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Bibliography of North American Geology, 1968

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Bibliography of North American Geology, 1968

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UNITED STATES DEPARTMENT OF THE INTERIOR

ROGERS C. B. MORTON, *Secretary*

GEOLOGICAL SURVEY

William T. Pecora, *Director*

CONTENTS

	Page
Introduction	V
Serial list	VII
Bibliography	1
Index	817

BIBLIOGRAPHY OF NORTH AMERICAN GEOLOGY

1968

INTRODUCTION

The current annual volume of the "Bibliography of North American Geology" lists publications that appeared during 1968 concerning the geology of the North American continent, Greenland, the West Indies and adjacent islands, Hawaii, Guam, and other island possessions but not the trust territories of the United States. Articles by American authors published in foreign journals are cited if they deal with North American localities or are of a general nature, but not if they deal only with foreign areas. Articles on North America by foreign authors are included regardless of place of publication, while those of a general nature are included only if they appeared in North American journals.

The citations are listed alphabetically by author, with full title and publication data. There follows a subject index to the papers cited. Geologic names in the index are those used by the individual authors, and their listing here does not imply approval by the Geological Survey. The list of serial publications cited in the bibliography follows on p. VII.

The numbers assigned to the abstracts in this publication are for reference in using the index; they are not order numbers. Publications cited are available in most geological libraries or through interlibrary loan. A list of journals commonly cited in bibliographies of the Survey may be obtained by writing to the U. S. Geological Survey, Washington, D. C. 20242.

The principal contributors to this volume were James W. Clarke, Georgianna D. Conant, Howard R. Cramer, Bettie S. Hackman, Virginia M. Jussen, Elisabeth S. Loud, Mildred C. Mead, Virginia S. Neuschel, and Dorothy B. Vitaliano.

The "Bibliography of North American Geology" comprises the following bulletins: 746-747 (1785-1918), 823 (1919-28), 937 (1929-39), 1049 (1940-49), 1195 (1950-59), 1196 (1960), 1197 (1961), 1232 (1962), 1233 (1963), 1234 (1964), 1235 (1965), 1266 (1966), and 1267 (1967).

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XVII

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Young, Harvey. *See* Kincheloe, Jesse. 07843

Young, Jan. *See* Young, Bob. 05992

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Young, Keith K. *See* Daniels, R. B. 00923

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- Young, Myron.** See Dooley, John A. 03506
- 06375 **Young, R. A.; Sudarsanan, K.; Mackie, P. E.** Structural origin of some physical property differences among three apatites, *in* Colloque international sur les phosphates minéraux solides, Toulouse, 1967—V. 1, Structure et propriétés des phosphates: Paris, Soc. Chim. France, p. 114-117, illus., tables, 1968.
- Young, Robert N.** See Griffin, Paul F. 10945
- 05421 **Young, Robert S.** Mineral exploration and development in Maine, *in* Ore deposits of the United States, 1933-1967 (Graton-Sales Volume), V. 1: New York, Am. Inst. Mining, Metall. and Petroleum Engineers, p. 125-139, illus., table, 1968.
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- Yund, R. A.** See Giletti, B. J. 04137
- Yund, R. A.** See Hall, H. T. 07952
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- Zablocki, Charles J.** See Gott, Garland B. 03996
- 07710 **Zaccor, J. V.; Mason, H. G.** Wave propagation tests in layered granular media, *in* International symposium on wave propagation and dynamic properties of earth materials, Albuquerque, N. Mex., 1967, Proc.: Albuquerque, N. Mex., Univ. New Mexico Press, p. 587-595, illus., 1968.
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- Zähringer, J.** See Kaiser, W. 01529
- 06405 **Zaitzeff, James B.; Sherman, John W., 3d.** Oceanographic applications of remote sensing, *in* Symposium on remote sensing of environment, 5th, 1968, Proc.: Ann Arbor, Mich., Univ. Michigan, Willow Run Labs., p. 497-527, illus., 1968.
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- Zand, S.** See Shahbazi, M. 08068

- Zanella, A. H.** See Walker, J. W. 04284
- Zangerl, Rainer.** See Gaffney, Eugene S. 01145
- Zangerl, Rainer.** See Bardack, David. 05254
- 08943 **Zangerl, Rainer.** The morphology and the developmental history of the scales of the Paleozoic sharks *Holmesella*, sp. and *Orodus*, in Current problems of lower vertebrate phylogeny—Nobel Symposium, 4th, Stockholm, 1967, Proc.: New York and London, Interscience Publishers (also Stockholm, Almqvist and Wiksell), p. 399-412, illus., 1968.
- Zangerl, Rainer.** See Peyer, Bernhard. 11199
- Zarrella, W. M.** See Schrayner, G. J. 05906
- 04111 **Zartman, R. E.** Isotopic composition of lead, in Reconnaissance geology, geophysics, and geochemistry of the southeastern part of the Lewis and Clark Range, Montana: U.S. Geol. Survey Bull. 1252-E, p. E31-E32, table, 1968.
- Zartman, R. E.** See Stacey, J. S. 06945
- 05050 **Zarudzki, E. F. K.; Uchupi, Elazar.** Organic reef alignments on the continental margin south of Cape Hatteras: Geol. Soc. America Bull., v. 79, no. 12, p. 1867-1870, illus., 1968.
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- Zeller, Doris E.** See Jewett, John Mark. 07665
- 08499 **Zeller, E. J.; Dreschhoff, Gisela.** Formation of organic compounds in solid bodies in space by proton interactions [abs.]: Am. Geophys. Union Trans., v. 49, no. 1, p. 245, 1968.
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Zeller, H. D. See Peterson, Fred. 07840

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Ziauddin, M. See Boyle, R. W. 02055

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Zienkiewicz, O. C. See Stagg, K. G. 08932

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- Zigic-Toshich, Darinka.** See Briggs, Louis I. 01229
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- Zigic-Toshich, Darinka.** See Briggs, Louis I. 10891
- Zimmerman, D. W.** See Cameron, John R. 03961
- 03962 **Zimmerman, D. W.; Cameron, J. R.** Supralinearity of thermoluminescence of LiF versus dose, Chap. 8.5 in *Thermoluminescence of geological materials—NATO Advanced Research inst.*, Spoleto, Italy, 1966, Proc.: London and New York, Academic Press, p. 485-491, illus., 1968.
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- Zoller, J. Harold.** See Leary, Robert M. 10869
- Zoltai, T.** See Araki, T. 06788
- Zoltai, Tibor.** See Jahanbagloo, I. Cyrus. 02211
- Zoltai, Tibor.** See Papike, J. J. 07859
- Zoltai, Tibor.** See Araki, Takaharu. 08226
- Zoltai, Tibor.** See Jahanbagloo, I. Cyrus. 09639
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- Zsabo, M. W.** See Smith, W. E. 07268
- Zsilinszky, V.** See Jackson, K. B. 09668
- 00018 **Zuidema, Henry P.** Iron kettles from Canadian shale: *Earth Sci.*, v. 21, no. 1, p. 17-18, illus., 1968.
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- 10407 **Zurflueh, Ernst G.** High speed processing of aeromagnetic survey data [abs.]: *Am. Geophys. Union Trans.*, v. 49, no. 4, p. 671, 1968.
- Zverev, S. M.** See Kosminskaya, I. P. 04668
- Zykov, S. I.** See Gerasimovskiy, V. I. 07328

INDEX

[The numbers refer to entries in the abstracts]

Absolute age, dates

Basalt

- Alaska, Nunivak Island: Hoare, Joseph M. 06353
- Arizona, Grand Canyon, lava flow, erosion rate: McKee, Edwin D. 00523
- Costa Rica, Cocos Island, cf. Galapagos: Dalrymple, G. Brent. 00142
- Deep-ocean flows, age uncertainties: Noble, C. S. 03831
- Hawaii, Kilauea, Ar-40 excess in submarine pillows: Dalrymple, G. Brent. 03120
- Mid-Atlantic Ridge, fission track: Fleischer, R. L. 02682
- Montana, Yellowstone Valley: Bush, John H. 10213
- Nova Scotia, K-Ar, paleomagnetism: Carmichael, C. M. 00658
- Pacific Ocean, Cobb seamount: Dymond, J. R. 01941
- Pacific Ocean, East Pacific Rise, K-Ar: Fisher, David E. 01926

Basaltic rocks

- Oceanic, interpretation, independent age for Earth: Oversby, V. M. 07303
- Oceanic, interpretation, independent age for Earth: Ulrych, T. J. 07304
- Triassic, Massachusetts: DeBoer, Jelle. 01167

Basement rocks

- Lead models, Utah: Stacey, J. S. 06945

Carbon-14

- Alaska, lacustrine strands, Point Barrow area: Carson, Charles E. 01515
- Alaska, Middleton Island: Plafker, George. 08312
- Alaska, Prince of Wales Island, Maybeso Valley: Swanston, Douglas N. 02609
- Alaska, Washington State University list: Chatters, Roy M. 03046
- Alberta, Cochrane area, Clarke Pit Member: Stalker, A. MacS. 07233
- Arctic Ocean, Chukchi Sea shelf, sedimentation rate: Holmes, Mark L. 08452
- Bermuda, ISOTOPES list: Buckley, James D. 03787
- Bermuda, reefs: Ginsburg, Robert N. 08705
- British Columbia, wood and peat: Fulton, R. J. 02691
- California, Blue Creek terrace, wood, age of flooding: Helley, Edward J. 05175
- California, Kern County, wood, Pleistocene: Manning, John C. 02861
- California, San Joaquin Valley, lacustrine deposits, wood: Croft, M. G. 00785
- California, southern, landslides: Stout, Martin L. 09707
- California, Tomales Bay, charcoal and midden shells: Follett, W. I. 01777
- Canada, Geological Survey list: Lowdon, J. A. 09425

Absolute age, dates—Continued

Carbon-14—Continued

- Canada, Hudson Bay area, raised beaches: Wagner, Frances J. E. 01423
- Canada, ISOTOPES list: Buckley, James D. 03787
- Canada, Saskatchewan University list: McCallum, K. J. 03042
- Canada, Wisconsin University list: Bender, Margaret M. 03045
- Cochrane area, bison bones: Churcher, C. S. 07234
- Connecticut, marine coastal marshes: Bloom, Arthur L. 09356
- Continental margin, California, Tanner Basin, sediments: Gorsline, Donn S. 01904
- Florida, Apalachicola coast, shorelines: Schnable, Jon E. 06659
- Florida, central lake basins, wood, ancient canoes: Bullen, Ripley P. 02847
- Florida, Choctawhatchee Bay: Goldsmith, Victor. 08530
- Florida, ground water: Hanshaw, Bruce B. 08418
- Florida, Keys, marine limestone, calcitic crusts: Multer, H. G. 00465
- Georgia, Brunswick area, cypress stump: Wait, Robert L. 05176
- Georgia, coastline deposits: Hoyt, J. H. 03977
- Greenland, Alaska, Copenhagen laboratory list: Tauber, Henrik. 03040
- Greenland, Holsteinsborg area, shells: Weidick, Anker. 02067
- Greenland, Inglefield Land: Nichols, Robert L. 09809
- Greenland, Umanak district, shells, summary: Rosenkrantz, Alfred. 05112
- Guam, storm-rubble ramparts, Holocene: Cur-ray, J. R. 08652
- Illinois, late-Altonian sequence: Kempton, J. P. 03979
- Illinois, Woodfordian loesses: Frye, John C. 02533
- Iowa, postglacial sediments, Lake Okoboji cores: Dodd, John D. 07590
- Kansas, raised marsh core, Atchison County: McGregor, Ronald L. 07686
- Louisiana, Franklin Parish, shells: Saucier, Roger T. 02505
- Maine, coast, deglaciation, submergence: Stuiver, Minze. 09939
- Maine, southern, Presumpscot Formation: Kilbourne, Richard T. 00884
- Massachusetts, Cape Cod: Oldale, Robert N. 09812
- Mexico, ISOTOPES list: Buckley, James D. 03787
- Mexico, Tennessee, ORAU list: Noakes, John E. 03041
- Mexico, UCLA list: Berger, Rainer. 03044
- New Jersey, northern, lake deposit: Harmon, Kathryn Parker. 06533

Absolute age, dates—Continued

Carbon-14—Continued

- New Mexico, San Andres Mts., Gardner Spring site, soils: Gile, L. H. 04821
 New York, Flushing Meadows, peat: Baskerville, Charles A. 07506
 New York, Ithaca area, interglacial deposit: Bloom, Arthur L. 09752
 North America, Pacific Northwest, archeological sites: Sanger, David. 05154
 North America, UCLA list: Berger, Rainer. 01121
 North America, University of Michigan list: Crane, H. R. 01120
 North Carolina, Long Beach area, peat: Whitehead, Donald R. 10356
 Nova Scotia, Debert archeological site: MacDonald, George F. 03643
 Nova Scotia, Debert Indian site, periglacial sand: Swift, Donald J. P. 11357
 Ohio, Garfield Heights area, Pleistocene deposits: White, George W. 01887
 Ontario, Ottawa area, Quaternary, marine algal bed: Mott, R. J. 01962
 Ontario, Wasaga Beach, glacial Lake Nipissing, marl, charcoal: Farrand, W. R. 10975
 Quebec, Kenogami area, wood, landslide age: LaSalle, Pierre. 01976
 Quebec, Manicouagan River valley, barnacle in clay: Sauve, Pierre. 06931
 Quebec, Saint Hilaire area, Pleistocene sediments: Terasmae, J. 01971
 Quebec, southeastern, Wisconsin deposits: McDonald, Barrie C. 09801
 Texas, Trinity River terraces: Thurmond, John T. 08338
 Texas, western, pluvial lake dolomite: Reeves, C. C., Jr. 10082
 United States and Canada, University of Wisconsin list: Bender, Margaret M. 01122
 United States, Atlantic shelf, sea levels, past 35,000 yrs: Milliman, John D. 04870
 United States, central, Wisconsin University list: Bender, Margaret M. 03045
 United States, ISOTOPES list: Buckley, James D. 03787
 United States, Mexico, Texas University list: Valastro, S., Jr. 03043
 United States, southwestern, alluvial material, general listing: Haynes, C. V., Jr. 03980
 United States, western, UCLA list: Berger, Rainer. 03044
 United States, western, Washington University list: Chatters, Roy M. 03046
 Washington, Three Springs Bar archeological site: Daugherty, Richard D. 09889
 Washington, wood and shells, Pleistocene, Island County: Easterbrook, Don J. 05044
 Washington-British Columbia, Juan de Fuca Strait, sediments: Anderson, Franz E. 07649
 West Indies, coral reefs: Richards, Horace G. 08554
 West Virginia, Morgantown area, lake deposit: Clendening, John A. 10291
 Wisconsin, Pleistocene deposits, Wisconsinan Stage chronology: Black, Robert F. 02282
 Wyoming, Montana, artifacts: Husted, Wilfred M. 02328
 Wyoming, Mummy Cave fill, prehistoric record: Wedel, Waldo R. 00597

Coral

- Barbados, Pa-231 dating: Ku, Teh-Lung. 00501

Absolute age, dates—Continued

Fossil shells

- California, Santa Cruz area, Pleistocene terrace: Bradley, William C. 03004

Gabbro

- Minnesota, Duluth Gabbro and Endion sill, Rb-Sr: Faure, G. 00016

General

- Retrieval system, automatic processing: Taylor, R. E. 11358
 Utah, northern, Precambrian: Damon, Paul E. 10883

General listing

- California, Sierra Nevada, Pleistocene glaciations: Curry, Robert Rodney. 07188
 Canada, rocks and minerals, K-Ar: Wanless, R. K. 05265
 Colorado, Needle Mountains, Precambrian, U-Pb: Silver, L. T. 09688
 Colorado, Utah, Uncompahgre Plateau, Precambrian events: Hedge, Carl E. 02685
 Miocene-Pliocene boundary, K-Ar, summary: Turner, Donald L. 10051
 Montana, Sun River area, Missoula Group: Obradovich, John D. 09152
 North America, Quaternary, selected: Dalrymple, G. B. 03993
 Oklahoma, basement rocks: Denison, Rodger E. 10069
 United States, transcontinental, 35-39° N., maps: Marvin, Richard F. 02380

Glaucinite

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Granite

- Massachusetts, Cape Ann Granite, weathering effects: Bottino, Michael L. 04497
 Montana, Boulder batholith emplacement: Tilling, Robert I. 04441
 Montana, Jardine-Crevise Mtn. area: Brookins, Douglas G. 06974
 Virginia, Petersburg Granite, weathering effects: Bottino, Michael L. 04497

Granitic rocks

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 California, Coast Ranges, K-Ar: Compton, Robert R. 08253
 California, Klamath Mountains: Lanphere, Marvin A. 02688
 California, Sierra Nevada batholith, vertical fractionation concept: Wollenberg, Harold A. 00271
 California-Nevada, Sylvania Mts.: McKee, E. H. 01069
 Haiti, Terre-Neuve Mountains, stock, K-Ar: Kesler, Stephen E. 10314
 Washington, Okanogan Range, K-Ar: Hawkins, James W., Jr. 05261
 Washington, Pasayten River area, plutons: Tabor, R. W. 02713
 Wisconsin, northeastern, Penokean, U-Pb: Banks, Philip O. 08608
 Wyoming, Big Horn Mountains, K-Ar: Heimlich, Richard A. 00647

Granodiorite

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Igneous rocks

- Arizona, Chiricahua Mountains: Marjanemi, Darwin. 02660

Absolute age, dates—Continued

Igneous rocks—Continued

- Arizona, Del Bac Hills, volcanics: Percious, J. K. 02659
- Arizona, Dos Cabezas Mountains, intrusions, K-Ar: Erickson, Rolf C. 08265
- Arizona, Precambrian-Cenozoic: Damon, Paul E. 02639
- Arizona, Santa Rita Mountains: Drewes, Harald. 04108
- British Columbia, Copper Mt. intrusions: Montgomery, Joseph Hilton. 07154
- British Columbia, Copper Mn. mineralization: Sinclair, A. J. 07888
- British Columbia, Nelson batholith, northern, other plutonic rocks: Nguyen, K. K. 02733
- British Columbia, White Creek batholith: Wanless, R. K. 01973
- California, Sierra Nevada, glaciation, K-Ar: Curry, Robert R. 07799
- California, southeastern, K-Ar: Adams, J. A. S. 07742
- Colorado, Black Canyon, Rb-Sr: Hansen, Wallace R. 02717
- Colorado, Front Range, Precambrian, Rb-Sr: Peterman, Zell E. 00387
- Colorado, Rosita Hills-Silver Cliff district, volcanics: Siems, Peter L. 05125
- Colorado, Thirtynine Mile volcanics: Epis, Rudy C. 05129
- Greenland, Gardar intrusion: Gerasimovskiy, V. I. 07328
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- Hawaii, lavas, K-Ar: Funkhouser, John G. 02531
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- Interpretation, intrusive belts, New England: Chapman, Carleton A. 00583
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- Maryland, Piedmont: Wetherill, G. W. 08199
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- Nevada, Ruby Mountains: Kistler, Ronald W. 10012
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- New York, Connecticut, orogenies: Clark, George S. 05213
- Northwest Territories, Yellowknife area, granitic rocks: Green, D. C. 07481

Absolute age, dates—Continued

Igneous rocks—Continued

- Ontario, Brent meteor crater: Shafiqullah, M. 06360
- Ontario, Grenville province, mineral and whole-rock: Krogh, T. E. 01585
- Ontario, Sudbury basin, consanguinity of complex: Fairbairn, H. W. 07479
- Ontario, Superior province, Round Lake batholith, Otto stock: Purdy, J. W. 07478
- Pacific Ocean, northeastern, Mt. Mazama ash: Nelson, C. Hans. 01920
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- Texas, Trans-Pecos area, Vieja Group, K-Ar: Twiss, Page C. 10090
- Texas, Trans-Pecos, Vieja Group: Wilson, John Andrew. 02443
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- Utah, northeastern: Best, Myron G. 06576
- Washington, Glacier Peak-Lake Chelan area, K-Ar: Cater, Fred W. 07785
- Washington, Stevens County, volcanic, plutonic events: Yates, Robert G. 05201
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- Wyoming, Medicine Bow Mts., Precambrian chronology: Hills, F. Allan. 05055
- Interpretation*
- Alaska, Cook Inlet, Quaternary, correlation: Karlstrom, T. N. V. 03991
- Arizona, central, Precambrian chronology: Livingston, Donald E. 07943
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- California, San Gabriel Mts., geological episodes: Silver, Leon T. 07966
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- Colorado, Front Range, Precambrian events: Peterman, Zell E. 07486
- Colorado, Front Range, Precambrian geochronology: Hutchinson, Robert M. 10234
- Connecticut, Rogers Lake, pollen-accumulation rates: Davis, Margaret B. 07771
- Earth history, metallogenetic periodicity: Pierce, Arthur P. 07842
- Geomagnetic reversals, time-scale, Pliocene-Holocene: Cox, Allan. 07330
- K-Ar, shocked rocks, nuclear explosion or meteorite impact: Hartung, Jack Burdair. 05517
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- Lead ages, single- and multi-stage models: Kanasewich, E. R. 04707
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- Metamorphic events, Precambrian-Cenozoic, K-Ar: Damon, Paul E. 09370
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- Ontario, Cutler area, orogenic events: Cannon, William F. 09759
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Absolute age, dates—Continued*Interpretation—Continued*

- Pleistocene climatic changes, time scale: Thurber, D. L. 08196
 Pleistocene, worldwide correlation, continental and marine: Emiliani, Cesare. 10951
 Time scales, Precambrian, chelogenic cycles, North America cf. Europe: Sutton, John. 02571
 United States, central, Precambrian history: Muehlberger, William R. 07833
 United States, Great Basin, Tertiary sialic volcanism: Armstrong, Richard L. 08607
 United States, western, paleomagnetic reversals: Dalrymple, G. Brent. 10697
 Zircon, Montana, Minnesota, Arizona, Appalachians: Catanzaro, E. J. 04708

Kimberlite

- Ontario, Gauthier township, Dobie area: Lee, Hulbert A. 02059

Metamorphic rocks

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 Appalachians, northern, lower Paleozoic tectogenesis: Harper, C. T. 02170
 Appalachians, northern, Taconic, Acadian orogenies: Harper, C. T. 02732
 Arizona, Basin and Range province, K-Ar: Mauger, Richard L. 02962
 Arizona, Precambrian-Cenozoic: Damon, Paul E. 02639
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 Contact zones, variations with petrologic facies: Hart, S. R. 04566
 Greenland, Ivigtut area, pre-Ketilidian, Ketilidian, K-Ar: Jorgensen, Ole. 01859
 Greenland, Precambrian rocks, western: Pulvertaft, T. C. R. 09454
 Greenland, West, Precambrian basement: Larsen, Ole. 09419
 Greenland, western, K-Ar: Larsen, Ole. 01858
 Manitoba, Rice Lake-Beresford area: Turek, A. 07236
 Maryland, Piedmont: Wetherill, G. W. 08199
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 North Carolina, Ore Knob, gneiss, Rb-Sr and K-Ar ages compared: Fullagar, Paul D. 07732
 Northwest Territories, Yellowknife area, greenstones: Green, D. C. 07481
 Ontario, Grenville province: Krogh, T. E. 04185

Absolute age, dates—Continued*Metamorphic rocks—Continued*

- Ontario, Grenville province, mineral and whole-rock: Krogh, T. E. 01585
 Ontario, Gunflint Formation, Rb-Sr: Kovach, J. 10109
 Rb-Sr, whole rock, minerals, Baltimore Gneiss, Maryland: Wetherill, G. W. 01903
 Virginia, Blacksburg area, tectonic events, K-Ar, Rb-Sr: Dietrich, Richard V. 08664
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 Wyoming, Medicine Bow Mts.: Houston, R. S. 10680
 Wyoming, Medicine Bow Mts., Precambrian chronology: Hills, F. Allan. 05055

Meteorites

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 Bondoc: Marshall, Royal R. 03929
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 Hypersthene chondrites, Rb-Sr: Gopalan, K. 04184
 Norton County achondrite: Matsuda, Hideki. 07925

Minerals

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 California, Valley Ford, albite, glaucophane: Keith, Terry E. 02709
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 Colorado, Eldora-Jamestown area, zircons: Davis, G. L. 04522
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 Mexico, Providencia-Concepcion del Oro district: Ohmoto, Hiroshi. 07851
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 Nevada, Mount Wheeler mine area, zircon: Lee, Donald E. 05195
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 Northwest Territories, Great Slave Lake area, galena, iron sulfides: Robertson, D. K. 05431
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 British Columbia: White, William H. 08904
 British Columbia, Craigmont, Rb-Sr: Chrismas, L. 09363
 British Columbia, K-Ar: White, William H. 11079
 New York, Balmat area: Reynolds, P. H. 05471
 Saskatchewan, Beaverlodge area, uranium mineralization: Koeppel, V. 02056
 Utah, Bingham: Moore, W. J. 04239

Absolute age, dates—Continued*Pegmatite*

Connecticut, eastern, genesis, K-Ar, Rb-Sr:
Brookins, D. G. 08626

Rhyolite

California, Mono and Inyo Craters, K-Ar: Dalrymple, G. Brent. 00326
California, Mono and Inyo Craters, U-Th: Taddeucci, Adriano. 00315
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Sedimentary rocks

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Montana, Belt Series, chronology: Obradovich, J. D. 07487
New Jersey, Triassic basin, Newark Group: Abdel-Monem, Abdalla A. 02977
Ontario, Sudbury basin, consanguinity of complex: Fairbairn, H. W. 07479

Sediments

California, Colorado River delta: Muffler, L. J. Patrick. 04462

Volcanics

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California, Ventura Basin, Pico Formation, K-Ar: Yeats, Robert S. 08354
California-Nevada, Mono Basin: Gilbert, C. M. 06355
Canada, Atlantic provinces, Rb-Sr: Fairbairn, H. W. 07716
Colorado, south-central, Oligocene: Steven, Thomas A. 05121
Hawaii: Tatsumoto, M. 08029
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Montana, Elkhorn Mountain: Robinson, G. D. 06502
Montana, Gallatin Range, Eocene: Chadwick, Robert A. 10217
Nevada, Caliente depression, K-Ar: Noble, D. C. 10248
Nevada, Nye and Esmeralda Counties: Kistler, Ronald W. 06796
North America, northeastern, Silurian, Devonian: Fullagar, Paul D. 06054
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Nova Scotia, Arisaig-Antigonish area, Ordovician-Silurian boundary: Fullagar, Paul D. 01972
Ontario, Lake Huron, north shore, Rb-Sr: Knight, Colin Joseph. 01749
Pacific Ocean, seamounts, Hawaiian area: Dymond, Jack. 01531

Absolute age, methods*Applications*

Quantitative measurement of time: Harbaugh, John W. 04704

Carbon-14

Caliche: Rightmire, Craig T. 08853
Corn, other grasses, isotope variations: Bender, Margaret M. 03121
Fossil bone and enamel, suitability for dating: Haynes, Vance. 03059
Quaternary deposits, limitations: Damon, P. E. 03948
Review, modern aspects: Olsson, Ingrid U. 06725
Verification by tritium analyses, Florida, ground water: Hanshaw, Bruce B. 08418

Absolute age, methods—Continued*Fission-track*

Apatite and sphene, United States: Naeser, C. W. 00004
Mica, problems: Miller, Donald S. 02822
Terrestrial and extraterrestrial samples: Fleischer, Robert L. 04709

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History, dating of Earth: Badash, Lawrence. 01823
Silicate inclusions in meteorites: Burnett, D. S. 08032
Techniques, applications, collected papers: Hamilton, E. I. 04564

Helium

Basalt, deep ocean flows, age uncertainties: Noble, C. S. 03831

Ionium-thorium

Sedimentation rates, oceanic sediments, occurrence: Goldberg, Edward D. 01532

Potassium-argon

Ar-40:Ar-39 method: Mitchell, J. G. 02993
Argon contamination from air: Mussett, Alan E. 02985
Basalt, deep ocean flows, age uncertainties: Noble, C. S. 03831
Basalt, submarine, excess Ar-40: Funkhouser, John G. 05098
Basalt, submarine, suitability: Dalrymple, G. Brent. 03120
Choice of samples, lack of criteria: Ozima, M. 00272
Glauconite, criteria for use: Obradovich, J. D. 03987
Meteorites, activation analysis invalid for K: Rancitelli, Louis A. 03219
Meteorites, effect of redistribution by thermal diffusion: Turner, G. 08023
Meteorites, new technique: Kaiser, W. 01529
Mineral pairs, precision: Kistler, Ronald W. 06796
Quaternary deposits, limitations: Damon, P. E. 03948
Quaternary rocks: Dalrymple, G. B. 03993
Review: Damon, Paul E. 09370
Shocked rocks, nuclear explosion or meteorite impact: Hartung, Jack Burdair. 05517
Tektites, possible errors: Gentry, Robert V. 08501

Protactinium-uranium

Barbados, corals: Ku, Teh-Lung. 00501

Rubidium-strontium

Isotope dilution technique: Molina Berbey, Rafael. 04721
Isotope migration, post-crystallization: Brooks, C. 02365
Maryland, Baltimore Gneiss, strontium redistribution with orogeny: Wetherill, G. W. 01903
Silicate rocks, ratio determination: Doering, Willis P. 02697
Sulfide ores, Quebec, Noranda district: Reesman, R. H. 04523
Virginia, granite, effects of weathering: Bottino, Michael L. 07809

Thorium-230

Comparison with paleomagnetic methods: Ku, Teh-Lung. 01606

Thorium-lead

Zircon, effects of acid-washing procedure: Steiger, Rudolf H. 09701

Absolute age, methods—Continued

Thorium-uranium

- Fossil mollusc shells, evaluation: Broecker, W. S. 10786
 Soil, rate of formation: Hansen, R. O. 00343
 Volcanic rocks: Allegre, C. L. 06352

Uranium-lead

- Concordia plots: Russell, R. D. 00372
 Zircon, effects of metamorphism: Davis, G. L. 04522
 Zircon, Pb loss, model study: Craig, Harmon. 00121
 Zircon, Concordia technique, interpretations: Catanzaro, E. J. 04708

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 Graphite, resources: Weis, Paul L. 01368
 Iron, Birmingham district: Simpson, Thomas A. 05384
 Mineral resources, Barbour County, summary: Smith, W. E. 07268
 Mineral resources, Conecuh County: Reed, Philip C. 07050
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 Natural gas, Black Warrior basin: Pike, Stuart J. 03403
 Petroleum and natural gas, 1965-66: White, H. Gene. 04301
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 Reservoirs, Pascagoula River basin, comprehensive studies: U.S. Army Corps Engineers. 02457
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Geomorphology

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- Heflin area, electrical, ground water: Joiner, T. J. 02745

Alabama—Continued

Geophysical surveys—Continued

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 Henry County, water resources: Newton, J. G. 09441
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Maps, geologic

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 Crenshaw County: McWilliams, R. G. 06085
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 Northeastern, generalized, clay and shale sample sites: Clarke, Otis M., Jr. 03166
 Pike County: Shamburger, Victor M., Jr. 06087
 Pisgah Dome, with structure contours: Daniel, Thomas W., Jr. 07645
 Southeastern, generalized: Clarke, Otis M., Jr. 07667

Maps, gravity

- Monroe County: MacElvain, Robert C. 07694

Maps, ground water

- Coffee County: Turner, J. D. 07141
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Maps, oil and gas

- General: White, H. Gene. 04301

Maps, structure

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Mineralogy

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Alabama—Continued

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Anthozoa, Eocene, Gosport and Lisbon Formations, distribution: Newman, Harry E., 3d. 08163

Bryozoa, Eocene-Oligocene, St. Stephen area, paleogeography: Askren, L. T., Jr. 04099

Cephalopoda, Eocene, sepiids, n.spp.: Allen, James E. 02974

Conodonts, Devonian, Gassaway Member, redescription: Huddle, John W. 00209

Foraminifera, Cretaceous, Blufftown Formation, eastern: Nikravesh, Rashel. 00856

Gastropoda, Ordovician, Odenville Limestone, new genus: Yochelson, Ellis L. 05863

Ostracoda, Silurian, northwestern: Lundin, Robert F. 08787

Palynomorphs, Paleozoic-Mesozoic, in Paleocene Naheola Formation: McLean, Dewey M. 06008

Palynomorphs, Silurian, Birmingham area, relation to climate: Cramer, Fritz H. 01502

Vertebrata, Pliocene, Graham Ferry Formation(?), Mobile area: Lamb, George. 08162

Petrology

Tallapoosa and Chambers Counties, mafic-ultramafic belt, alteration: Neathery, Thornton L. 09440

Sedimentary petrology

Cusseta Sand, deltaic origin, facies, composition: Hester, Norman Curtis. 05518

Frog Mountain Sandstone, provenance: Kiefer, John D. 10852

Pottsville Formation, coal splits, sedimentation: Culbertson, William C. 07798

Western, central, Tallahatta Fm., lussatitic quartzite: Reynolds, William R. 08552

Stratigraphy

Cretaceous, southeastern: Moore, Donald B. 07695

Cretaceous-Holocene, Crenshaw County: McWilliams, R. G. 06085

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Jurassic, facies, depositional environments: Oxley, Marvin L. 09318

Mesozoic, Vick Formation inlier, pre-Tuscaloosa age: McLean, Dewey M. 06008

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Cahaba coal field, Pennsylvanian strata: Shotts, Reynold Q. 08165

Alabama—Continued

Structural geology—Continued

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Alaska

Absolute age

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C-14, Copenhagen laboratory list: Tauber, Henrik. 03040

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February 4, 1965, Aleutian Islands, aftershock sequence: Korkman, K. 02433

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June 21, 1967, Fairbanks area: Cloud, William K. 00167

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March 28, 1964, effects, Allen II slide: Johnson, Noye M. 06477

March 28, 1964, effects, Anchorage area, quick-clay slides: Kerr, Paul F. 04194

March 28, 1964, effects, avalanching: Tuthill, Samuel J. 06476

March 28, 1964, effects, glacier-dammed lakes: Marcus, Melvin G. 06474

March 28, 1964, effects, glaciers: Post, Austin S. 07003

Alaska—Continued

Earthquakes—Continued

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- March 28, 1964, effects, landslide, Sherman Glacier: Marangunic, Cedimir. 06479
- March 28, 1964, effects on ground-water levels, Alberta: Gabert, Gordon M. 06469
- March 28, 1964, effects, Sherman and Sheridan Glaciers: Tuthill, Samuel J. 06473
- March 28, 1964, effects, Sherman Glacier, debris slide: Bull, Colin. 06472
- March 28, 1964, effects, Sherman Glacier, landslides: Plafker, George. 06478
- March 28, 1964, effects, Sherman landslide: Shreve, Ronald L. 06480
- March 28, 1964, effects, snow avalanching, Chugach Mts.: LaChapelle, Edward R. 06475
- March 28, 1964, effects, water-sediment ejections: Waller, Roger M. 06492
- March 28, 1964, geomagnetic field effects: Hirschberg, Joan. 00203
- March 28, 1964, horizontal movement, strain analysis: Pope, Allen J. 08358
- March 28, 1964, hydrologic effects: National Research Council. 06488
- March 28, 1964, hydrologic effects, Anchorage area: Waller, Roger M. 07038
- March 28, 1964, hydrologic effects, outside Alaska: Vorhis, Robert C. 06468
- March 28, 1964, hydrologic effects, south-central: Waller, Roger M. 06489
- March 28, 1964, mechanism: Wyss, Max. 10058
- March 28, 1964, Montague Island, Hanning Bay fault scarp, photograph: Whitten, Charles A. 02384
- March 28, 1964, preshock, aftershock focal mechanism: Stauder, William. 08332
- March 28, 1964, Prince William Sound, effects, photointerpretation: Hackman, Robert J. 06490
- March 28, 1964, seismic seiches in North America: McGarr, Arthur. 10959
- March 28, 1964, tectonic deformation, atmospheric pressure waves: Mikumo, Takeshi. 00642
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Economic geology

- Construction materials, lightweight aggregates, shale: Heiner, Lawrence E. 09831
- Copper, Clearwater Mountains, occurrence, distribution: Glavinovich, Paul Stephen. 09833
- Copper, Cosmos Hills area, Ruby Creek prospect, mineralization: Runnells, Donald D. 08061
- Gold and other metals, Chulitna district, upper, occurrence: Hawley, C. C. 01140
- Gold, east-central, Livengood district, possibilities: Foster, R. L. 02818
- Heavy minerals, Gulf of Alaska, eastern, exploration: Valencia, Shirley M. 04586
- Metals, McCarthy B-4 and B-5 quadrangles: MacKevett, E. M., Jr. 05156
- Metals, McGrath A-2 quadrangle, Bowser Creek: Reed, Bruce L. 00931

Alaska—Continued

Economic geology—Continued

- Metals, placer deposits, Bering Sea, possibilities: Hopkins, David M. 09845
- Mineral resources, Koyukuk River region, central, possibilities: Miller, Thomas P. 01721
- Mineral resources, Seward Peninsula, occurrence, potential: Lu, Frederick C. J. 09837
- Oil shale, Brooks Range: Tourtelot, Harry A. 08016
- Oil shale, northern, occurrence: Donnell, John R. 07767
- Petroleum, Arctic slope, occurrence: Gibson, Ray. 09514
- Petroleum, Bering Sea, occurrence: Scholl, D. W. 02284
- Petroleum, Cook Inlet basin, occurrence, production: Laughbaum, Graydon H., Jr. 02249
- Petroleum, natural gas, Cook Inlet basin: Kelly, Thomas E. 02095
- Petroleum, natural gas, possibilities: Gates, George O. 02094
- Placers, fuels, Bering Sea, possibilities: Hopkins, D. M. 06844
- Southeastern, mineral deposits, trend-surface analysis: Heiner, Lawrence E. 09834
- Tin, Serpentine-Kougarok area, cassiterite in gold placers: Sainsbury, C. L. 01421
- Tin, Seward Peninsula, Lost River lodes: Sainsbury, C. L. 07650
- Tin-beryllium, Seward Peninsula, York Mts.: Sainsbury, C. L. 05360

Engineering geology

- Earthquakes, Fairbanks area, June 21, 1967: Cloud, William K. 00167
- Landslides, Anchorage area, quick-clay slides: Kerr, Paul F. 04194
- Landslides, Kenai Lake area, 1964 earthquake effect: McCulloch, David S. 06491
- Slope stability, Prince of Wales Island, Maybeso Valley: Swanston, Douglas N. 02609
- Urban planning, Greater Anchorage Area Borough: Dobrovolsky, Ernest. 06064

General

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Geochemistry

- Alaska Range, Windy Fork-Post River, geochemical prospecting: Reed, Bruce L. 01709
- Coal, trace elements, distribution: Rao, P. Dharma. 11046
- East-central, Livengood district, geochemical prospecting, gold: Foster, R. L. 02818
- Equisetum*, metal absorption, geochemical prospecting: Cannon, Helen L. 01034
- Fairbanks district, geochemical prospecting, trace element distribution: Heiner, L. E. 09835
- Farewell area, geochemical prospecting, metals: Herreid, Gordon. 04840
- Fortymile district, geochemical prospecting, metals: Smith, William H. 04771
- Interior, north slopes, P and cations availability, forest, bogs: Heilman, Paul E. 03103
- Seward Peninsula, geochemical prospecting, tin: Sainsbury, C. L. 07650
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- Slana area, geochemical prospecting: Richter, Donald H. 04058

Alaska—Continued

Geochemistry—Continued

- Southeastern, ultramafic rocks, Sr-Rb-K isotope relations: Lanphere, Marvin A. 02813
 Tanana and Yukon River drainage areas, lakes, limnology: Likens, Gene E. 05332
 Wood River-Tikchik Lakes area, geochemical prospecting: Eakins, Gilbert R. 04772
 Yukon-Tanana area, geochemical prospecting, metals: Burand, W. M. 03743

Geomorphology

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 Brooks Range, coulees: Berkland, James O. 09971
 Central, pingos, distribution, growth: Holmes, G. William. 09400
 Colville River, bank erosion: Walker, H. J. 07968
 Glacier Bay National Monument, glacier cave: Peterson, D. N. 08072
 Interior, north slopes, bog formation, P and cations availability: Heilman, Paul E. 03103
 Middleton Island, shoreline, uplift, color airphoto: Swanson, Lawrence W. 02372
 Point Barrow area, lacustrine strands, postglacial: Carson, Charles E. 01515
 Sherman Glacier, Allen II slide, flow mechanics: Johnson, Noye M. 06477
 Sherman Glacier, landslide, earthquake of 1964: Marangunic, Cedomir. 06479
 Sherman Glacier, Shattered Peak and Pyramid Peak landslides: Plafker, George. 06478
 Sherman landslide, 1964 earthquake: Shreve, Ronald L. 06480
 Southeastern, coastal areas, earthquake effects: Stanley, Kirk W. 07515

Geophysical surveys

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 Central interior, seismic, refraction profile: Hanson, Kenneth. 04827
 Continental margin, Montague Island area: Malloy, R. J. 07939
 Fairbanks district, magnetic, geochemical correlations: Heiner, L. E. 09835
 Gravity, progress since 1963: Barnes, David F. 10363
 Mount Wrangell, heat flow, caldera: Benson, Carl S. 05135
 Point Barrow area, multispectral, airborne: Horvath, R. 06404

Glacial geology

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 Casement Glacier, basal sliding: Peterson, Donald N. 08419
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 Fairbanks area, Wisconsin silt section, ice wedges: Sellmann, Paul V. 08072
 Glacier Bay National Monument, glacier cave: Peterson, D. N. 08072
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 Glaciers, earthquake effects, pre-1964: Field, William O. 07039
 Martin River and Sioux Glaciers, superglacial drift, genesis by avalanching: Reid, John R. 08051
 Martin River area, earthquake origin of superglacial drift: Tuthill, Samuel J. 06476
 Mendenhall Valley: Barnwell, William W. 00373

Alaska—Continued

Glacial geology—Continued

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 Sherman Glacier, regime, debris slide effect: Bull, Colin. 06472
 Vaughan Lewis (Glacier) Icefall, avalanche activity: Pinchak, Alfred C. 04872
 Worthington Glacier, midsummer heat balance: Stretten, N. A. 04873

Hydrogeology

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 Homer area, ground-water resources: Waller, Roger M. 09483
 Juneau area, soil-moisture loss, vegetation effect: Patric, J. H. 04987
 South-central, earthquake effects, March 1964: Waller, Roger M. 06489
 Taku Inlet area, ground-water flow, glacier outwash, tidal effect: Slatt, Roger M. 03567
 Tanana and Yukon River drainage areas, lakes, limnology: Likens, Gene E. 05332

Maps, geochemical

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 Fortymile district, Chicken area: Smith, William H. 04771
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 Windy Fork-Middle Fork area: Herreid, Gordon. 04840
 Wood River-Tikchik Lakes area: Eakins, Gilbert R. 04772

Maps, geologic

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 Homer area, surficial: Waller, Roger M. 09483
 Hooper Bay quadrangle: Hoare, J. M. 00332
 Johnson River area: Holmes, G. William. 02428
 Lake Peters area, Brooks Range: Reed, Bruce L. 04488
 Mendenhall Valley, surficial: Barnwell, William W. 00373
 Nunivak Island: Hoare, Joseph M. 06353
 Selawik and southeastern Baird Mtn. quadrangles: Patton, William W., Jr. 00593
 Shungnak quadrangle: Patton, William W., Jr. 01809
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 Windy Fork-Middle Fork area: Herreid, Gordon. 04840

Maps, ground water

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 Mendenhall Valley: Barnwell, William W. 00373

Maps, paleogeographic

- Mendenhall Valley: Barnwell, William W. 00373

Mineralogy

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Paleoclimatology

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Paleomagnetism

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Paleontology

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 Anthozoa, Permian, east-central, non-colonial rugose: Minato, Masao. 06660

Alaska—Continued

Paleontology—Continued

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- Invertebrata, Devonian, Yukon-Porcupine Rivers area, correlation: Churkin, Michael, Jr. 02888
- Lichens, Cenozoic, geographic distribution: Krog, Hildur. 04410
- Mammalia, Pleistocene, interior, paleoecology: Guthrie, R. D. 05659
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- Trilobita, Cambrian, Jones Ridge Limestone, east-central: Palmer, Allison R. 00264

Petrology

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- Fairbanks area, eclogitic rocks: Forbes, R. B. 11125
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- Mount Katmai and Novarupta, ejecta, 1912 eruption: Curtis, G. H. 06496
- Nunivak Island, basalts, eruptive history: Hoare, Joseph M. 06353
- Nunivak Island, micaceous-spinel-lherzolite fragment: McGetchin, Thomas R. 10380
- Nunivak Island, Nanwaksjak Crater, olivine eclogite: Hoare, J. M. 07889
- Nunivak Island, volcanics, eclogite and peridotite inclusions: Hoare, J. M. 08280
- Southeastern, ultramafic complexes, magma, isotope data: Lanphere, Marvin A. 02813
- White River Ash, source determination: Lerbekmo, J. F. 05069
- Yukon-Tanana Upland, Prindle Volcano, granulite, peridotite inclusions: Foster, Helen L. 08272

Sedimentary petrology

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- Coal, coking potential, petrographic evaluation: Hankinson, Fred C. 09830
- Loess deposits, general description: Pewe, Troy L. 05634
- Mendenhall Glacier, terminus, sediments, pebble distribution: Ehrlich, Robert. 06734
- Taku Inlet area, glacier outwash sediments, sorting: Slatt, Roger M. 03567
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- Three Entrance Bay and Easter Egg Hill, beach sediment, provenance: Hoskin, Charles M. 01219

Stratigraphy

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- Devonian, Brooks Range, western, facies: Tailleux, I. L. 02971
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- Devonian, Yukon-Porcupine Rivers area: Churkin, Michael, Jr. 02888
- Mesozoic, Quaternary, Mendenhall Valley, sections: Barnwell, William W. 00373

Alaska—Continued

Stratigraphy—Continued

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- Quaternary, Cook Inlet, correlation, radiometric dates: Karlstrom, T. N. V. 03991
- Silurian-Devonian, boundary, location: Churkin, M. 02831

Structural geology

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- Aleutian Ridge, Buldir Depression, extensional deformation: Marlow, Michael S. 10435
- Bering land bridge, paleontologic evidence: Cohen, Gaston. 03132
- Brooks Range, western, thrust fault: Tailleux, I. L. 02971
- Central interior, crust, four layer: Hanson, Kenneth. 04827
- Continental margin, Montague Island area, vertical tectonics: Malloy, R. J. 07939
- Cook Inlet basin, Mesozoic-Cenozoic, anticline, oil fields: Laughbaum, Graydon H., Jr. 02249
- Denali fault, motion, monitoring: Boucher, Gary. 02359
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- Gulf of Alaska, continental shelf, tectonic trends: Wright, F. F. 08453
- Montague Island, Hanning Bay fault scarp, color airphoto: Whitten, Charles A. 02384
- Northern, Brooks Range orogen, thrust faults: Tailleux, Irvin L. 08012
- Rat Islands, sea-floor spreading, earthquakes: Stauder, William. 01944
- Richardson Mountains and Peel River basin, tectonics: Bostrom, R. C. 04655
- South-central, 1964 earthquake zone, prequake tectonics: Plafker, George. 08312
- Southeastern, post-Carboniferous tectonics, volcanism role: Brew, D. A. 05068
- West-central, Kaltag fault: Patton, William W., Jr. 05187

Volcanology

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- Mount Katmai and Novarupta, ejecta, 1912 eruption: Curtis, G. H. 06496
- Mount Wrangell, heat flow, variations: Bingham, Douglas K. 04879
- Saint Augustine Island, color airphoto interpretation: Sobierski, V. Ralph. 02374

Alberta

Absolute age

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Areal geology

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- Foremost-Cypress Hills area, surficial: Westgate, J. A. 06698
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- Lethbridge area: Irish, E. J. W. 02921

Economic geology

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- Evaporites, general: DeMille, George. 01016

Alberta—Continued*Economic geology—Continued*

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 Mineral resources, Gleichen area: Irish, E. J. W. 02918
 Mineral resources, Jasper region, possibilities: Gibson, D. W. 02678
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 Natural gas, Alexander field, occurrence: Jackson, K. E. 02135
 Natural gas, Carbon field, occurrence: Workman, L. E. 02138
 Natural gas, Fort Saskatchewan field, occurrence: White, N. B. 02136
 Natural gas, Homeglen-Rimbey field: Webb, J. B. 03400
 Natural gas, Medicine Hat-Hatton field, occurrence: Hancock, W. P. 02139
 Natural gas, occurrence: Edmonton Geological Society. 02132
 Natural gas, Panther River culmination area: Ollerenshaw, N. C. 02923
 Natural gas, Peace River area, occurrence: Clark, L. M. 02133
 Natural gas, Pembina Cardium oil field, occurrence: Mills, B. A. 02134
 Natural gas, plains, Paleozoic rocks: Prather, R. W. 03250
 Natural gas, Provost field, occurrence: Suey, Harry. 02137
 Natural gas, reserves, exploration: Heise, Horst. 00088
 Natural gas, Rocky Mountain Foothills: Wells, G. C. 03249
 Oil sand sands, Athabasca deposit, exploration: Ward, Dennis E. 09272
 Oil sands, Athabasca tar, reserves, potential: McClements, Robert, Jr. 07084
 Oil sands, Fort McMurray area, Athabasca deposits: Pearse, Charles R. 09617
 Oil sands, occurrence, genesis: Vigrass, Laurence W. 04511
 Petroleum and natural gas, west-central, occurrence: Hemphill, Charles R. 01216
 Petroleum, northern, reservoir evaluation, computer program: Jeffries, Frank. 06514
 Petroleum, northwestern, occurrence: Langton, J. Roger. 11314
 Petroleum, Rainbow and Zama areas, exploration, dip meter: Cox, John W. 06021
 Petroleum, Rainbow area, occurrence, reefs: Barss, D. L. 01324
 Petroleum, Redwater area, Devonian, Frasnian limestone reef: Grieve, R. O. 01228
 Petroleum, Zama area, occurrence: McCamis, John G. 04507
 Zinc, lead, Rocky Mountains: Evans, T. L. 04222

Engineering geology

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 Slope stability, Red Deer and St. Mary Rivers landslide areas: Scott, J. S. 02057
 Soils, Rocky Mountain Forest Preserve, erosion prediction: Rutter, N. W. 05334

Geochemistry

- Devonian Woodbend reefs, geochemical prospecting: Weaver, Charles E. 05723
 Ireton and Duvernay Formations, chemical composition: Campbell, F. A. 01719
 Swan Hills Reef, Beaverhill Lake Formation, geochemical profile: Cameron, E. M. 01961

Alberta—Continued*Geochemistry—Continued*

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 Western, Cretaceous-Paleocene bentonites, analyses: Retschke, J. F. 07229

Geomorphology

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 Cypress Hills: Bird, Charles D. 10926
 Devonian reefs, morphology, cf. modern reefs: Martin, Rudolf. 02890
 Edmonton-Cadomin area, Highways 16 and 47: Williams, G. D. 09683
 Foremost-Cypress Hills area, prairie mounds, genesis: Bik, M. J. J. 07342
 Freeman River, hydrographic network, Horton analysis: Saint-Onge, D.-A. 10768
 Gleichen area, preglacial topography: Geiger, K. W. 08897
 Major features: Green, Robert. 10925
 Red Deer Valley, lower, landform evolution: McPherson, H. J. 06309

Geophysical surveys

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 Experimental studies, chemical explosion, surface waves: Hasegawa, H. S. 01988
 Leduc area, magnetotelluric: Rankin, David. 07397
 Northwestern, well logging, Devonian carbonate evaluation: Dorin, A. H. 05954
 Rainbow and Zama areas, electrical, dip-meter logs: Cox, John W. 06021
 Rainbow-Zama area, well logging, data standardization: Connolly, E. T. 05953
 Seismic, application of Dinoseis system: Godfrey, L. M. 00183
 Southern, crustal studies, seismic: Clowes, R. M. 01609
 Southern, magnetotelluric, polarization studies: Rankin, D. 08409
 Southern, magnetotelluric traverse: Rankin, D. 08410
 Southern, seismic, Precambrian rift valley: Kanasevich, E. R. 03119
 Swan Hills and Rainbow Lake oil fields, wireline logging: Jeffries, F. 06343
 Zama area, well logging, radioactivity: Lishman, J. R. 05959

Glacial geology

- Athabasca Glacier, deformation: Raymond, C. F. 10616
 Athabasca Glacier, icequakes: Savage, J. C. 10579
 Banff area, major ice advances, features: Rutter, N. W. 04091
 Banff area, Pleistocene, major advances: Rutter, Nathaniel W. 08063
 Cypress Hills, Rocky Mtn. and southern biotas: Bird, Charles D. 10926
 Southern and central, sole marks on till, ice-flow direction: Westgate, J. A. 06729
 Southwestern, Laurentide, Rocky Mtn. deposits, correlation: Wagner, W. Philip. 07967
 Southwestern, moraines: Wagner, W. Philip. 08019

Hydrogeology

- Edson area, buried valley aquifer, safe yield prediction: VandenBerg, A. 00619

Alberta—Continued

Hydrogeology—Continued

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 Plains area, ground-water level changes, Alaskan earthquake: Gabert, Gordon M. 06469
 Red Deer area, ground water, surficial indications, mapping: Clissold, R. J. 05504
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 Stettler area, aquifers, ground-water models: Dunn, Darrel Eugene. 02629
 West-central, townships 11-25, water-well data: Geiger, K. W. 11284

Maps, bedrock topography

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Maps, geologic

- Foremost area: Irish, E. J. W. 02922
 Foremost-Cypress Hills area, surficial: Westgate, J. A. 06698
 Gleichen area: Irish, E. J. W. 02918
 Lethbridge area: Irish, E. J. W. 02921
 Limestone Mountain area, Cambrian-Cretaceous units, structure: Ollerenshaw, N. C. 06571
 Panther River culmination area: Ollerenshaw, N. C. 02923
 Robb to Mountain Park, Highway 47: Edmonton Geological Society. 09675
 Rocky Mountain Foothills region: Stott, D. F. 03137

Maps, geomorphologic

- Freeman River, hydrographic network: Saint-Onge, D.-A. 10768
 Gleichen area, bedrock topography: Geiger, K. W. 08897

Maps, isopach

- Southern plains, Upper Cretaceous formations: Irish, E. J. W. 06312

Maps, paleogeographic

- Rocky Mountain Foothills region: Stott, D. F. 03137

Maps, structure

- Southern plains, Upper Cretaceous formations: Irish, E. J. W. 06312
 Sub-Cretaceous unconformity, spatial filtering: Robinson, J. E. 05618

Maps, tectonic

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Mineralogy

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 Cretaceous-Paleocene bentonites, modal analyses: Lerbekmo, J. F. 07229
 Ireton and Duvernay Formations: Campbell, F. A. 01719

Paleoclimatology

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Paleontology

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 Anthozoa, Brachiopoda, Mississippian, Mt. Head Formation: Macqueen, R. W. 05524
 Brachiopoda, Permian, Ishbel Group, correlation: Logan, Alan. 05686
 Coelenterata, Cambrian, Gog Group, Banff area, burrows: Arai, Mary Needler. 00487
 Conodonts, Devonian, fauna, zoning: Pollock, C. A. 02195

Alberta—Continued

Paleontology—Continued

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 Conodonts, Devonian, Upper, south-central, fauna: Mound, Michael C. 02196
 Fauna, Devonian, Swan Hills Formation, Carson Creek North reef complex: Leavitt, E. M. 05506
 Foraminifera, Carboniferous, Etherington Formation, correlation: Mamet, Bernard L. 04097
 Foraminifera, Cretaceous, Rocky Mtn. foothills, paleoecology: Wall, John H. 11033
 Fungi, Cretaceous, Edmonton Formation, spores, n. spp.: Srivastava, Satish K. 09024
 Mammalia, Cretaceous, Edmonton Formation: Lillegraven, Jason Arthur. 06521
 Mammalia, Paleocene, Paskapoo Formation, condylarth, n. sp.: Fox, Richard C. 09035
 Mammalia, Pleistocene, Bow River terrace, ungulates: Churcher, C. S. 07234
 Man, fossil, evidence: Bryan, Alan. 10927
 Palynomorphs, Cretaceous, Edmonton and Battle Formations, southern: Binda, P. L. 09354
 Palynomorphs, Cretaceous, Edmonton Fm.: Srivastava, Satish K. 07921
 Palynomorphs, Cretaceous, Edmonton Formation, ephedralean pollen: Srivastava, Satish K. 01989
 Palynomorphs, Cretaceous, Edmonton Formation, southern: Srivastava, Satish K. 11354
 Palynomorphs, Cretaceous, Edmonton Formation, triorate pollen, n. gen.: Srivastava, Satish K. 09023
 Reptilia, Cretaceous, Edmonton Formation, Drumheller area, ceratopsid: Langston, Wann, Jr. 05696
 Stromatoporoidea, Devonian, Ancient Wall carbonate complex: Stearn, Colin W. 02885
 Stromatoporoidea, Devonian, Swan Hills Fm.: Fischbuch, N. R. 07343

Petrology

- Northeastern, cataclastic rocks: Watanabe, R. Y. 04092
 Northwestern, Lower Cretaceous strata, shock metamorphism: Cariggy, Maurice A. 07505
 Steen River structure, shocked rocks: Short, Nicholas M. 07483

Sedimentary petrology

- Cadomin area, Mississippian rocks, carbonate classification, facies: Macqueen, R. W. 09678
 Carson Creek North oil field, Swan Hills Formation, reef complex: Leavitt, E. M. 05506
 Cold Lake area, Mannville Group: Clack, W. J. F. 04083
 Devonian carbonates, well-log evaluation: Dorin, A. H. 05954
 Eastend and Whitemud Formations, mineralogy, provenance: Byers, P. R. 04082
 Foremost-Cypress Hills area, prairie mounds, postglacial sequence: Bik, M. J. J. 07342
 Goose River oil field, Beaverhill Lake Formation, reefs: Jenik, A. J. 00063
 Gulf Spring Point, Cretaceous-Paleocene sandstones, provenance: Nelson, H. W. 07321
 Jasper region, Sulphur Mtn. and Whitehorse Formations: Gibson, D. W. 02678
 Jasper region, Sulphur Mtn. and Whitehorse Formations: Gibson, D. W. 02851
 Leduc reefs, porosity, dolomitization, environmental control: Stanton, Robert J., Jr. 09697

Alberta — Continued

Sedimentary petrology — Continued

- Mount MacKenzie-Cardinal Mtn. area, carbonate mounds, lenses: MacKenzie, W. S. 02892
- Nipisi area, Watt Mountain Formation, Gilwood Member, arkosic sandstones: Thachuk, Norman M. 06009
- Northwestern, Keg River Formation, Rainbow Member, reef facies: Langton, J. Roger. 11314
- Red Deer Valley, Edmonton Formation, Upper Member, sandstones: Chi, B. L. 04063
- Rocky Mountains, Devonian reef margins, carbonate debris flows: Pray, L. C. 01185
- Southwestern, Siyeh Formation, carbonate silt, genesis: Adshead, John D. 08596
- Swan Hills area, Devonian reef complexes: Fischbuch, N. R. 07343

Stratigraphy

- Cambrian, nomenclature, correlation, southern Rockies, surface to subsurface: Aitken, J. D. 00548
- Carboniferous, Etherington Formation, Foraminifera: Mamet, Bernard L. 04097
- Cretaceous, Alberta Group, McLeod River area: Stott, D. F. 09681
- Cretaceous, Bullhead and Fort St. John Groups, Rocky Mtn. Foothills: Stott, D. F. 03137
- Cretaceous, Lower, Cadomin area: Mellon, G. B. 09680
- Cretaceous, Whitemud and Battle Formations, Kneehills Tuff zone, marker horizon: Irish, E. J. W. 06312
- Cretaceous, Whitemud and Eastend Formations: Byers, P. R. 04082
- Cretaceous-Tertiary, Brazeau Formation, central foothills: Jensen, E. 09682
- Cretaceous-Tertiary, Foremost area: Irish, E. J. W. 02922
- Cretaceous-Tertiary, Gleichen area: Irish, E. J. W. 02918
- Devonian, Beaverhill Lake Formation, Goose River oil field: Jenik, A. J. 00063
- Devonian, Beaverhill Lake Group, Swan Hills area, nomenclature: Leavitt, E. M. 05525
- Devonian, biostratigraphy, conodont zones: Pollock, C. A. 02195
- Devonian, Cairn and Southesk Formations, Mtn. Park area: MacKenzie, W. S. 09677
- Devonian, Keg River Formation, Rainbow Member, northwestern: Langton, J. Roger. 11314
- Devonian, Middle facies, Zama area: McCamis, John G. 04507
- Devonian, Middle, Rainbow Member reefs: Barss, D. L. 01324
- Devonian, Miette and Ancient Wall reef complexes: Mountjoy, Eric W. 09435
- Devonian, Mount MacKenzie-Cardinal Mtn. area, carbonate mounds, lenses: MacKenzie, W. S. 02892
- Devonian, northern: Richmond, William Oliver. 00862
- Devonian, reef morphology: Martin, Rudolf. 02890
- Devonian, Swan Hills Formation, reef growth divisions: Fischbuch, N. R. 07343
- Devonian, Upper, west-central, conodont zones: Mound, Michael C. 02896
- Devonian, Watt Mountain Formation, Gilwood Member: Thachuk, Norman M. 06009

Alberta — Continued

Stratigraphy — Continued

- Mississippian, Cadomin area: Macqueen, R. W. 09678
- Mississippian, Mount Head Formation, southwestern: Macqueen, R. W. 05524
- Mississippian-Cretaceous, Panther River culmination area: Ollerenshaw, N. C. 02923
- Nomenclature, rules, Alberta Soc. Petroleum Geologists: Hawryszko, J. W. 04079
- Paleozoic-Mesozoic, Limestone Mountain area, thrust sheets: Ollerenshaw, N. C. 06571
- Permian, Ishbel Group, Rocky Mts., faunal correlation: Logan, Alan. 05686
- Precambrian, Old Fort Point Formation, Jasper area: Weiner, J. L. 04093
- Quaternary, Banff area: Rutter, N. W. 04091
- Tertiary-Quaternary, Edmonton-Cadomin area, Highways 16 and 47: Williams, G. D. 09683
- Triassic, Spray River Group, Jasper region: Gibson, D. W. 02678
- Triassic, Spray River Group, Jasper region: Gibson, D. W. 02851
- Triassic, Whitehorse Formation, type section: Best, E. W. 09679
- Structural geology*
- Bow River area, Cardium Formation, jointing: Muecke, G. K. 08307
- Cadomin area, thrust faults: Gots, R. J. 09676
- Crust, P-wave data, short-period: Ellis, R. M. 04829
- Jasper area, folds, faults, Laramide orogeny: Weiner, J. L. 04093
- Limestone Mountain area, faults, folds: Ollerenshaw, N. C. 06571
- Nordegg area, Brazeau Range anticline, kinematic analysis: Cruden, D. M. 04064
- Northwestern, foothills and ranges, folds, faults, tectonics: Irish, E. J. W. 06695
- Southern, Precambrian rift valley: Kanasevich, E. R. 03119
- Steen River structure, impact origin, evidence: Short, Nicholas M. 07483

Algae

Acetabulariae

- Recent, fossil, possible source of calcispheres: Rupp, Arthur W. 08062

Cambrian

- Utah, Spence Shale, Wasatch Mts., uncertain species: Robison, Richard A. 07354

Charophyta

- Devonian-Recent, evolution: Eyer, Jerome A. 01208

Cretaceous

- Atlantic Ocean, Blake Escarpment, Lower limestones: Johnson, J. Harlan. 07176
- Texas, Buda Limestone: Johnson, J. Harlan. 00917
- Texas, pre-Buda Limestone: Johnson, J. Harlan. 00918

Geochemistry

- Lipid and fatty acid content, possible dating method: Das, Salil K. 07045

Halimeda

- Holocene, cell morphology, calcification, fossil interpretation: Baars, Donald L. 01321

Identification

- Filaments in Animikie chert: Moorhouse, W. W. 07803

Komia

- Pennsylvanian, Colorado, Molas Pass area: Girdley, W. Arch. 01226

Algae—Continued

Morphology

- Codiacea, calcification: Baars, Donald L. 01321
 Precambrian, Ontario, Gunflint Iron-Formation:
 Licari, G. R. 09133
 Reef-structures, Florida cf. Permian, Texas: Klement, Karl W. 08902

Myxophyceae

- Devonian, New York, Buffalo, Onondaga
 Limestone: Baschnagel, Raymond A. 02407

Paleozoic

- United States, limestones, late: Wray, John L. 05628

Pennsylvanian

- Colorado, western: Wray, John L. 10279
 Nevada, Great Basin: Rich, Mark. 10037

Platylithophycus cretaceum

- Evidence for reclassification as sepiid: Miller,
 Halsey W. 07787

Precambrian

- Idaho-Montana Belt Series, algal structures:
 Pflug, Hans D. 02551
 Marine environment: Weyl, Peter K. 01921
 Ontario, Gunflint Iron-Formation: Licari, G. R. 09133

Ungarella americana, n.sp.

- Pennsylvanian, New Mexico, Middle, southeastern: Toomey, Donald Francis. 02960

Aluminum

Analysis

- Atomic absorption spectroscopy: Katz, Amitai. 02234
 Emission spectroscopy, rotating-disk-electrode,
 F-interference: Kurtz, L. T. 09416

Appalachians

- Resources, review: Patterson, Sam H. 01375

Geochemistry

- Achondrites: Deuser, W. G. 03105
 Dissolved complexes, graphical study methods:
 Hem, John D. 07360
 Soils, exchange capacity, drying effects: Westfall, Dwayne Gene. 04448
 Water, Al ion and hydroxy-Al polymers, interaction with phosphate: Hsu, Pa Ho. 03670
 Water, hydroxy-Al polymers, gibbsite and bayerite formation: Hem, John D. 03749

Isotopes

- Al-26, induced by cosmic-rays in terrestrial rocks: Tanaka, S. 01062

- Al-26, meteorites: Matsuda, Hideki. 07925

United States

- Resources, anorthosite, bauxite, clays: U.S. Bureau of Mines. 11184

American Samoa

Areal geology

- Manu'a Islands: Stice, Gary D. 11380

Geochemistry

- Lava, rare earths, trace elements: Hubbard, Norman Jay. 10752
 Manu'a Islands, volcanics, analyses: Stice, Gary D. 11437

Maps, geologic

- Manu'a Islands: Stice, Gary D. 11380

Petrology

- Manu'a Islands, volcanics, petrography: Stice, Gary D. 11437

Amphibia

Anura

- Miocene, Florida, Thomas Farm, n.spp., paleoecology: Holman, J. Alan. 02824

Amphibia—Continued

Dissorophidae

- Pennsylvanian-Permian, paleoecology, evolution of armor: DeMar, Robert. 05708

Dissorophus multicinctus

- Permian, Texas, morphology, paleoecology, evolution: DeMar, Robert. 05708

Evolution

- Origin, aqueous-terrestrial transition, phylogeny: Schmalhausen, I. I. 04888
 Origin, relation to Devonian, rhizodontid, rhipidistian fishes: Thomson, Keith Stewart. 04798

Lissamphibia

- Evolution, possible descent from Rhipidistia, diphyletic theory: Thomson, Keith Stewart. 08941

Morphology

- Skeleton and associated soft parts, evolution: Schmalhausen, I. I. 04888

Pennsylvanian

- Kansas, Burlingame Limestone: Baird, Donald. 07752

Tertiary

- Kansas, Trego County, WaKeeney local fauna: Wilson, Richard Leland. 06938

Tuditanus (Eosaurus)

- Carboniferous, Ohio, microsauro-reptile distinctions: Carroll, Robert L. 05715

Angiosperms

Alangiaceae

- Cretaceous-Cenozoic, taxonomy: Eyde, R. H. 02318

Betula

- Miocene, Washington, Vantage area, Columbia basalts: Prakash, U. 02549

Calkinsia franklinensis, n.gen., n.sp.

- Paleogene, Washington, Green River Canyon, Puget Group: Wolfe, Jack A. 00532

Callixylon

- Pleistocene, Ohio, lignin and cellulose: Morey, P. R. 02309

Cretaceous

- California, Panoche Formation, central: Page, Virginia M. 00345
 Greenland, Kome Formation: Pedersen, K. Raunsgaard. 02064
 Oklahoma, Marshall County, Albian: Hedlund, R. W. 03740

Euonymus glanduliferus Ball

- Eocene, Texas, Wilcox Group, leaves, morphologic species: Stuessy, Tod F. 05652

Evolution

- Textbook: Cronquist, Arthur. 06165

Goweria, n.gen.

- Paleogene, Washington, Green River Canyon, Puget Group: Wolfe, Jack A. 00532

Plataninum californicum, n.sp.

- Cretaceous, California, Panoche Formation: Page, Virginia M. 00345

Plataninum platanoides, n.sp.

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Pugetia longifolia, n.gen., n.sp.

- Paleogene, Washington, Green River Canyon, Puget Group: Wolfe, Jack A. 00532

Robinia

- Miocene, Washington, Vantage area, Columbia basalts: Prakash, U. 02549

Spermatites

- Cretaceous, Alberta, Edmonton Fm., n.spp., lectotypes: Binda, P. L. 07691

Angiosperms—Continued

Taxonomy

Textbook: Cronquist, Arthur. 06165

Tertiary

North America, southeastern, Eocene palms, taxonomy: Dilcher, D. L. 09375

Oregon, Stayton area, Oligocene: Klucking, Edward Paul. 03031

Washington, Coleman Creek, Latah florule: Klucking, Edward P. 00404

Washington, King County, systematic descriptions, biostratigraphy: Wolfe, Jack A. 00532

Tetracentronites panochetris, n.sp.

Cretaceous, California, Panoche Formation: Page, Virginia M. 00345

Vinea pugetensis, n.gen., n.sp.

Paleogene, Washington, Green River Canyon, Puget Group: Wolfe, Jack A. 00532

Willisia rentonensis, n.gen., n.sp.

Paleogene, Washington, Green River Canyon, Puget Group: Wolfe, Jack A. 00532

Annelida

Cambrian

Utah, Spence Shale, Wasatch Mts., uncertain species: Robison, Richard A. 07354

Filigranites bootii, n.gen., n.sp.

Devonian, New York, Cardiff Shale, in shell-borings: Cameron, Barry. 03209

Hydroides norvegica

Holocene, Texas, serpulid reef ecology and structure: Behrens, E. William. 06308

Mississippian

Nova Scotia, Windsor Group, scolecodonts: Globensky, Yvon. 07238

Polychetapis oklahomensis, n.sp.

Ordovician, Criner Hills, scolecodont assemblage: Taugourdeau, Ph. 07702

Sabellaria

Carboniferous-Holocene, role as reef builder: Kirtley, David W. 01476

Anthozoa

Dasmia americana, n.sp.

Eocene, Oregon, Cowlitz Formation, cf. European species: Blake, D. Bryan. 00556

Devonian

Alaska, Salmontrout Limestone, Yukon-Porcupine Rivers area, correlation: Churkin, Michael, Jr. 02888

New York, Tully Valley, Hamilton Group, new coral bed: Grasso, Thomas X. 00498

Ohio, Tenmile Creek Dolomite, rugose and tabulate: Stumm, Erwin C. 04202

Geyerophyllidae

Kansas, Upper Pennsylvanian: Cocke, J. M. 07683

Grabaephyllum johnstoni

Silurian, Illinois, Chicago area, redescription: Stumm, Erwin C. 06898

Heliophyllum rhopaliseptatum, n.sp.

Devonian, Ohio, Tenmile Creek Dolomite: Stumm, Erwin C. 04202

Mississippian

Alberta, southwestern, Mt. Head Formation: Macqueen, R. W. 05524

Morphology

Devonian Rugosa, individuals of colonies, variation controls: Oliver, William A., Jr. 05755

Geyerophyllidae, Pennsylvanian-Permian: Cocke, J. M. 07683

Rugosa, compound and non-colonial forms, reproduction: Minato, Masao. 06660

Anthozoa—Continued

Nomenclature

Devonian, Michigan, new name: Stumm, Erwin C. 00603

Silurian, Maine, new name: Stumm, Erwin C. 00603

Pacific Ocean

Holocene, trace-element concentrations, compared with sea water: Veeh, H. Herbert. 02537

Permian

Nevada, Arcturus Group, zones: Stevens, Calvin H. 08334

Phyllactis

Quaternary, Florida, Bahamas, burrows, marine sediments: Shinn, Eugene A. 05767

Pseudofavosites

Pennsylvanian, Kansas-Oklahoma, species assigned to *Sutherlandia*: Cocke, J. M. 06800

Quaternary

Florida, Key Largo Limestone, outer and back reefs: Hoffmeister, J. E. 04292

Rugosa

Devonian, Canada, northwestern, taxonomy: Crickmay, C. H. 04157

Devonian, Michigan-Ohio, Silica Formation, fauna, n.spp.: Stumm, Erwin C. 06902

Devonian, North America, Lower and Middle, eastern: Oliver, William A., Jr. 02884

Paleozoic, morphology, reproduction, non-colonial forms: Minato, Masao. 06660

Silurian

Tabulata, growth patterns, paleoclimatic, paleogeographic tools: Fischer, A. G. 04678

Stichopsammia(?) *vokesi*, n.sp.

Eocene, Oregon, Cowlitz Formation, cf. European species: Blake, D. Bryan. 00556

Sutherlandia n.gen. n.spp.

Pennsylvanian, Kansas-Oklahoma, favositid: Cocke, J. M. 06800

Syringopora

Mississippian, Alaska, Totatlanika Formation, Alaska Range: Wahrhaftig, Clyde. 01659

Tabellaephyllum? *phaceloidea*, n.sp.

Devonian, Ohio, Tenmile Creek Dolomite: Stumm, Erwin C. 04202

Taxonomy

Devonian, Canada, northwestern: Crickmay, C. H. 04157

Temnophyllum spiculi

Devonian, Nevada, new name for *T. waltheri*: Frost, S. H. 05699

Tertiary

Alabama, Gosport and Lisbon Formations, Eocene, distribution: Newman, Harry E., 3d. 08163

Timania rainbowensis

Permian, Alaska, east-central, non-colonial, simple budding: Minato, Masao. 06660

Zonophyllum lucasense, n.sp.

Devonian, Ohio, Tenmile Creek Dolomite: Stumm, Erwin C. 04202

Antimony

Abundance

Meteorites: Ehmman, William D. 08044

California

Hot spring deposits, genesis: Dickson, Frank W. 05281

Geochemistry

Cinnabar-stibnite deposits, solubilities, genesis: Learned, R. 11416

Antimony—Continued

Nevada

Hot spring deposits, genesis: Dickson, Frank W. 05281

Appalachians

Absolute age

Metamorphic rocks, lower Paleozoic tectogenesis: Harper, C. T. 02170

Northern, Acadian orogeny: Dennis, J. G. 02734
Northern, igneous and metamorphic rocks: Lyons, J. B. 07250

Northern, Taconic, Acadian orogenies: Harper, C. T. 02732

Areal geology

Popular account: Connelly, Thomas L. 06969

Review: Miller, Ralph L. 01392

Economic geology

Aluminum, resources: Patterson, Sam H. 01375

Asbestos, resources: French, Alice E. 01389

Barite, resources: Brobst, Donald A. 01390

Ceramic materials, talc, resources: Wedow, Helmut, Jr. 01373

Chromite, resources, review: Thayer, T. P. 01376

Clays, resources, review: Hosterman, John W. 01393

Coal, properties, coking behavior, anomalous: Benedict, L. G. 03096

Coal, resources, review: Arndt, Harold H. 01396
Coal, southern, geologic setting: Wanless, Harold R. 09729

Coal, southern, resources: Culbertson, William C. 08651

Cobalt, nickel, resources: Cornwall, H. R. 01377

Construction materials, dimension stone, resources, review: Newman, William L. 01326

Construction materials, lightweight aggregate, resources: Bush, A. L. 01384

Construction materials, lime, resources: Ericksen, George E. 01385

Copper, southern, exploration, geochemical: Tan, Li-Ping. 08908

Copper, sulfur, resources: Kinkel, Arthur R., Jr. 01378

Feldspar, resources: Lesure, F. G. 01327

Gems, localities: French, Alice E. 01329

Gold, resources: Bergendahl, M. H. 01379

Gold, southeastern, occurrence: Rife, David L. 08114

Graphite, resources: Weis, Paul L. 01368

Gravel, resources: Maxwell, Charles H. 01387

Gypsum, resources, review: Withington, C. F. 01383

Industrial minerals, abrasives, resources: French, Alice E. 01388

Industrial minerals, strontium, resources: Cox, Dennis P. 01372

Iron, resources: Wright, Wilna B. 01380

Lead, zinc, resources: Wedow, Helmut, Jr. 01331

Limestone, cement resources, review: Ericksen, George E. 01400

Limestone, dolomite, resources: Ericksen, George E. 01386

Manganese, resources: Dorr, John Van N., 2d. 01381

Metals, metallotectonic zoning: Gabelman, John W. 04992

Metals, southern: Laurence, Robert A. 06302

Mica, resources: Lesure, F. G. 01369

Mineral resources, general: Laurence, Robert A. 01410

Appalachians—Continued

Economic geology—Continued

Mineral resources, general: U.S. Geological Survey. 01408

Natural gas, general: Roth, Ernest E. 03404

Niobium, tantalum, resources: Parker, Raymond L. 01382

Oil shale, resources, review: Conant, Louis C. 01397

Peat, resources, review: Cameron, Cornelia C. 01398

Petroleum, bitumens, review: Meyer, Richard F. 01395

Petroleum, natural gas, resources, review: Meyer, Richard F. 01399

Potash, nitrates, phosphate, resources: Wedow, Helmut, Jr. 01328

Salt, resources: Cox, Dennis P. 01370

Sand, resources, review: Carter, W. D. 01371

Silver, resources: Luttrell, Gwendolyn W. 01330

Thorium, rare earths, resources: Adams, John W. 01364

Tin, resources, review: Sainsbury, C. L. 01366

Titanium, resources: Herz, Norman. 01367

Uranium, resources: Butler, Arthur P., Jr. 01365

Zircon, resources: Wedow, Helmut, Jr. 01374

Engineering geology

General aspects, review: Davies, William E. 01394

Waste disposal, Plateau, coal waste bank stability: Davies, William E. 09574

Geochemistry

Mercury and trace elements in sphalerite: Jolly, Janice L. 05981

Southern, copper indicators: Tan, Li-Ping. 08908

Geomorphology

Patterned ground, sorted: Clark, G. Michael. 02279

Physiographic provinces, origin: Davies, William E. 01409

Popular account: Connelly, Thomas L. 06969

Tennessee River, lower course, development history: Milici, Robert C. 03897

Valley and Ridge peneplanation, waxing slope concept: Bethune, P. de. 10918

Geophysical surveys

Gulf of Saint Lawrence, seaward extension, seismic: Sheridan, Robert E. 01997

Oil wells, log cf. core analyses: Duda, J. R. 09277

Hydrogeology

Coal-mining areas, acid-water pollution, infrared imagery: Strandberg, Carl H. 02376

Ground-water resources: Wyrick, Granville G. 03683

Maps, geologic

General: U.S. Geological Survey. 01408

General: Wyrick, Granville G. 03683

Maps, ground water

General: Wyrick, Granville G. 03683

Maps, isopach

Basin, Devonian stages: Oliver, William A., Jr. 03162

Mineralogy

Gems, collecting localities: French, Alice E. 01329

Mineral collecting: Zeitner, June Culp. 08134

Paleontology

Brachiopoda, Ordovician, Reedsville-Martinsburg Formations, paleoecology: Bretsky, S. S. 08622

Bryozoa, Ordovician, Reedsville Formation, central: Bretsky, Peter W. 01320

Appalachians—Continued*Paleontology—Continued*

Conodonts, Pennsylvanian, Allegheny rocks, platform species, variations: Merrill, Glen K. 08804

Conodonts, Pennsylvanian, Conemaugh Group, biofacies: Merrill, Glen K. 07880

Devonian, Canadian: Cumming, L. M. 03163

Fossil collecting, guide to localities: French, Alice E. 01329

Gymnosperms, Pennsylvanian, *Lescuropteris*: Darrah, W. C. 02321

Invertebrata, Devonian, Oriskany Sandstone, environment indicators: Seilacher, Adolf. 09611

Mollusca, Ordovician, Reedsville-Martinsburg Formations, bivalve assemblages: Bretsky, P. W. 08621

Palynology, Quaternary, north-central, paleoecology: Stingelin, Ronald W. 10936

Porifera, Pennsylvanian, deltaic sequences, paleogeography: Cavaroc, V. V., Jr. 00468

Sedimentary petrology

North-central, Silurian clastic rocks: Smith, Norman Dwight. 01356

North-central, Silurian clastics, sedimentation: Smith, Norman D. 09935

Oil well cores, physical properties, cf. log analyses: Duda, J. R. 09277

Oriskany Sandstone, calcareous cement, leaching: Seilacher, Adolf. 09611

Primary sedimentary structures, interpretation: Cooper, Byron N. 10292

Stratigraphy

Cambrian, review, northern: Theokritoff, George. 07179

Devonian, basin: Oliver, William A., Jr. 03162

Devonian, Canada-New England: Cumming, L. M. 03163

Devonian, Helderberg Group, central: Head, James W., 3d. 09787

Devonian, Old Red Sandstone and equivalents: Allen, J. R. L. 03187

Northern and marine, review: Zen, E-an. 07177

Ordovician, Bays Formation: Hergenroder, John D. 10306

Ordovician, graptolite zones, paleogeography, northern: Berry, William B. N. 07180

Ordovician, Upper, Pennsylvania-Tennessee, environments: Bretsky, Peter W. 01320

Paleozoic-Mesozoic, northern, sedimentation, symposium: Klein, George deVries. 03453

Pennsylvanian, Conemaugh Formation, environment and paleogeography: Morris, David Albert. 09851

Pennsylvanian, deltaic sequences, Plateau, paleogeography: Cavaroc, V. V., Jr. 00468

Pennsylvanian, Monongahela-Dunkard strata, paleocurrents: Jones, Michael L. 05582

Pennsylvanian, southern, time relations, palynology: Upshaw, Charles F. 09723

Silurian, clastic rocks, north-central: Smith, Norman Dwight. 01356

Structural geology

Canada-New England, Acadian orogeny: Cumming, L. M. 03163

Evolution: Paster, Theodore P. 11084

Mesozoic dikes, tectonics, paleomagnetic studies: DeBoer, Jelle. 11235

Northern, Acadian orogeny, Devonian, principal orogeny: Dennis, J. G. 02734

Northern and marine, review: Zen, E-an. 07177

Northern, Taconic klippe, mechanism: Cady, Wallace M. 02452

Appalachians—Continued*Structural geology—Continued*

Oil fields, surface-fracture trends, induced fractures, correlation: Overbey, William K., Jr. 10971

Piedmont, applications of New England geology: Rodgers, John. 08184

Southern coal field, evolution: Stearns, Richard G. 09699

Taconic allochthon: Zen, E-an. 07132

Taconic orogeny, stratigraphic evidence: Pavlides, Louis. 07138

Tectonic history: Rodgers, John. 09458

Tectonics, lower Paleozoic, isotopic age evidence: Harper, C. T. 02170

Arctic*General*

Bering land bridge, paleontologic evidence: Cohen, Gaston. 03132

Environment analysis, vs. alpine, symposium: Wright, H. E., Jr. 02079

Geomorphology

Meteor craters, distribution, Canada, Alaska, Greenland: Sandner, Werner. 06955

Geophysical surveys

Franklin and continental shelf, aeromagnetic, interpretation: Bhattacharyya, B. K. 04736

Ice caps, heat flow, thermal probe: Aamot, Halvor W. C. 11250

Remote-sensing methods, environment exploration: Simonett, David S. 02092

Maps, magnetic

Franklin and continental shelf, airborne, residual anomalies: Bhattacharyya, B. K. 04736

Paleoclimatology

Cenozoic, tundra ecosystem, vs. alpine: Hoffman, R. S. 02080

Pleistocene, ice-free ocean, control of glacial stages: Donn, William L. 04166

Quaternary, relative thermoluminescence as indicator: Ronca, Luciano B. 04012

Paleontology

Vertebrata, Cenozoic faunas, tundra ecosystems: Hoffman, R. S. 02080

Sedimentary petrology

Baffin Bay, sediments: Blee, John J. 04400

Soil genesis, pedogenic gradients: Tedrow, J. C. F. 02257

Arctic Ocean*Earthquakes*

Seismicity, regionalization: Santo, Tetsuo. 03721

General

Drifting station, pack-ice deformation: Senior, C. Ward. 09875

Drifting stations, Arlis II and Fletcher's Ice Island: Schindler, John F. 09870

Drifting stations, symposium: Sater, John E. 11051

Drifting stations, U.S. Air Force research: Crary, A. P. 09871

Research vessel, submersible PISCES: Pelletier, B. R. 09449

Sea-ice dynamics, rheologic properties, research needs: Campbell, William J. 09872

Geochemistry

Chukchi Sea, zinc, abundance: Burrell, D. C. 10503

Foraminifera, water, oxygen isotopes: vanDonk, Jan. 10709

Geomorphology

Midoceanic ridge, Greenland, Norwegian Seas: Litvin, V. M. 05862

Arctic Ocean—Continued*Geomorphology—Continued*

Western, geomorphic provinces: Hunkins, Kenneth. 09877

Geophysical surveys

Alpha and Nansen Cordillera, magnetic, gravity: Vogt, Peter Richard. 07160

Chukchi rise, southern: Hall, John K. 08451

Chukchi Sea, gravity: Ostenso, Ned A. 00466

Chukchi Sea, magnetic, basement shallowing: Bassinger, B. G. 00078

Chukchi Sea shelf, seismic: Holmes, Mark L. 08452

Drifting station, ARLIS II, elastic constants, thickness: Kutschale, Henry. 09880

Drifting station, ARLIS II, gravity, magnetic observations, 1961-62: Ostenso, N. A. 09881

Drifting stations, telluric, geomagnetic, auroral: Hessler, V. P. 09878

Greenland area, seismic, subbottom profile: Ostenso, Ned A. 09876

Greenland Sea, magnetic, gravity, seismic: Ostenso, N. A. 00544

Heat flow, drifting station studies: Lachenbruch, Arthur H. 09879

Heat flow, variations: Marshall, B. Vaughn. 10647

Glacial geology

Pack ice, effect on air temperature and glaciation: Fletcher, J. O. 04165

Maps, gravity

Chukchi Sea: Ostenso, Ned A. 00466

Mineralogy

Clay minerals, Alpha Rise, sea-floor sediments: Carroll, Dorothy. 01231

Paleomagnetism

Cenozoic, magnetic stratigraphy, faunal patterns: Steuerwald, B. A. 05096

Paleontology

Mammalia, Tertiary, migration from Pacific: Mitchell, Edward. 07871

Sedimentary petrology

Chukchi shelf, sedimentation: McManus, Dean A. 10848

Deep-sea cores, sediments, climatic implications: Tsunemasa, Saito. 08186

Quaternary, sedimentation rates, relation to magnetic reversals: Steuerwald, B. A. 05096

Structural geology

Alpha, Nansen Cordillera, sea-floor spreading: Vogt, Peter Richard. 07160

Chukchi Sea, extension of Alaskan structures: Ostenso, Ned A. 00466

Greenland Sea, Lena Trough, Caledonian fold belt: Ostenso, N. A. 00544

Midoceanic ridge, tectonics, Greenland, Norwegian Seas: Litvin, V. M. 05862

Sea-floor rifts, relict and present: Johnson, G. Leonard. 08445

Argon*Abundance*

Enstatite melts: Kirsten, T. 00657

Geochemistry

Chondritic meteorites, unequilibrated, analyses: Heymann, D. 00297

Meteorites, redistribution by thermal diffusion: Turner, G. 08023

Sea water, noble gas analyses: Bieri, Rudolf H. 02841

Isotopes

Abundance, natural gas, relations to helium genesis: Stroud, Lowell. 08009

Ar-40, excess in deep-sea basalt: Funkhouser, John G. 05098

Argon—Continued*Isotopes—Continued*

Ar-39, mass-spectrometric measurement: Mitchell, J. G. 02993

Ar-40, ultramafic inclusions, Hawaii: Funkhouser, John G. 02361

K-Ar, contamination, air argon: Mussett, Alan E. 02985

Arizona*Absolute age*

Bagdad area, zircon, U-Pb: Silver, Leon T. 10991

Basin and Range province, metamorphic rocks, K-Ar: Mauger, Richard L. 02962

Central, Precambrian chronology: Livingston, Donald E. 07943

Central, Precambrian stratified rocks: Livingston, Donald E. 07460

Central, Yavapai Series, deformation and metamorphism: Lanphere, Marvin A. 07488

Dos Cabezas Mountains, intrusions, K-Ar: Erickson, Rolfe C. 08265

Grand Canyon, basalt flow, erosion rate: McKee, Edwin D. 00523

Kana-a lava flow, thermoluminescence method: Aitken, M. J. 03971

Metamorphic events, orogenic pulses, K-Ar: Damon, Paul E. 09370

Porphyry copper deposits: Livingston, Donald E. 00541

Santa Rita Mountains, igneous rocks: Drewes, Harold. 04108

Southern, Precambrian-Cenozoic events: Damon, Paul E. 02639

Areal geology

Apache Trail, western, volcanic geology: Sheridan, Michael F. 02653

Beaver Creek experimental drainage basin: Beus, Stanley S. 04393

Chiricahua Mountains, northern: Marjanemi, Darwin. 02660

Colorado River, guidebook, Lee's Ferry to Phantom Ranch: Hamblin, W. Kenneth. 06154

Colorado River valley, Lees Ferry to Phantom Ranch, guidebook: Pewe, Troy L. 09504

Del Bac Hills: Percious, J. K. 02659

Dos Cabezas Mountains: Erickson, Rolfe C. 02658

Mount Union quadrangle, southeast quarter: Blacet, Philip Merrell. 05513

Peloncillo Mountains: Gillerman, Elliot. 02646

Roskrage Mountains, summary: Bikerman, Michael. 02657

San Pedro Valley, field trip, road log: Haynes, Vance. 02650

Southeastern, field trip, road-log: Damon, Paul E. 02655

Southern, guidebook: Arizona Geological Society. 02672

Tucson area, orbital altitude photos: Titley, Spencer R. 02673

Tucson Mountains, Pima County, history of study: Mayo, Evans B. 02642

Wet Beaver Creek Canyon: Thompson, Robert. 04394

Economic geology

Asbestos, general: Salas, Guillermo P. 09531

Copper, Ajo area, occurrence: Wadsworth, William B. 01910

Copper and other metals, general: Anderson, Charles A. 05380

Copper, Bisbee area, genesis: Bryant, Donald G. 00540

Arizona—Continued

Economic geology—Continued

- Copper, hydrothermal alteration: Guilbert, John M. 04139
- Copper, Kalamazoo-San Manuel orebody, alteration zones: Guilbert, J. M. 11117
- Copper, Magma mine area: Hammer, Donald F. 05347
- Copper, Mineral Park deposit, genesis, fluid inclusion study: Ypma, P. J. M. 10682
- Copper, Pima County, Esperanza mine, occurrence: Lynch, Dean W. 02669
- Copper, Pima mining district, field trip, road log: Lynch, Dean. 02649
- Copper, Ray area, occurrence: Metz, R. A. 02670
- Copper, San Manuel district: Lowell, J. David. 04123
- Copper, Silver Hill mine, genesis: Beane, Richard E. 10205
- Copper, skarn deposits: Titley, Spencer R. 04155
- Copper, southern, genesis: Guilbert, John M. 02667
- Copper-lead-zinc, Banner district, Christmas mine area: Eastlick, John T. 05381
- Copper-zinc, Bagdad district: Baker, Arthur, 3d. 05348
- Lead-zinc, copper, gold, silver, Iron King mine: Gilmour, Paul. 05429
- Lead-zinc, copper, molybdenum, Mineral Park district: Eidel, J. J. 05430
- Metals, Bisbee district, genesis: Nye, Thomas Spencer. 07198
- Metals, southeastern, occurrence, dome-fracture intersection: Wertz, Jacques B. 05029
- Natural gas, Black Mesa basin: Turner, Daniel S. 03428
- Natural gas, Four Corners region: Picard, M. Dane. 03427
- Ore deposits, structural guides: Wertz, J. B. 09863
- Petroleum, Diné-bi-Keyah field, occurrence, production: McKenny, Jere W. 04514
- Porphyry copper: Livingston, Donald E. 00541
- Southeastern, Triassic-Jurassic mineralization, possibilities: Hayes, Philip T. 08588
- Uranium, Monument Valley-White Canyon district: Malan, Roger C. 05392
- Uranium-copper-vanadium, Garnet Ridge: Gavasci, Anna T. 07634

Engineering geology

- General, Benson and Tucson area, field trip, road log: Lacy, W. C. 02648
- Land subsidence, San Manuel mine, mechanics: Hatheway, Allen W. 11296

Geochemistry

- San Francisco Peaks, volcanics, chemical variations: Deal, Edmond G. 04392

Geomorphology

- San Pedro Valley, late Quaternary history: Haynes, C. Vance. 02666
- Sonoran Desert: Dunbier, Roger. 09496
- Southeastern, drainage patterns, evolution: Cooley, M. E. 02665
- Southwestern, bahadas and pediments, floods, characteristics: Rahn, Perry H. 10795

Geophysical surveys

- Ajo porphyry copper deposit, magnetic properties: May, Bruce Tipton. 04546
- Meteor Crater, electrical: Wilkins, Joe, Jr. 08503
- Tombstone area, gravity, Walnut Gulch watershed: Spangler, Daniel P. 05746

Arizona—Continued

Glacial geology

- San Francisco Peaks, multiple Pleistocene events: Updike, Randall G. 04391

Hydrogeology

- Central, ground-water depletion, electric-analog analysis: Anderson, T. W. 03679
- Coconino County, ground water, basic data: McGavock, E. H. 00566
- Colorado River, Lees Ferry to Lake Mead, ground-water movement: Johnson, P. W. 00915
- Cottonwood Wash, water resources, vegetation effects: Bowie, James E. 00608
- General, ground-water resources, levels, 1966-67: Cox, C. J. 03144
- Grand Canyon, Muav aquifer, analysis: Beck, George L. 11258
- Hopi Indian Reservation, ground-water resources, new: Whitsell, W. J. 09046
- Maricopa County, Sycamore Creek watershed, ground-water flow, resources: Thomsen, B. W. 07338
- Paradise Valley, Maricopa County, ground-water resources: Arteaga, F. E. 01879
- Sonoran Desert: Dunbier, Roger. 09496
- Tucson area, ground-water regime, changes, influent seepage: Wilson, L. G. 11375
- Tucson basin, geochemistry of ground water: Laney, R. L. 04653
- Tucson basin, ground-water resources, investigations: Davidson, E. S. 04652
- Waterman Wash area, ground-water resources, quality: Denis, E. E. 03141

Maps, geologic

- Brandenburg Mountain quadrangle: Krieger, Medora H. 00327
- Holy Joe Peak quadrangle: Krieger, Medora H. 00328
- Huachuca and Mustang Mountains: Hayes, Philip T. 00029
- Lookout Mountain quadrangle: Krieger, Medora H. 00449
- Saddle Mountain quadrangle: Krieger, Medora H. 01770

Maps, gravity

- Maricopa, Pima, Pinal, Yuma Counties, parts: Peterson, Donald L. 04189
- Tombstone area, Walnut Gulch watershed: Spangler, Daniel P. 05746

Maps, ground water

- Central, depths to water: Anderson, T. W. 03679
- Coconino County, levels in Coconino and Supai Formations: McGavock, E. H. 00566
- Paradise Valley, Maricopa County: Arteaga, F. E. 01879

Maps, hydrogeologic

- Maricopa County, Sycamore Creek watershed: Thomsen, B. W. 07338

Mineralogy

- Clay minerals, copper-bearing, Ray area: Stephens, J. D. 09702
- Clay minerals, Roosevelt Lake, sediments: Pipkin, Bernard W. 11385
- Hemihedrite, Pinal County, Florence mine: Anthony, John W. 10200
- Kaersutite, San Carlos area, basalt: Mason, Brian. 09062
- Na-montmorillonite, Chambers area, particle morphology: Roberson, H. E. 05569
- Pyroxene, Gila County, diabase sill, compositional variations: Smith, Douglas. 09691

Arizona—Continued

Mineralogy—Continued

- Quartz, Meteor Crater, shock-wave damage: Sclar, Charles B. 07458
Wickenburgite, new mineral, Wickenburg area: Williams, Sidney A. 07568

Paleomagnetism

- Holocene, basalt, Flagstaff area: Strangway, David W. 04285

Paleontology

- Arthropoda, Permian, Coconino Formation, spider tracks: Alf, Raymond M. 02510
Aves, Pleistocene, lower, Mohave County, stork: Phillips, Allan R. 03090
Cephalopoda, Permian, Toroweap Formation, Coconino County, nautiloid: Beus, Stanley S. 02467
Flora, Devonian: Canright, James E. 04386
Gymnosperms, Tertiary, volcanics, San Cayetano Mts.: Damon, Paul E. 11423
Mammalia, Pliocene, Benson local fauna, rabbits: Downey, Joe S. 05230
Mammalia, Quaternary, southeastern, rodent: Cantwell, R. J. 04389
Mollusca, Quaternary, lake sediments, Winona area: Batchelder, George L. 04388
Palynology, Pleistocene, Lake Cochise shore deposits, southern: Hevly, Richard H. 11381
Palynomorphs, Holocene, Sonoran Desert, paleoecologic indicators: Hevly, Richard H. 11384
Palynomorphs, Quaternary, lake sediments, Coconino County: Whiteside, Melbourne C. 11426
Pteridophytes, Cretaceous, Dakota Sandstone: Rushforth, Samuel R. 06140
Reptilia, Mesozoic, northern, dinosaurs, popular account: Breed, William J. 04337

Petrology

- Ajo area, Cornelia pluton: Wadsworth, William B. 01910
Ajo area, Cornelia pluton, multiple intrusions: Wadsworth, William B. 10992
Bisbee area, intrusive breccias: Bryant, Donald G. 00540
Central, Yavapai Supergroup, silicic volcanics: Anderson, C. A. 06500
Garnet Ridge, breccia dike: Gavasci, Anna T. 07634
Gila County, Christmas copper mine, contact rocks, genesis: Perry, David Vinson. 02637
Hopi Buttes, volcanic rocks, differentiation, X-ray fluorescence study: Laidley, Richard A. 04273
Ithaca Peak, porphyry stock, crystallization, mineralization: Eidel, J. James. 07708
Meteor Crater, impact metamorphism: Brett, Robin. 05191
Northeastern, Buell Park kimberlite pipe: Schmitt, H. H. 10776
Peloncillo Mountains, Weatherby Canyon ignimbrite: Gillerman, Elliot. 02643
San Francisco Mountains, Mount Humphreys, fulgurites: Davis, Donald G. 03191
South and central, volcanic rocks, intrusive: Watson, Barry N. 02641
Southeastern, Tertiary ash flows: Elston, Wolfgang E. 02654
Superior area, Tertiary ash-flow, zoning: Peterson, Donald W. 02661

Sedimentary petrology

- East-central, Devonian rocks, environments, provenance: Pine, Gordon Leroy. 04542

Arizona—Continued

Sedimentary petrology—Continued

- North-central, San Rafael Group, environment: Johnston, Ian McKay. 08752
Sonoita and Avra Valleys, soils, genesis of semiarid: Smith, B. R. 01839
Southeastern, Earp Formation, chert conglomerate: Rea, David K. 03883
Yavapai County, stream sands, heavy minerals: Gambell, Neil. 04397

Stratigraphy

- Brandenburg Mountain quadrangle, map-unit descriptions, sections: Krieger, Medora H. 00327
Cenozoic, northwestern, Hindu Canyon: Gray, Robert. 11383
Cretaceous, southeastern: Lootens, Douglas J. 08300
Cretaceous, southeastern: Schafroth, Don W. 02663
Cretaceous-Cenozoic, Roskrige Mountains: Bikerman, Michael. 02657
Cretaceous-Quaternary, Pena Blanca and Walker Canyon areas: Nelson, Frank J. 11334
Devonian, east-central, paleogeography: Pine, Gordon Leroy. 04542
Devonian, nomenclature, central: Teichurt, Curt. 06037
Holy Joe Peak quadrangle, map-unit descriptions, sections: Krieger, Medora H. 00328
Huachuca and Mustang Mountains, sections: Hayes, Philip T. 00029
Lookout Mountain quadrangle, sections: Krieger, Medora H. 00449
Mesozoic, northern, popular account: Breed, William J. 04337
Mesozoic, Santa Rita and Empire Mts., field trip, road log: Drewes, Harald. 02647
Mesozoic, sedimentary and volcanic rocks, southeastern: Hayes, Philip T. 02662
Paleozoic, diagnostic features: Bryant, Donald L. 02640
Pennsylvanian, Naco Formation, south-central, biostratigraphy: Reid, Alastair Milne, 2d. 07201
Permian, Earp Formation, southeastern: Rea, David K. 03883
Pliocene, Bouse Formation, Parker-Blythe-Cibola area: Metzger, D. G. 05185
Precambrian-Cambrian, Troy Quartzite, Bolsa and Abrego Formations, southeastern: Krieger, Medora H. 02671
Precambrian-Miocene, Tucson Mts., field trip, road log: Damon, P. E. 02651
Quaternary, San Pedro River valley: Haynes, C. Vance. 02666
Saddle Mountain quadrangle, sections: Krieger, Medora H. 01770
Santa Rita Mountains, new and revised formations: Drewes, Harald. 04108
Tertiary, southeastern, ash flows: Elston, Wolfgang E. 02654
Tertiary, volcanic and clastic rocks, south-central: Sell, James D. 02664
Tertiary, Yuma area: Olmsted, F. H. 07853
- Structural geology*
Bisbee district, ore deposition, controls: Nye, Thomas Spencer. 07198
Central, Shylock fault zone, Precambrian wrench faulting: Anderson, C. A. 09962
Coconino County, Woods Canyon drainage basin: Scholtz, Judith Fessenden. 04395

Arizona—Continued*Structural geology—Continued*

Dos Cabezas Mountains, Laramide-Tertiary deformation: Erickson, Rolfe C. 08265
 Goldfield and Superstition Mountains area, calderas: Sheridan, Michael F. 04398

Pima County, Tucson Mountain chaos, basement blocks, emplacement: Mayo, Evans B. 11427

Santa Catalina Mountains, East Forerange, folds: Peterson, Richard Charles. 07200

Santa Rita and Empire Mountains, Laramide deformation, field trip, road log: Drewes, Harald. 02647

Southeastern, domes, fractures, relation to ore deposits: Wertz, Jacques B. 05029

Southern, fractures, domes, intersections: Wertz, J. B. 09863

Yuma area, Tertiary history: Olmsted, F. H. 07853

Weathering

Sonoita and Avra Valleys, soils, genesis of semiarid: Smith, B. R. 01839

Arkansas*Absolute age*

Magnet Cove, biotite, fission track: Miller, D. K. 03200

Magnet Cove, sphene, apatite, fission-track: Naeser, C. W. 00004

Areal geology

Scranton-New Blaine quadrangles: Haley, Boyd R. 05972

Economic geology

Coal, other resources, Scranton-New Blaine quadrangles: Haley, Boyd R. 05972

Mineral resources, Greenwood quadrangle: Haley, Boyd R. 05451

Natural gas, Aetna field: Planalp, Roger. 03411
 Natural gas, Arkoma basin: Branan, C. B., Jr. 03412

Natural gas, Jerusalem field: Hartman, F. H. 03388

Natural gas, Washburn anticline fields: Bartlett, Charles S., Jr. 03410

Nitrogen gas, Jurassic oil and gas fields, occurrence: Lokke, Donald H. 02163

Uranium, reconnaissance, 1952-56: U.S. Atomic Energy Commission. 08994

Geomorphology

Grand Prairie region, Cypress Bayou, drainage change: Bedinger, M. S. 00784

Geophysical surveys

Ozark region, radar, lineaments: Kirk, J. Norman. 09288

Hydrogeology

Grant and Hot Spring Counties, aquifers: Halberg, H. N. 04806

Ground-water levels, 1965, Quaternary and Tertiary deposits: Albin, Donald R. 11181

Maps, geologic

Grant and Hot Spring Counties: Halberg, H. N. 04806

Greenwood quadrangle: Haley, Boyd R. 05451

Scranton-New Blaine quadrangles: Haley, Boyd R. 05972

Maps, ground water

Grant and Hot Spring Counties: Halberg, H. N. 04806

Maps, structure

Greenwood quadrangle, coal beds and gas fields: Haley, Boyd R. 05451

Arkansas—Continued*Mineralogy*

Chlorite, Saline County, Anderson talc deposit: Wu, Dah-cheng. 09303

Paleomagnetism

Cretaceous, igneous rocks, Magnet Cove, Potash Sulphur Springs: Scharon, LeRoy. 08379

Paleontology

Brachiopoda, Silurian, St. Clair Limestone: Amsden, Thomas W. 03222

Brachiopoda, Silurian-Devonian, value changes: Amsden, Thomas W. 07746

Bryophytes, Eocene, Wilcox Formation, Crowley's Ridge, new mosses: Wittlake, Eugene B. 06509

Cephalopoda, Mississippian, Moorefield-Fayetteville Formations: Drahozal, James A. 08160

Cephalopoda, Pennsylvanian, Bloyd Formation: McCaleb, James A. 03723

Cephalopoda, Pennsylvanian, Bloyd Formation, Washington County: Mikesch, David L. 03628

Cephalopoda, Pennsylvanian, Hale Formation, descriptions, zonation: Gordon, Mackenzie, Jr. 09388

Cephalopoda, Pennsylvanian, Hale Formation, goniatites: Quinn, James H. 02958

Conodonts, Ordovician-Silurian, Batesville district: Craig, William Warren. 04534

Gymnosperms, Mississippian, Chester Series, southwestern: Taylor, T. N. 02349

Gymnosperms, Mississippian, Wellington Sandstone: Eggert, D. A. 02954

Protista, Cretaceous, coccolithophorids, coastal plain: Gartner, Stefan, Jr. 09385

Pteridophytes, Mississippian, Fayetteville Shale, northwestern: Taylor, Thomas N. 00584

Radiolaria, Mississippian, Fayetteville Shale, Washington County: Nigrini, Catherine. 01787

Trilobita, Mississippian, Boone Formation: Taylor, John D. 11179

Trilobita, Mississippian, Boone Formation, Benton County: Taylor, John D. 11178

Trilobita, Ordovician, Powell Formation, Marion County: Taylor, John D. 11180

Sedimentary petrology

Crawford County, Atoka sandstone, clay-mineral diagenesis: Triplehorn, Don M. 00414

Gulf Coast embayment, Buckner Formation: Dickinson, Kendall A. 03524

Northwestern, Morrowan oolitic limestone, diagenesis: Henbest, Lloyd G. 01148

Northwestern, silty soils, genesis: Chapman, S. L. 01855

Winslow area, Winslow Formation, cycles, faunal, depositional: Henbest, Lloyd G. 02496

Stratigraphy

Cambrian-Quaternary, Greenwood quadrangle: Haley, Boyd R. 05451

Hot Springs National Park and vicinity: Fel-lows, Terence L. 08268

Jurassic, Buckner Formation, Gulf Coast embayment: Dickinson, Kendall A. 03524

Jurassic, southwestern, Upper: Dickinson, Kendall A. 01693

Mississippian, Upper, northern, nomenclature revision: Ogren, David E. 00306

Ordovician-Silurian, Batesville district: Craig, William Warren. 04534

Arkansas—Continued*Stratigraphy—Continued*

- Pennsylvanian, Atoka rocks, nomenclature, problems: Quinn, James H. 02497
- Pennsylvanian, Hale Formation, biostratigraphy: Quinn, James H. 10080
- Pennsylvanian, Hale Formation, correlation with England: Quinn, James H. 02958
- Pennsylvanian, Winslow Formation, Winslow area: Henbest, Lloyd G. 02496
- Silurian, Saint Clair Limestone, north-central, correlation: Amsden, Thomas W. 03222

Structural geology

- Greenwood quadrangle: Haley, Boyd R. 05451
- Hot Springs National Park and vicinity: Fellows, Terence L. 08268
- Ouachita Mountains, eastern, nappes: Viele, George W. 10092
- Ouachita Mountains, frontal: Morris, Robert C. 08815
- Southwestern, basal Cretaceous surfaces: Speer, John H. 10086
- Washburn anticline gas fields, faults: Bartlett, Charles S., Jr. 03410

Arsenic*Ontario*

- Cobalt district, genesis: Petruk, William. 09450
- Cobalt-Gowganda area, occurrence: Petruk, William. 04130

Artesian waters and wells*British Columbia*

- Vernon area, artesian aquifer, flow control: Scott, J. S. 00546

Florida

- Baker County: Leve, Gilbert W. 03758
- Broward County, Floridan aquifer: Grantham, Rodney G. 03647

Georgia

- Coastal Plain aquifer, piezometric surface, decline: Carver, Robert E. 02525

Montana

- Fox Hills-Hell Creek aquifer, constants, stress relations: Taylor, O. James. 02687

North Dakota

- Eastern, source and movement: Swenson, Frank A. 05879
- Recharge theory, artesian basin: Swenson, Frank A. 00552

South Dakota

- Eastern, source and movement: Swenson, Frank A. 05879
- Recharge theory, artesian basin: Swenson, Frank A. 00552

Virginia

- Princess Anne County, Nansemond Formation: Rogers, W. S. 02526

Arthropoda*Permian*

- Arizona, Coconino Formation, spider tracks: Alf, Raymond M. 02510

Artifacts*Age*

- Pottery, thermoluminescence dating, progress: Ralph, Elizabeth K. 03972

Alberta

- General: Bryan, Alan. 10927

Georgia

- Broad River-Pistol Creek drainage area: Midgett, Gordon M. 00883
- Steatite: Kelly, A. R. 00882

Idaho

- Cascadia Cave, Holocene: Newman, Thomas M. 09198

Artifacts—Continued*Idaho—Continued*

- Malad Hill site: Swanson, Earl H., Jr. 06169

Minnesota

- Blue Earth County, Cambria Site, properties, source areas: Watrall, Charles R. 06988

New York

- Orange County, Pleistocene? cave deposit, fluted point with caribou: Guilday, John E. 11291

- Staten Island, projectile points, petrologic study, sources: Rutsch, Edward S. 08135

North America

- General, prehistory, archeological concepts, early man sites: Jennings, Jesse D. 09000
- Pacific Northwest, sites, cores and blades, cultures, dates: Sanger, David. 05154

Nova Scotia

- Debert archeological site, absolute age: MacDonald, George F. 03643

United States

- Bibliography, salvage archeology: Petsche, Jerome E. 09493

West Virginia

- Charleston area, Saint Albans site, Holocene: Broyles, Bettye J. 01714

Asbestos*Alabama*

- Tallapoosa and Chambers Counties, anthophyllite, occurrence: Neathery, Thornton L. 09440

Appalachians

- Resources, review: French, Alice E. 01389

Exploration

- Evaluation of discoveries, cores, visual method: Dean, A. W. 05339

General

- Properties, occurrence, utilization, Arizona, Quebec: Salas, Guillermo P. 09531

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Associations—Continued

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Associations—Continued

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Smith, Neal J. 00182
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09871
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E. 11051
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Asteroidea

- Morphology*
Plate, fossil and Holocene: Blake, D. Bryan.
08611

Asterozoa

- Onychaster*
Mississippian, U.S., central, species distinction:
Bjork, Philip R. 06901
- Onychaster stimpfei*, n.sp.
Mississippian, Illinois, Golconda Formation:
Bjork, Philip R. 00489

Atlantic Coastal Plain

- Economic geology*
Petroleum, continental margin, potential, ex-
ploration: Barrow, Thomas D. 06106
- Phosphate, Quaternary deposits, genesis:
Cathcart, James B. 07449
- Geochemistry*
Sediments, magnetic spherules, electron probe
analyses: Marvin, Ursula B. 09800
- Geomorphology*
Delmarva Peninsula, gross morphology,
Pleistocene sedimentation: Jordan, Robert R.
08210
- Terraces, regional, transgressive-regressive sedi-
ment complexes: Colquhoun, Donald J. 07982
- Geophysical surveys*
Basement, magnetic, structural interpretation:
Reed, John C., Jr. 08850

Hydrogeology

- Ground water, distribution, composition: Man-
heim, F. T. 05436
- Pre-Cretaceous basement configuration,
hydrologic significance: Gill, Harold E. 09780

Mineralogy

- Apatite, vivianite, northern, sediments,
diagenetic: Adams, John K. 08595

Paleoclimatology

- Miocene-Pliocene: Isphording, Wayne C. 10313

Paleontology

- Gastropoda, Cenozoic, southern, Muricidae:
Vokes, Emily H. 05057
- Ostracoda, Pleistocene, submarine canyons, dis-
tribution: Hazel, Joseph E. 05693
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evolution: Heaslip, William Graham. 04377

Sedimentary petrology

- Cretaceous-Quaternary, sedimentary sequences,
lithofacies: Owens, James P. 08964
- Miocene strata, depositional environments,
basin mobility: Gibson, T. G. 08949
- Southern, Cretaceous shelf rocks: Swift, Donald
J. P. 09711

Atlantic Coastal Plain—Continued

Sedimentary petrology—Continued

Weathering

- Soils, genesis of clay-poor bodies, B2t horizon:
Daniels, R. B. 04985
- Southern, paleosols, genesis: Cady, J. G. 07419

Atlantic Ocean

Absolute age

- Mid-Atlantic Ridge, basaltic glass, fission track:
Fleischer, R. L. 02682
- Mid-Atlantic Ridge, extrusives, K-Ar, spreading
rates: Aumento, F. 02681

Areal geology

- Northwestern, ocean bottom photography: Ew-
ing, Maurice. 09136
- Sohm Abyssal Plain: McGregor, Bonnie A.
07372
- Western, sedimentation, tectonics: Heezen,
Bruce C. 02476

Economic geology

- Manganese, San Pablo Seamount, possibilities:
Aumento, F. 04726

Engineering geology

- Clays, shear strength, density, Gulf of Maine:
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Geochemistry

- Be-7 concentration: Silker, W. B. 03066
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Manheim, F. T. 08791
- Gulf of Maine, suspended sediment: Spencer,
Derek W. 08468
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tions: Brewer, Peter G. 08470
- Mid-Atlantic Ridge, Ba, Co, Ag, accumulation
rate: Turekian, Karl K. 02356
- Mid-Atlantic Ridge, rocks, trace elements: Cor-
liss, John B. 10504
- Mn, Co, Ni solids, stability conditions: Carvajal,
Marta Campa. 07784
- Nares Abyssal Plain, iron-manganese nodules:
Smith, R. E. 03061
- Northern, sediments, dissolved silica, interac-
tion: Fanning, Kent A. 10707
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in rocks: Friedel, R. A. 11282
- Rare earths, concentrations, variations: Hog-
dahl, Ove T. 03666
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ment, analyses: Aumento, F. 04726
- Strontium, barium, concentrations, variations:
Andersen, Neil R. 03665

Geomorphology

- Bahama canyon system: Andrews, James E.
07748
- Bay of Fundy, subaqueous dune fields: Swift,
Donald J. P. 08010
- Continental margin, North America, bottom fea-
tures: Uchupi, Elazar. 00926
- Depositional anticlines, Straits of Florida, Miami
Terrace: Malloy, Richard J. 09323
- Eleuthera Ridge, genesis, turbidity currents: An-
drews, James E. 08603
- Hatteras plain, North Carolina continental mar-
gin, evolution: Rona, Peter Arnold. 02040
- Lower Continental Rise Hill province, anti-
dunes: Fox, P. J. 04492
- Massachusetts continental slope, Corsair
Canyon, erosion: Ross, David A. 02010
- North American Basin, physiographic provinces:
Pratt, Richard M. 04519

Atlantic Ocean—Continued*Geomorphology—Continued*

Scotian Shelf, end-moraine complex: King, Lewis H. 09794

Geophysical surveys

Bahama Canyon system, seismic: Andrews, James Einar. 00871

Bahama-Blake Outer Ridge, structure, seismic: Markl, Rudi G. 10846

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Florida-Hatteras slope, Blake Plateau, seismic: Zarudzki, E. F. K. 05050

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Gulf of Maine, gravity, magnetic: Kane, M. F. 11109

Hatteras abyssal plain, seismic: Rona, Peter Arnold. 02040

Labrador Sea, magnetic: Kroenke, Loren W. 09828

Labrador Sea, sea-floor spreading, magnetic, seismic evidence: Mayhew, M. A. 08446

Labrador Sea, seismic, magnetic: Fenwick, D. K. B. 01975

Mid-Atlantic Ridge, heat flow, conductivity: Kasameyer, Paul W. 10648

Mid-Atlantic Ridge, magnetic, heat flow: Phillips, J. D. 10658

Mid-Atlantic Ridge, Puerto Rico Trench, basalt, magnetic properties: Phillips, J. D. 07846

Mid-oceanic ridge, magnetic, anomaly pattern, interpretation: Heirtzler, James R. 00655

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Northern, Mid-Atlantic Ridge, magnetic anomalies: Talwani, Manik. 10847

Northern, seismic: Ewing, John I. 07986

Northwestern off Labrador, mid-oceanic ridge, branch: Johnson, G. Leonard. 00636

Outer ridge, valleys, seismic: Chase, R. L. 07786

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Rhode Island area, Block Island to Martha's Vineyard, seismic: McMaster, Robert L. 00927

Sediments, sequences, velocity, sonobuoy data: Houtz, Robert. 00514

Straits of Florida, gravity: Ball, M. M. 08442

Vema fracture zone, heat flow: VonHerzen, R. P. 10649

Glacial geology

Gulf of Maine, history: Schlee, John S. 08972

Maps, bathymetric

0° N., 63-74° W.: Zietz, Isidore. 09490

Cape Sable to Cape Hatteras: U.S. Coast and Geodetic Survey. 02425

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North American Basin: Pratt, Richard M. 04519

Maps, magnetic

0° N., 63-74° W.: Zietz, Isidore. 09490

Burgeo Bank, shipborne: Canada Geological Survey. 02769

Grand Bank, shipborne: Canada Geological Survey. 02782

Atlantic Ocean—Continued*Maps, magnetic—Continued*

Newfoundland Shelf, Sheets 1 O (east half), and 1 P (west half), shipborne: Canada Geological Survey. 02784

Scotian Shelf, Banquereau, ship- and airborne: Canada Geological Survey. 02779

Scotian Shelf, Middle Bank, ship- and airborne: Canada Geological Survey. 02780

Scotian Shelf, Misaine Bank, ship- and airborne: Canada Geological Survey. 02781

Scotian Shelf, Sable Island Bank East, ship- and airborne: Canada Geological Survey. 02775

Scotian Shelf, Sable Island Bank West, ship- and airborne: Canada Geological Survey. 02776

Scotian Shelf, Sheet 11 G/12, shipborne: Canada Geological Survey. 02767

Scotian Shelf, Sheet 11 G/14, shipborne: Canada Geological Survey. 02768

Scotian Shelf, Sheet 1D, shipborne: Canada Geological Survey. 02777

Scotian Shelf, Sheets 20 O:1, 2, 6-11, 14-16, shipborne: Canada Geological Survey. 06440

Scotian Shelf, Shelburne area, shipborne: Canada Geological Survey. 02770

Scotian Shelf, The Stone Fence, shipborne: Canada Geological Survey. 02778

Scotian Shelf, Yarmouth area, ship- and airborne: Canada Geological Survey. 02774

Virgin Rocks, shipborne: Canada Geological Survey. 02783

Mineralogy

Bottom sediments, zonal distribution: Shurko, I. I. 08071

Florida shelf to Blake Plateau, sedimentary rocks, facies: Weaver, Charles E. 02540

Palygorskite, associated minerals, Barracuda Escarpment: Bonatti, Enrico. 06443

Saponite, Mid-Atlantic Ridge, basalt: Banks, Harold H., Jr. 08230

Paleoclimatology

Precambrian-Cenozoic, northern regions, summary: Schwarzbach, Martin. 11397

Quaternary, evolution of bottom water, sediments: Worthington, L. V. 04163

Quaternary, insolation, surface temperature, sea level correlation: Broecker, Wallace S. 04172

Quaternary, salinity and temperature, role in glaciation: Weyl, Peter K. 04162

Tertiary-Pleistocene, Caribbean to Nova Scotia, Foraminifera: Bartlett, Grant A. 02087

Paleomagnetism

Mid-Atlantic Ridge, manganiferous sediments: Schwarz, E. J. 07210

Plio-Pleistocene, cores, north, geochronology: Phillips, J. D. 02676

Paleontology

Algae, Cretaceous, Lower, Blake Escarpment: Johnson, J. Harlan. 07176

Fauna, Quaternary, island shore, endemism, causes: McDowall, R. M. 07825

Foraminifera, Plio-Pleistocene, sediment cores, north: Phillips, J. D. 02676

Foraminifera, Tertiary-Pleistocene, planktonic: Bartlett, Grant A. 02087

Microfossils, Plio-Pleistocene boundary, north-central, zonation: Berggren, W. A. 09126

Palynology, seismic horizon beta, age: Habib, Daniel. 05166

Protista, Cenozoic, calcareous nannoplankton, worldwide markers: Bukry, David. 06348

Protista, coccolithophores, ecology, climatic assemblages: McIntyre, Andrew. 07877

Atlantic Ocean—Continued

Paleontology—Continued

Protista, dinoflagellates, Quaternary, calciodinellids, peridinioid cysts: Wall, David. 06029

Quaternary, northern, biogeography, late land connections: Lindroth, Carl H. 11398

Petrology

Mid-Atlantic Ridge, 22° N. lat., basalt, green schist: Melson, W. G. 11241

Mid-Atlantic Ridge, median valley to crest, basalts: Aumento, F. 02166

Mid-Atlantic Ridge, ultramafic rocks: Bonatti, Enrico. 03159

Sedimentary petrology

Baffin Bay, bottom sediments: Marlowe, James I. 06736

Bahama Canyon system, sedimentation: Andrews, James Einar. 00871

Bahama-Blake Outer Ridge, sedimentation, evolution: Markl, Rudi G. 10846

Bahamas area, lithified carbonates: Thompson, Geoffrey. 06600

Bay of Fundy, ripple marks, hydraulic factors: Klein, George deVries. 07915

Bermuda Rise, northern, sedimentation: Fox, P. J. 08693

Blake Plateau, Florida Hatteras Slope, sediments, mineralogy: Hathaway, John C. 08951

Blake-Bahama Outer Ridge, contour currents, sedimentation: Ballard, J. A. 10843

Blake-Bahama Outer Ridge, sedimentation, hydrodynamic model: Bryan, George M. 10845

Bottom sediments, mineralogical zones and provinces: Shurko, I. I. 08071

Clay mineral distribution, sediment sources, transport: Griffin, John J. 05986

Continental margin, Florida, sediments, organic constituents: Hulsemann, Jobst. 01147

Gulf of Maine, Wilkinson basin, clays, properties, probe tests: Richards, Adrian F. 01190

Gulf Stream system, mineral transport: Folger, David W. 08948

Lower Continental Rise Hills, currents, sediment provinces: Heezen, B. C. 07882

Massachusetts to Florida, suspended sediments: Manheim, F. T. 08961

Mid-Atlantic Ridge, Cretaceous-Tertiary sediments: Tsunemasa, Saito. 08078

North American Basin, sediments: Pratt, Richard M. 04519

North, sediments, glacial, ice-rafted: Conolly, J. R. 11271

Northern, continental rise, sedimentation, contour currents: Hollister, C. D. 09790

Northern, suspended sediments, transport mechanisms, eolian contribution: Folger, David W. 09776

Sediments, elasticity vs. porosity and grain diameter: Schreiber, B. Charlotte. 00285

Sediments, piston cores, bedding disturbance: Bouma, A. H. 03801

Sediments, properties: Keller, G. H. 05627

Straits of Florida, Floridian-Bahamian escarpments, sedimentary structures: Neumann, A. Conrad. 08441

Stratigraphy

Cretaceous-Holocene, Puerto Rico Trench, north slope: Chase, R. L. 09502

Oligocene-Miocene, The Gully, submarine canyon: Marlowe, J. I. 10323

Pliocene-Pleistocene boundary, north-central, core, dating: Berggren, W. A. 09126

Atlantic Ocean—Continued

Stratigraphy—Continued

Quaternary, Florida-Hatteras slope: Zarudzki, E. F. K. 05050

Structural geology

Basin genesis, model study: Funnell, B. M. 03920

Evolution, continental drift: Wilson, J. Tuzo. 09953

Evolution of basin, continental drift: Sutton, John. 06127

Mid-Atlantic Ridge, crustal spreading questioned: Watkins, N. D. 02815

Mid-Atlantic Ridge, fracture zone: Lowrie, A., Jr. 10997

Mid-Atlantic Ridge, sea-floor spreading, lapse: Schneider, Eric D. 08869

Mid-Atlantic Ridge, sea-floor spreading rates: Aumento, F. 02681

Mid-Atlantic Ridge, spreading rates: Fleischer, R. L. 02682

Mid-Atlantic Ridge, tectonics, geologic, geophysical data: vanAndel, Tjeerd H. 09479

Northern, crustal structure, seismic data review: Orlenok, V. V. 09443

Northern, wrench faulting, rifting, palinspastic restoration: Webb, Gregory W. 00172

Opening, Triassic age, evidence: Seyfert, Carl. 08450

Puerto Rico Trench, faulting theories: Chase, R. L. 09502

Sea-floor spreading, bottom material, viscosity: Cramer, Chris H. 10481

Sohm Abyssal Plain, sea-floor spreading: McGregor, Bonnie A. 07372

Straits of Florida, lineaments, faulting evidence: Malloy, Richard J. 08960

*Atmosphere**Composition*

O-CO₂ balance, control since Precambrian: Tappan, Helen. 01832

Oxygen isotopes, variations, North America, last 13,000 years: Stuiver, Minze. 10710

Quartz in airborne dust, evaluation, X-ray diffraction: Oberg, Maurice. 04356

Evolution

Primitive Earth: Cloud, Preston E., Jr. 02742

Genesis

Early development, relation to Moon capture: Singer, S. F. 03904

Geochemistry

CO₂ abundance through time: Holland, Heinrich D. 08020

Radioactivity

Rn-222, measurement, alpha-pulse spectroscopy: Lindeken, C. L. 00659

*Automatic data processing**Absolute age*

Radiocarbon dates, retrieval system: Taylor, R. E. 11358

Applications

Colorado School of Mines, faculty uses: Hutchinson, Robert M. 07761

Clay mineralogy

Soils, quantitative analysis, limitations: McNeal, Brian L. 00989

Crystallography

Interfacial angles, matricial calculation, program: Fabregat, Francisco J. 09222

Earth sciences

Applications, simulation, colloquium: Merriam, Daniel F. 06110

Automatic data processing—Continued*Earth-current methods*

Micropulsations, propagation characteristics, analysis: Bloomquist, Marvin Gaines. 02238

Earthquakes

Body waves, mantle, model, computer program: Walker, Daniel A. 02294

Mechanism, body force equivalents, FORMAC application: Nyland, Edo. 11190

Mechanism, P nodal solutions, computer vs. visual methods: Stevens, Anne E. 02295

Stress patterns, regional and global: Ben-Menahem, Ari. 05452

Economic geology

Alaska, mineral deposits, trend-surface analysis: Heiner, Lawrence E. 09834

Coal-bearing rocks, Pennsylvania: Kent, Bion H. 07913

Petroleum reservoir, volume, well data system: Jeffries, Frank. 06514

Storage and retrieval: Hutchison, W. W. 01032

Engineering geology

Information retrieval, descriptors and abstracts: Chari, Tuppal Ramanuja. 00974

Layered media, nuclear explosion, wave propagation: Costantino, C. J. 07738

Nonlinear structures, earthquake effects, analysis: Liu, Shih-Chi. 01762

Seismic structural analysis, skyscrapers: Medearis, Kenneth. 08302

Slope stability: Starr, Michael Reginald. 00988

Gas reservoir behavior

Mathematical modeling, technique, possible applications: Weinaug, C. F. 06176

General

Canada, national system for storage and retrieval: Burk, C. F., Jr. 09211

Computer, time-sharing experiment: Frush, Charles O. 07775

Factor analysis, Q-mode, FORTRAN IV program: Klován, J. E. 01056

Factor analysis, R-mode, FORTRAN II program: Sampson, Robert J. 01006

Fortran IV trend-surface program, Alaska University computer: Heiner, Lawrence E. 09832

Information storage and retrieval, algorithms: Goodin, Ed. V. 09341

Interpretation of state vectors and local transformation operators: Pollack, Henry N. 06175

Item seriation, refinements: Craytor, William Bert. 08167

Multivariate analysis, dispersion: Rao, S. V. L. N. 01055

Storage and retrieval system, Georgia, minerals program: Ostrander, Charles C. 00895

Tulsa University, information retrieval system: Graves, Roy W. 08710

U.S. Geological Survey, storage and retrieval systems: Appleman, D. E. 10885

West Virginia, Geological Survey, program: Latimer, I. S., Jr. 01715

Geochemistry

Basic, ultrabasic rocks, analyses, data projection scheme: Westoll, N. D. S. 10502

Brines, factor analysis, R-mode, FORTRAN II program: Sampson, Robert J. 01006

Geochemical prospecting, Alaska, Fairbanks area: Heiner, L. E. 09835

Igneous rocks, molecular norm calculation, FORTRAN IV program: Creven, J. F. 10871

*Geologic reference***Automatic data processing—Continued**

Information structuring and search: Briggs, Louis I. 10891

Geologic systems

Simulation: Bonham-Carter, Graeme. 06170

Geomorphology

Cusate forelands, origin, structural influences, Florida: Wood, William L. 08438

Terrain analysis: Turner, A. Keith. 06913

Geophysical methods

Gravity, magnetic fields, wave number domain: Kanasewich, E. R. 10406

Geophysical surveys

Marine data, retrieval, storage system: Ross, D. I. 08473

Hydrogeology

Aquifer analysis: Bredehoeft, J. D. 09543

Aquifer evaluation: Pinder, George F. 04569

GOWN, ground-water data storage system: Gilliland, J. A. 07211

Ground-water flow, regional, quantitative analysis: Freeze, R. Allan. 01849

Ground-water hydrographs, digital recording: Gilliland, J. A. 01940

Ground-water management, California: Weber, Ernest M. 09542

Ground-water seepage flow, Pavlovsky's solution, computer program: Papadopoulos, George T. 00194

Permeability distribution, energy dissipation analysis: Nelson, R. William. 00591

Rangeland watershed, physical data: Stephenson, G. R. 11030

Resource development: Kaser, Roland F. 05536

Software interface, computer and geologist: Meyer, Charles F. 08429

Soils, hydraulic conductivity, calculation factors: Kunze, R. J. 05966

Stream-aquifer systems, simulation, U.S., western: Bittinger, Morton Wayne. 07182

Systems analysis, multilevel optimization: Dracup, John A. 09544

Magnetic methods

Airborne data, high speed processing: Zurflueh, Ernst G. 10407

Maps

Contour, computer programs for compilation: Smith, F. G. 01963

Contour, plotting program: McIntyre, Donald B. 09431

Structure, analysis, spatial filtering: Robinson, J. E. 05618

Marine geology

Geophysical data, retrieval, storage system: Ross, D. I. 08473

Underwater photography, storage, retrieval system: Manchester, Keith S. 08474

Mineral exploration

Potential: Lea, Graham. 00951

Techniques, computer analysis: Rychkun, Edward A. 06884

Techniques, storage, retrieval: Eimon, Paul I. 09377

Uranium, resource prediction: Bostick, N. H. 06831

Mineralogy

Computer analysis, zircon morphology: Greenwood, William R. 00425

Mineral chemical analyses, end member molecules: Perry, Kenneth, Jr. 01482

Multi-component mineral systems, identification: McCaleb, Stanley B. 08795

Automatic data processing—Continued*Mineralogy—Continued*

- Powder data, self-indexing, unit-cell refinement: Appleman, D. E. 08605
- Powder patterns, recognition program: Johnson, G. G., Jr. 08749
- X-ray diffraction analysis, Fourier-transform technique, effects of nonideal crystals: Ross, Malcolm. 09554
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- X-ray diffraction analysis, multiphase powder identification system: Johnson, G. G., Jr. 04756
- X-ray diffraction data, processing: Rex, R. W. 08852
- X-ray powder data, intensity values: Smith, Deane K. 09690
- X-ray powder data, programs: Sleight, A. W. 09689

Mining geology

- Computer systems, applications: Kaas, L. Michael. 05223
- Open pits, computer applications: Adams, B. W. 06865
- Ore reserve analysis: O'Brian, D. T. 05218
- Ore reserve analysis, sample weighting, interpolation: David, M. 05222
- Pillar systems design, rock properties evaluation: Starfield, Anthony M. 09592

Paleontology

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Ontario

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Trees-soils

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Biography

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Utah

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Robinsonite, Salmo area, bismuthian: Jambor, J. L. 03456

Skarn silicates, Cassiar district, tin-bearing: Muligan, R. 03462

Staurolite, composition, Kwoiek area: Hollister, Lincoln S. 11126

Sulfides, hypogene zoning, Rossland area: Thorpe, Ralph Irving. 01357

Todorokite, manganese nodules from fjord: Grill, E. V. 03158

Paleoclimatology

Miocene, subsurface strata, Whatcom basin: Hopkins, William S., Jr. 01885

Paleontology

Brachiopoda, Permian, Ishbel Group, correlation: Logan, Alan. 05686

Foraminifera, Carboniferous, Lower, Connor Lakes, zonation: Mamet, B. L. 04061

Foraminifera, Cretaceous, Rocky Mtn. foothills, paleoecology: Wall, John H. 11033

Foraminifera, Cretaceous, Trent River Formation, Vancouver Island: Langhus, B. G. 05528

Foraminifera, Pennsylvanian-Permian, Cache Creek Group, biostratigraphy: Danner, Wilbert R. 07769

Insecta, Eocene, Princeton Group, central: Rice, H. M. A. 01611

Mammalia, Oligocene, Sooke Formation, Vancouver Island, cetacean: Russell, Lorin S. 02729

Mammalia, Pleistocene, Dease Lake, muskox: Harington, C. R. 05478

Palynology, Cretaceous-Tertiary, coastal, intermontane areas: Rouse, Glenn E. 08084

Palynomorphs, Miocene, Whatcom basin strata: Hopkins, William S., Jr. 01885

Pisces, Devonian, Nahanni Formation, new osteolepidid: Jessen, H. 06691

Petrology

Adamant monzonite pluton, zones, metamorphism: Fox, Peter Edward. 00851

Bella Coola-Ocean Falls region, crystalline rocks, metamorphic history: Baer, A. J. 07231

Coast crystalline belt, granites, petrogenesis: White, William H. 09086

Coast Mountains, Vancouver, northern, granitic rocks, classification: Armstrong, J. E. 09088

Copper Mountain intrusions, differentiation: Montgomery, Joseph Hilton. 07154

British Columbia—Continued*Petrology—Continued*

Kootenay arch, Slocan syncline, metamorphic facies, relation to structure: Ross, John V. 02726

Kootenay Lake area, Proterozoic to Triassic metamorphics and plutons: Crosby, Percy. 06321

Kwoiek area, garnets, zoning: Hollister, Lincoln S. 11304

Princeton area, Copper Mountain intrusions, differentiation: Montgomery, J. H. 03595

Revelstoke area, Shuswap complex, metamorphism: Ross, John V. 02740

Southeastern, Shuswap complex, metamorphism: Hyndman, Donald W. 01166

Vancouver Island, Karmutsen Group: Surdam, Ronald C. 01483

Vancouver Island, Karmutsen Group, metamorphism: Surdam, Ronald C. 09710

Vancouver Island, Kennedy Lake area, lavas, intrusives: Eastwood, G. E. P. 07924

Vancouver Island, southern, Wark-Colquitz complex: Libby, W. G. 03592

White Lake area, Tertiary volcanics: Church, Barry Neil. 07187

Sedimentary petrology

Crowsnest area, bituminous coal: Cameron, A. R. 07781

Fernie Basin, Natal area, Balmer coal seam: Cameron, A. R. 02821

Permian eugeosynclinal rocks, chert, genesis: Danner, Wilbert R. 08653

Southwestern, Boundary Bay, intertidal flat sediments: Murray, J. W. 08962

Taseko Lakes map-area, Jurassic-Cretaceous strata: Jeletzky, J. A. 09409

Stratigraphy

Cambrian, Hamill Group, northern Dogtooth Mts.: Ellison, A. H. 04084

Carboniferous, Connor Lakes area, Foraminifera, correlation: Mamet, B. L. 04061

Cretaceous, Bullhead and Fort St. John Groups, Rocky Mtn. foothills: Stott, D. F. 03137

Cretaceous, northeastern, Tetsa-LaBiche Rivers area: Stott, D. F. 04070

Cretaceous, Trent River Formation, biostratigraphy: Langhus, B. G. 05528

Devonian, northeastern: Griffin, D. L. 11014

Devonian-Cretaceous, Fort Nelson map-area: Taylor, G. C. 06757

Devonian-Permian, northeastern: Bamber, E. W. 05743

Devonian-Quaternary, southwestern: Danner, W. R. 09085

Jurassic-Cretaceous, Taseko Lakes map-area: Jeletzky, J. A. 09409

Mississippian, Cretaceous, Maxhamish Lake map-area: Taylor, G. C. 06697

Ordovician-Silurian, Peace to Muskwa Rivers: Davies, E. J. L. 04065

Permian, Connor Lakes area, measured section: Mamet, B. L. 05508

Permian, Ishbel Group, Rocky Mts., faunal correlation: Logan, Alan. 05686

Pleistocene, sediments, Juan de Fuca Strait, paleoecology: Anderson, Franz E. 07649

Precambrian, Proterozoic successions, northeastern: Bell, R. T. 01658

Precambrian-Cambrian, Cretaceous-Paleocene, Rocky Mtn. Trench: Rutter, N. W. 00984

British Columbia—Continued*Stratigraphy—Continued*

Precambrian-Triassic, Kootenay arch, Slocan syncline: Ross, John V. 02726

Quaternary, Strait of Georgia area: Leaming, S. F. 06020

Tertiary, Kettle River and Marron Formations, Greenwood area: Monger, J. W. H. 06314

Triassic, Halfway Formation, Milligan Creek area: Mothersill, John S. 04078

Triassic, Karmutsen Group, Vancouver Island: Surdam, Ronald C. 01483

Triassic-Cretaceous, Vancouver Island, Kennedy Lake area: Eastwood, G. E. P. 07924

Structural geology

Dogtooth Range, northern, folds: Wind, G. 04090

Greenwood area, faults, folds: Monger, J. W. H. 06314

Kootenay arch, Slocan syncline, evolution: Ross, John V. 02726

Kootenay Lake area, central arc, tectonic history: Crosby, Percy. 06321

Mantle, seismic wave interpretation, models: White, W. R. H. 04670

Northeastern, foothills and ranges, folds, faults, tectonics: Irish, E. J. W. 06695

Peace and Liard Rivers area, foothills fold belt: Fitzgerald, E. L. 01450

Revelstoke area, Shuswap complex, folding, phases: Ross, John V. 02740

Southeastern, Shuswap complex, folds: Hyndman, Donald W. 01166

Southeastern, Shuswap terrane, metamorphic rocks: Hyndman, Donald W. 08592

British Honduras*Areal geology*

Physical geography: Furley, Peter. 02259

Geomorphology

Karst region, description: Furley, Peter. 02259

Northern coast, shore features, sedimentary process, storm effects: High, Lee R., Jr. 01217

Mineralogy

Clay minerals, continental shelf, distribution: Scott, Martha R. 08075

Paleontology

Ostracoda, Tertiary cf. Holocene, marine, distribution: Teeter, J. W. 00606

Sedimentary petrology

Belize area, reef and lagoon, sediments, composition: Billings, Gale K. 03107

Weathering

Karst areas, granite terrain: Furley, Peter. 02259

Bromine*Abundance*

Meteorites: Ehmann, William D. 08044

Analysis

X-ray fluorescence, matrix problems, slope-ratio technique: Cuttitta, Frank. 03463

X-ray fluorescence method: Wahlberg, J. S. 05233

X-ray fluorescence method, application to brines: Dunton, Polly J. 01153

Geochemistry

Evaporites, Saskatchewan: Wardlaw, Norman C. 03864

Brucite*Nevada*

Gabbs area, occurrence, genesis: Schilling, John H. 05363

Bryophytes

Hypnites arkansana Wittlake, n.sp.

Eocene, Arkansas, Wilcox Formation: Wittlake, Eugene B. 06509

Muscites wilcoxensis Wittlake, n.sp.

Eocene, Arkansas, Wilcox Formation: Wittlake, Eugene B. 06509

Bryozoa

Acanthoceramoporella, n.gen.

Ordovician, central U.S., ceramoporid, reassigned species: Utgaard, John. 06028

Actinotrypa

Mississippian, United States, taxonomy: Horowitz, Alan Stanley. 02965

Anolotichidae, n. fam.

Ordovician, North America, from Ceramoporidae, revision of genera: Utgaard, John. 05770

Beania bermudezi, n.sp.

Eocene, Cuba, Jabaco Fm., first fossil of genus: Lagaaij, Robert. 11424

Bythotrypa laxata

Ordovician, Champlainian limestones, Illinois: Bork, Kennard B. 09357

Ceramoporidae, emend.

Ordovician genera, North America, redefined: Utgaard, John. 06028

Cheilostomata

Eocene, Holocene, skeletal carbonate mineralogy: Rucker, James B. 11390

Tertiary, first fossils of Holocene genera: Lagaaij, Robert. 11424

Crassaluna epidermata, n.gen., n.comb.

Ordovician, Upper, Illinois, from Crepipora: Utgaard, John. 05770

Cretaceous

New Jersey, Navesink Formation: Toots, Heinrich. 09942

Cryptostomata

Ordovician, Middle, zoecial boundary patterns: Karklins, Olberts L. 11389

Ordovician, Oklahoma, Simpson Group, bifoliate: Farmer, George Thomas, Jr. 05516

Cyclotomata

Post-Paleozoic, microstructure, zoecial walls, pores, diaphragms: Nye, Osborne B. 11391

Diplotrypa

Ordovician, Champlainian limestones, Illinois: Bork, Kennard B. 09357

Ectoprocta

Chemical composition, spectrochemical analysis: Schopf, Thomas J. M. 03221

Environmental analyses

Ordovician, Upper, Reedsville Formation, Appalachians: Bretsky, Peter W. 01320

Eridotrypa

Ordovician, Champlainian limestones, Illinois: Bork, Kennard B. 09357

Floridina

Cenozoic, United States, southeastern, origin, restriction of genus: Schager, Sten A. N. 11395

Geochemistry

Holocene, analyses, compositional-ecologic groups: Schopf, Thomas J. M. 08068

Geographic distribution

Circumtropical, Cenozoic, cheilostome genera: Lagaaij, Robert. 11424

Deep-sea vs. continental margin, ecology, sampling bias: Schopf, Thomas J. M. 11392

Bryozoa—Continued*Hemiphragma irrasum*

Ordovician, Champlainian limestones, Illinois:
Bork, Kennard B. 09357

Heteropora

Recent, crystal growth, lamellar development:
Boardman, Richard S. 11259

Heterotrypa

Ordovician, Champlainian limestones, Illinois:
Bork, Kennard B. 09357

Lunulitiform

Natural orientation, living forms: Greeley,
Ronald. 10302

Meekopora

Mississippian, Tennessee, Warsaw Limestone:
McKinney, Frank K. 04100

Morphology

Budding patterns in Paleozoic trepostomes, convergence: Boardman, Richard S. 11441

Nicholsonella

Ordovician, Champlainian limestones, Illinois:
Bork, Kennard B. 09357

Nomenclature

Ectoprocta, replacement for phylum name, objections: Mayr, Ernst. 02927

Ordovician

Illinois, Iowa, Wisconsin, Champlainian limestones, descriptions: Bork, Kennard B. 05771

Paleozoic

Subsurface exploration, potential use: Boardman, Richard S. 11388

Permian

United States, western, Phosphoria rock complex: Yochelson, Ellis L. 00126

Poricellariidae

Cretaceous-Holocene, evolution of zoecial asymmetry: Cheetham, Alan H. 11394

Taxonomy

Ceramoporidae, Paleozoic, restriction: Utgaard, John. 05770

Ceramoporidae, Paleozoic, restriction: Utgaard, John. 06028

Statistical analysis, variance: Anstey, Robert L. 11396

Tertiary

Alabama, paleoecology, indicators: Askren, L. T., Jr. 04099

Trepotomata

Rhombotrypa-like, Paleozoic, budding patterns, convergent evolution: Boardman, Richard S. 11441

Cadmium*Analysis*

Atomic absorption method, geologic material: Nakagawa, H. M. 05196

Geochemistry

Biologic concentration: Boyle, R. W. 04234

Calcite*Ontario*

Vein deposits, occurrence, production, summary: Sergiades, A. O. 06336

Calcium*Analysis*

Atomic absorption spectroscopy, acetylene flames: Ramakrishna, T. V. 11343

Electrochemical, activity coefficients: Kramer, James R. 07921

Flame photometry, hydrogen-argon-entrained-air flame, interference: Smith, R. 03133

Flame photometry, interferences: Popham, Ronald E. 03474

Calcium—Continued*Analysis*—Continued

Glass electrode: Truesdell, A. H. 09895

Ion-exchange electrode: Mukherji, Anil K. 11333

Geochemistry

Hudson River water, New York: Fabricand, Burton P. 03551

Soils, clays, exchange capacity, lithium: Bair, F. L. 02255

Isotopes

Ca-48:total Ca, clam shell, teeth, seawater: Corless, James T. 09367

California*Absolute age*

Blue Creek terrace, wood, age of flooding: Helley, Edward J. 05175

Coast Ranges, granitic rocks, K-Ar: Compton, Robert R. 08253

Coast ranges, northern, metamorphism, Franciscan terrane: Suppe, John. 00013

Death Valley-Furnace Creek fault zone, igneous, sedimentary rocks: McKee, E. H. 01069

Glass Mountain, rhyolite flows, obsidian hydration dates: Friedman, Irving. 00171

Glaucinite, San Pedro Formation, K-Ar: Obradovich, J. D. 03987

Kern County, wood in floodplain sand, Pleistocene: Manning, John C. 02861

Klamath Mountains, Abrams Schist, metamorphism, Rb-Sr: Lanphere, Marvin A. 07928

Klamath Mountains, plutons and metamorphics: Lanphere, Marvin A. 02688

Mono Basin, volcanics: Gilbert, C. M. 06355

Mount Lassen, 1915 flow, thermoluminescence method: Aitken, M. J. 03971

Owens Valley, Mono and Inyo Craters lava, K-Ar: Dalrymple, G. Brent. 00326

Owens Valley, Mono and Inyo Craters volcanics: Taddeucci, Adriano. 00315

Owens Valley, Mono and Inyo Craters, volcanics: Allegre, C. L. 06352

Salton Trough, Colorado River delta sediments: Muffler, L. J. Patrick. 04462

San Gabriel Mountains, geological episodes: Silver, Leon T. 07966

San Joaquin Valley, lacustrine deposits, wood, C-14: Croft, M. G. 00785

Santa Cruz area, Pleistocene shells: Bradley, William C. 03004

Sierra Nevada batholith: Wollenberg, Harold A. 00271

Sierra Nevada, granitic rocks, fission-track ages: Dodge, F. C. W. 10737

Sierra Nevada, igneous rocks, glaciation, K-Ar: Curry, Robert R. 07799

Sierra Nevada, Pleistocene glaciations: Curry, Robert Rodney. 07188

Silver Peak region, Tertiary volcanics, sediments: Robinson, Paul T. 06578

Southeastern, igneous rocks, Mesozoic, K-Ar: Adams, J. A. S. 07742

Southern, landslides, carbon-14: Stout, Martin L. 09707

Tomas Bay, charcoal and midden shells, C-14: Follett, W. I. 01777

Valley Ford, schist, K-Ar: Keith, Terry E. 02709

Ventura basin, Pico Formation, ash bed, K-Ar: Yeats, Robert S. 08354

Areal geology

Cascade Range, Cenozoic history, summary: Macdonald, G. A. 02963

Fremont Peak and Opal Mtn. quadrangles: Diblee, T. W., Jr. 01841

California—Continued

Areal geology—Continued

- General, geologic history: King, P. B. 00364
 Lake Tahoe area: Burnett, John L. 03673
 Lake Tahoe area, guidebook: Geol. Soc. Sacramento. 03748
 Modoc Plateau: Macdonald, G. A. 02053
 Mount Shader quadrangle: Hamill, Gilmer S. 08586
 Pinnacles National Monument, field trip, road log: Hinds, Norman E. A. 03515
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 San Joaquin Valley, western, field trip, road log: Elliott, William J. 02859
 Sierra Nevada: Bateman, Paul C. 02481
 Slate Range: Smith, George I. 08907
 Southern, Little San Geronio Creek area: Link, Martin H. 09307
 Tierra Redonda Mountain and Bradley quadrangles: Durham, David L. 04761

Earthquakes

- 1769-1966, history: Wolfe, John. 03722
 1960-1966, Hollister area: Cloud, William K. 09981
 1952, Kern County, tidal stresses: Dix, C. H. 10454
 1962-65, mechanism: Bolt, B. A. 05458
 1966, Parkfield area, San Andreas fault displacement: Smith, Stewart W. 05454
 1966, Parkfield sequence, mechanism, Love-wave spectra: Filson, John R. 04044
 1906, San Francisco, focus, location: Bolt, Bruce A. 00481
 1957, San Francisco, ground motion: Idriss, I. M. 05459
 April 9, 1968, Borrego Mountain, fault movements: Wyss, M. 10458
 April 9, 1968, Borrego Mountain, fault trace: Allen, C. R. 02580
 Arvin-Tehachapi area, strain energy release: Burford, Robert O. 08246
 Elastic waves, Rayleigh, group velocities: Sutton, D. J. 01996
 June 27, 1966, Parkfield: Cloud, William K. 09980
 June 28, 1966, Parkfield area: Bakun, W. H. 09967
 June 27, 1966, Parkfield area, seismoscope data: Hudson, D. E. 10007
 June 28, 1966, Parkfield, displacements near fault: Aki, Keiiti. 03210
 June 28, 1966, Parkfield, magnitude and mechanism: Wu, Francis T. 00966
 June 27, 1966, Parkfield-Cholame, aftershocks: Eaton, J. P. 09992
 June 1966, Parkfield, mechanism: Aki, Keiiti. 04042
 June 1966, Parkfield-Cholame, aftershocks, spatial distribution: Eaton, Jerry P. 04043
 March 4, 1966, Imperial fault: Brune, James N. 09973
 May 24, 1966, Chico area, cf. Chase V explosion: Lomnitz, C. 10016
 Northern, offshore: Auld, B. 09964
 Parkfield area, accelerograms: Cloud, William K. 09982
 Parkfield area, ground motion: Housner, G. W. 10006

California—Continued

Earthquakes—Continued

- Prediction, San Francisco-San Bernadino area, method: California Dept. Water Resources. 09028
 San Andreas fault system, southern, microearthquakes: Brune, James N. 08244
 San Francisco Bay area, hazard, public policy development: Steinbrugge, Karl V. 07658
 San Francisco Bay area, microearthquakes: Pfluke, John H. 10035
 September 12, 1966, Truckee area, aftershocks, nodal planes: Greensfelder, Roger. 04822
 September 1966, Truckee area sequence: Ryall, Alan. 00478
 Source mechanism: Wyss, Max. 02335
Economic geology
 Boron, Kramer: Smith, Ward C. 07635
 Boron, Los Angeles County, Sterling Borax mine, history: Pemberton, H. Earl. 01613
 Brines, San Joaquin Valley, southwestern: Weddle, James R. 00577
 Brines, Searles Lake: Joralemon, Ira B. 06981
 Fluorspar, general: Elevatorski, E. A. 03744
 Gold, continental shelf, off Klamath Mts.: Moore, George W. 06330
 Gold, Nevada County, Tertiary channel, occurrence, possibilities: Peterson, Donald W. 01420
 Gravel, southern counties: Goldman, Harold B. 06721
 Iron, Eagle Mountain mine area: DuBois, Robert L. 11276
 Mercury, antimony, hot spring deposits: Dickson, Frank W. 05281
 Mercury, gold, Wilbur Springs: Joralemon, Peter. 04240
 Mercury, New Idria mining district: Linn, Robert K. 05364
 Mercury, Wilbur Springs, genesis: Moiseyev, Alexis N. 01884
 Metals, Rocky Hill Granodiorite, occurrence: Putnam, George W. 00816
 Mineral resources, Marin County (western) area: Gluskoter, Harold J. 07068
 Natural gas, Arbuckle field, occurrence: Vaughan, Richard H. 02129
 Natural gas, Corning and South Corning fields, occurrence: Sacramento Petroleum Association. 02126
 Natural gas, Eel River basin, occurrence: Ogle, Burdette A. 02096
 Natural gas, Lathrop field, occurrence: Teitsworth, Robert A. 02130
 Natural gas, Los Angeles basin, occurrence: Brown, James B. 02105
 Natural gas, Maine Prairie field, occurrence: Arleth, Karl H. 02098
 Natural gas, Perkins Lake field, occurrence, production: Harding, Tod P. 02097
 Natural gas, Rio Vista field: Burroughs, Ernest. 04419
 Natural gas, Rio Vista field, occurrence: Burroughs, Ernest. 02100
 Natural gas, Sacramento and San Joaquin Valleys: Jones, Vern. 02123
 Natural gas, Sacramento Valley, occurrence: Reedy, R. D. 02125
 Natural gas, Sacramento Valley, show pattern cf. structure: Knight, Raymond L. 03776
 Natural gas, San Joaquin Valley, occurrence: Rudkin, George H. 02103

California—Continued*Economic geology—Continued*

- Natural gas, Santa Maria and Ventura basins, occurrence: Dryden, J. E. 02104
- Natural gas, Thornton and Walnut Grove fields, occurrence: Silcox, John. 02099
- Natural gas, Vernalis field, occurrence: Manlove, C. F. 02131
- Natural gas, Wild Goose field, occurrence: Hawley, Arthur S. 02128
- Natural gas, Willows-Beehive Bend field, occurrence: Alkire, James. 02127
- Petroleum and natural gas, offshore operations, legal aspects: Stone, Oliver L. 05111
- Petroleum, Bouquet Canyon field: Zuberli, J. L. 04423
- Petroleum, Elk Hills field, occurrence: Lantz, Robert J. 02869
- Petroleum, Elk Hills field, western, potential: Lorschbough, A. L. 00575
- Petroleum, general, oil field waters: Weddle, James R. 02866
- Petroleum, Los Angeles basin, Wilmington field: Mayuga, M. N. 01177
- Petroleum, natural gas, Brea-Olinda field: Gaede, Verne F. 04418
- Petroleum, natural gas, Brentwood field: Ditzler, Clark C. 02102
- Petroleum, natural gas, Ten Section field: Hluza, A. G. 00576
- Petroleum, natural gas, Wilmington field, occurrence: Hamilton, S. V. 02106
- Petroleum, Northwest Lost Hills field: Hardoin, John L. 04421
- Petroleum, Ojai field, Sisar Creek area: Mitchell, William Spencer. 04420
- Petroleum, Rosedale field, north, south, east areas: Beecroft, G. W. 04422
- Petroleum, San Joaquin Valley, western: Callaway, David C. 02865
- Petroleum, Sespe field, occurrence: Dosch, Murray W. 00633
- Petroleum, Wayside Canyon field, occurrence: Mefferd, M. G. 00632
- Talc, Panamint-Kingston Ranges area: Wright, Lauren A. 07862
- Tungsten, Bishop district: Gray, Raymond F. 05359
- Tungsten, Pine Creek deposits, Inyo County, contact-metasomatic origin: Darling, Richard Graydon. 05515
- Engineering geology*
- Clays, San Francisco Bay mud, cyclic stress-strain characteristic: Thiers, Gerald R. 09473
- Dams, deformation, Mammoth Pool dam: Squier, Lyman Radley. 02611
- Dams, Piru Creek, Pyramid Rock site, sedimentation calculation: Scott, Kevin M. 05551
- Earthquakes, aqueduct route, fault movement investigations: California Dept. Water Resources. 09028
- Earthquakes, San Francisco Bay area, urban development of fault zones: Cluff, Lloyd S. 04051
- Foundations, Aqueduct Project, exploration, oriented-core: Voloshin, V. 05041
- Foundations, Bolsa Island nuclear plant, geophysical studies: Campbell, David G. 04849
- Foundations, Central Valley, Dos Amigos Pumping Plant, rebound: Stoll, Ulrich W. 00200

California—Continued*Engineering geology—Continued*

- Gas storage, McDonald Island field: Lee, Charles A. 02101
- Gas storage, Playa del Rey oil field: Barnds, Ray M. 02107
- Geologic hazards, Lake Tahoe area: Matthews, Robert A. 03674
- Geologic hazards, San Francisco Bay area, need for urban geologists: Pestrong, Raymond. 04248
- Land subsidence, aquifer compaction, Pixley area: Riley, F. S. 08085
- Land subsidence, central, sediment compaction: Meade, Robert H. 00811
- Land subsidence, cracks, filled, San Joaquin Valley: Prokopovich, Nikola P. 10251
- Land subsidence, Delta-Mendota Canal: Prokopovich, N. P. 10870
- Land subsidence, Fresno County, ground-water withdrawal: Prokopovich, Nikola P. 09040
- Land subsidence, Livermore and Amador Valleys: Gibson, W. M. 01125
- Land subsidence, Los Angeles area, Wilmington oil field: Albright, M. B., Jr. 06666
- Land subsidence, Los Banos-Kettleman City area: Bull, William B. 07772
- Land subsidence, relations to water-level decline: Lofgren, Ben E. 07945
- Land subsidence, San Joaquin Valley, stress analysis: Lofgren, Ben E. 00733
- Land subsidence, Santa Clara Valley, 1960-65: Poland, J. F. 08089
- Landslides, Elk Creek, Mendocino National Forest: Danehy, Edward A. 04855
- Landslides, San Diego County, Mount Soledad slide: Mann, Richard L. 08301
- Landslides, slope stability, Alameda, Contra Costa Counties: Waltz, James Patterson, 2d. 02045
- Landslides, slope stability, San Clemente area, factor analysis: Blanc, Robert P. 07693
- Land-use planning, interpretive soil maps: Wohletz, L. R. 07439
- Materials, properties, central, subsiding areas, sediments: Johnson, A. I. 00312
- Reservoir, Baldwin Hills, failure: James, Laurence B. 07507
- Rock mechanics, Chino Limestone, Crestmore mine: Heuze, Francois E. 11164
- San Francisco Bay area, pre-earthquake planning: Steinbrugge, Karl V. 07658
- Shorelines, Santa Barbara area, sea cliff, retreat rate: Norris, Robert M. 02052
- Soils, creep rates, Coast Ranges: Kojan, Eugene. 07918
- Soils, sodium saturation tests, volume and conductivity changes: Waldron, L. J. 01853
- Urban development, hillside areas, planning, techniques: Slosson, James E. 10873
- Urban development, sand and gravel pits: Young, Eleanor. 04247
- Urban planning, general: Campbell, Ian. 06052
- General*
- Bibliography, San Joaquin Valley, oil and gas fields: Matum, James R. 02864
- Bibliography, water resources: Durrenberger, Robert W. 07906
- History, petroleum industry, 1865-75: White, Gerald T. 08174
- Index to geologic maps, 1961-64: Koenig, James B. 07666

California—Continued

General—Continued

Scripps Institution of Oceanography, flame photometer for cesium: Folsom, T. R. 01152

Geochemistry

Box Springs Mountains, granodiorite, compositional variations: Joshi, Martand Shripad Rao. 01747

Burro Mountain, serpentinization, iron variation: Page, Norman J. 10696

Castac Valley, soils, toxic elements, distribution: Laskowski, Edward Albin. 02615

Central, serpentinite soils, montmorillonite formation: Wildman, W. E. 05960

Deep Springs Lake, dolomite formation, isotope studies: Clayton, Robert N. 01524

Imperial Valley, geochemical water facies: Rex, Robert W. 10498

Inyo County, elements in monzonite near Pine Creek ore: Darling, Richard Graydon. 05515

Kings Canyon, Sequoia, and Yosemite Parks, lake waters: Bradford, G. R. 04472

Lost Hills area, soil analyses: Laskowski, E. A. 02860

Ludlow area, soils, rocks, radio elements: Bunker, C. M. 02707

Mono Craters, Southern Coulee flow, major oxides: Loney, Robert A. 06503

New Idria area, chrysotile, activity-product constant: Hostetler, P. B. 01978

Offshore basins, Recent sediments, organic acids from oxidation: Hoering, T. C. 01583

pH-temperature profiles, ocean and lakes, in-place probe: Ben-Yaakov, S. 06049

Red Mountain-De Puerto complex, minerals, rocks, analyses: Himmelfarb, G. R. 02710

Saline Valley, evaporites, genesis: Hardie, Lawrence A. 06675

Salton Sea geothermal area, oxygen isotope fractionation: Clayton, R. N. 05269

Salton Sea geothermal system, CO₂ origin: Muffler, L. J. Patrick. 09868

Sierra Nevada batholith, granitic rocks, analyses: Dodge, F. C. W. 04812

Southern, batholithic rocks, chemical variations: Baird, A. K. 07751

Tulare County, Rocky Hill Granodiorite, base metal trends: Putnam, George W. 00816

Wilbur Springs, mercury: Moiseyev, Alexis N. 01884

Wilbur Springs, mercury, gold: Joralemon, Peter. 04240

Geomorphology

Black Mountain, Blackhawk slide, mechanism: Shreve, Ronald L. 04299

Central coast, Monterey Canyon, genesis: Starke, George W. 01892

Cholame-Camp Dix area, offset stream channels, San Andreas fault: Wallace, Robert E. 03952

Continental slope, San Diego area, terraces, sea cliffs: Dill, Robert C. 08460

Crescent City area, shoreline features, Smith River Plain beaches: Roberts, James A. 10965

Death Valley, ancient Lake Manly, popular account: Houghton, S. G. 10811

General: Albers, J. P. 01501

La Jolla submarine fan valley, channel geometry: Normark, W. R. 08461

La Jolla submarine fan-valley: Shepard, Francis P. 04552

Lake Tahoe, general: Goldman, Charles R. 09387

California—Continued

Geomorphology—Continued

Landform description, by provinces: Duranberger, Robert W. 07618

Mitchell Caverns, history of formation: Taylor, Frank. 04563

Northern, rivers, flood frequency analysis: Helley, Edward J. 05175

Pinnacles National Monument, landform evolution: Hinds, Norman E. A. 03515

Riverside County, Perris basin, landform evolution: Kim, Young II. 02024

Rubicon River, Hell Hole damsite, catastrophic flood: Scott, Kevin M. 07531

San Gabriel Mountains, erosion, effects of fire: Doebling, Donald O. 01485

San Gabriel Mountains, erosion, soil slips: Rice, Raymond M. 11085

Santa Barbara area, erosion, sea cliff retreat, rate: Norris, Robert M. 02052

Sierra Nevada, denudation rates, vertical zonation: Janda, Richard J. 08290

Southeastern, alluvial fans, steady-state relations: Hooke, Roger LeB. 04442

Truckee River, Tahoe-age flood velocities: Birkeland, Peter W. 00538

White Mountains, slope degradation rates: LaMarche, Valmore C., Jr. 00162

Geophysical observations

Coast and off coast, earth currents, tide induced: Larsen, J. C. 03911

Geophysical surveys

Alturas sheet, gravity: Chapman, Rodger H. 03717

Bolsa Island, seismic, well logging: Campbell, David G. 04849

Borrego Mountain, explosion data, time-term analysis: Hamilton, Robert M. 10376

Cascade Mountains, gravity: Aiken, C. 11251

Central, southern, major faults, heat flow: Heyey, T. L. 08729

Cholame area, San Andreas fault, gravity, magnetic: Hanna, William F. 10367

Cholame area, San Andreas fault zone, seismic: O'Neill, M. E. 10032

Coast Ranges, graywackes, radioactivity: Woltenberg, Harold A. 07996

Diablo and Gabilan Ranges, San Andreas fault area, seismic, crustal study: Stewart, Samuel W. 04055

El Dorado County, buried karst, microwave: Kennedy, J. M. 01889

Gabilan Range, Salinas area, seismic, stress accumulation at depth: Eisler, Joseph D. 04052

Gravity, Division of Mines and Geology, progress: Chapman, Rodger H. 10396

Gravity, U.S. Geological Survey program: Oliver, H. W. 10364

Imperial Valley, Durmid dome, aquifers, electrical: Randall, Walter. 10500

Imperial Valley, Durmid dome, gravity: Babcock, Elkanah. 10501

Klamath River delta, seismic: Moore, George W. 02719

Long Valley, Mono Basin, seismic: Pakiser, L. C. 05051

Menlo Park, heat flow, measurement methods: Sass, J. H. 02837

Mojave Desert, infrared sensing, test flights: Hovis, W. A., Jr. 01680

Mono Lake area, infrared, thermal anomalies: Friedman, Jules D. 07730

Monterey Canyon and environs, gravity: Starke, George W. 01892

California—Continued*Geophysical surveys—Continued*

- Nevada County, northern, seismic, magnetic: Oliver, Howard W. 01419
- Pisgah Crater, radar: Moore, R. K. 06387
- Placerville to Lake Tahoe region, gravity: Loomis, Alden A. 10018
- Rogers Playa, seismic: Cabaniss, G. H. 10424
- San Andreas fault, central, aeromagnetic, gravity: Hanna, William F. 04031
- San Andreas fault, piezomagnetic effect: Breiner, Sheldon. 02046
- San Andreas geophysical observatory: Bolt, Bruce A. 10533
- San Bruno-Hollister area, San Andreas fault, piezomagnetic changes: Breiner, Sheldon. 04033
- San Francisco area, ground motion, nuclear explosions: Borchardt, R. D. 10378
- San Francisco Bay area, earth tides, tilts: Wood, M. D. 10360
- San Francisco sheet, gravity: Chapman, Rodger H. 03716
- San Joaquin Valley, western, logging techniques: Kane, Armour. 02868
- San Jose area, Calaveras, Hayward, Silver Creek faults, aeromagnetic, gravity: Robbins, Stephen L. 04032
- Santa Clara County, electrical, hydrologic conditions: Page, Leo M. 04887
- Santa Clara County, ground water, induced polarization: Bodmer, Rene. 11260
- Santa Fe Springs oil field, gravity logging: McCulloh, T. H. 07279
- Santa Lucia Range, serpentine bodies, gravity: Grannell, Roswitha B. 09998
- Sierra Nevada, central, heat flow: Wollenberg, Harold A. 11112
- Sierra Nevada, heat flow: Lachenbruch, Arthur H. 04287
- Sierran highland region, velocity-density relations: Thompson, George A. 08337
- Southern, gravity, structural relations: Biehler, Shawn. 10403
- The Geysers area, gravity: Chapman, Rodger H. 09975
- Trans-state, magnetotelluric sounding profile: Morrison, H. F. 00663
- Ventura basin-Santa Barbara, offshore, seismic: Vernon, James W. 10054
- Western Transverse Ranges, gravity: Rietman, J. 10397

Geothermal energy

- Salton Sea area: Helgeson, Harold C. 00648
- The Geysers, resources, power plant: Moxey, R. L. 05089

Glacial geology

- Sierra Nevada, Big Pine drainage area, glaciation episodes: Fleisher, Penrod Jay. 01342
- Sierra Nevada, Big Pine drainage area, Pleistocene history: Fleisher, P. Jay. 07723
- Sierra Nevada, early event, absolute age: Curry, Robert R. 07799
- Sierra Nevada, icecap, three-million year old till: Curry, Robert R. 04246
- Sierra Nevada, major advances, Pleistocene ice: Curry, Robert Rodney. 07188
- Sierra Nevada, Pleistocene chronology: Sharp, Robert P. 01077
- Sierra Nevada, West Walker River, Pleistocene glaciation: Clark, Malcolm Mallory. 11232

Hydrogeology

- Borrego, Carrizo, San Felipe Valley areas, wells and springs: Moyle, R. W., Jr. 11016

California—Continued*Hydrogeology—Continued*

- Central coastal area, 1966 data: California Dept. Water Resources. 02935
- Coastal area, northern, ground-water levels and quality: California Dept. Water Resources. 01154
- Coastal area, northern, ground-water levels, surface- and ground-water quality: California Dept. Water Resources. 06179
- Fresno area, ground water nitrate distributions: Behnke, Jerold J. 09041
- Fresno County, Pleasant Valley, ground-water resources: Prokopovich, Nikola P. 09040
- Ground-water management, computer approach: Weber, Ernest M. 09542
- Los Angeles County, ground-water management: Milne, Clinton. 09536
- Los Angeles County, salt-water intrusion, management: Bruington, Arthur E. 09537
- Los Banos-Kettleman City area, ground-water levels, changes: Bull, William B. 07772
- Orange County, ground-water resources, management: Owen, Langdon W. 09036
- Orange County water district, water management: Owen, Langdon W. 09535
- Piru Creek watershed, sedimentation in reservoirs: Scott, Kevin M. 05551
- Pixley area, aquifer compaction, water levels: Riley, F. S. 08085
- Resource development: Teerink, John R. 09047
- Resource development, long term: Teerink, John R. 09045
- San Francisco area, artesian aquifers, storage coefficients, reduction: Peterson, Frank L. 08423
- San Joaquin Valley, ground-water fluctuations, relations to subsidence: Lofgren, Ben E. 00733
- San Joaquin Valley, ground-water levels: California Dept. Water Resources. 04803
- Santa Barbara-Montecito area, reconnaissance, ground water: Muir, K. S. 01695
- South Bay, Fremont study area, ground-water resources, evaluation: California Dept. Water Resources. 09029
- Southern, ground-water levels and recharge, 1966 data: California Dept. Water Resources. 02936
- Southern, ground-water recharge, artificial, salt-water barrier projects: Kazmann, Raphael G. 00039
- Southern, surface and ground-water quality, analyses: California Dept. Water Resources. 02937

Maps, geologic

- Adelaida quadrangle: Durham, David L. 04212
- Borrego Valley area: Moyle, R. W., Jr. 11016
- Carrizo-San Felipe Valley area: Moyle, R. W., Jr. 11016
- Desert Hot Springs area, with structure sections: Proctor, Richard J. 06722
- Fox Mountain quadrangle: Vedder, J. G. 04414
- Fremont Peak and Opal Mtn. quadrangles, and Mud Hills area: Dibblee, T. W., Jr. 01841
- Highway geology: Feray, Dan E. 07144
- Ibex Hills, Kingston Range, Avawatz Mts., talc-bearing area: Wright, Lauren A. 07862
- Kelseyville quadrangle: McNitt, James R. 01776
- Klamath Mountains: Lanphere, Marvin A. 02688
- Klamath Mountains, Cecilville area: Davis, G. A. 01993
- Lake Tahoe area: Geol. Soc. Sacramento. 03748

California—Continued*Maps, geologic—Continued*

- Lucerne Valley, Blackhawk landslide area: Shreve, Ronald L. 04299
- Magruder Mountain area: McKee, Edwin H. 05983
- Marin County (western) area: Gluskoter, Harold J. 07068
- Mono Basin, eastern margin: Gilbert, C. M. 06355
- Mono County, Big Alkali caldera: Chesterman, Charles W. 06493
- Mono County, Bodie Hills: Chesterman, Charles W. 06493
- Panamint Range, Saratoga Hills, Saddle Peak Hills, talc-bearing zones: Wright, Lauren A. 07862
- San Clemente area: Blanc, Robert P. 07693
- Santa Barbara-Montecito area: Muir, K. S. 01695
- Shuteye Peak quadrangle: Huber, N. King. 00995
- Silver Peak region: Robinson, Paul T. 06578
- Slate Range: Smith, George I. 08907
- Temblor Range, San Luis Obispo-Kern Counties: Am. Assoc. Petroleum Geologists. 02856
- Tierra Redonda Mountain and Bradley quadrangles: Durham, David L. 04761
- Twentynine Palms quadrangle: Dibblee, T. W., Jr. 04766
- Waucoba Wash quadrangle: Ross, Donald C. 10675

Maps, gravity

- Alturas sheet: Chapman, Rodger H. 03717
- San Francisco sheet: Chapman, Rodger H. 03716

Maps, ground water

- Borrego Valley area: Moyle, R. W., Jr. 11016
- Carrizo-San Felipe Valley area: Moyle, R. W., Jr. 11016
- Santa Barbara-Montecito area: Muir, K. S. 01695

Maps, mineral resources

- Southern, sand and gravel deposits: Goldman, Harold B. 06721

Maps, oil and gas

- Rio Vista gas field: Burroughs, Ernest. 04419

Maps, structure

- Bouquet Canyon oil field, top of Miocene: Zulberti, J. L. 04423
- Brea-Olinda field, top of Miocene zones: Gaede, Verne F. 04418
- Elk Hills oil field, western: Lorshbough, A. L. 00575
- Northwest Lost Hills oil field, top of Reef Ridge Shale: Hardoin, John L. 04421
- Ojai oil field, Sisar Creek area, top of Miocene unconformity: Mitchell, William Spencer. 04420
- Rosedale oil field, north, south, east areas: Beecroft, G. W. 04422
- Sespe oil field: Dosch, Murray W. 00633
- Ten Section oil field: Hluza, A. G. 00576
- Wayside Canyon oil field, Yule zone: Mefferd, M. G. 00632

Maps, tectonic

- Faults, active, historically and recently: Stanford Univ. School Earth Sci. 03956

Mineralogy

- Albite, pyroxene, glaucophane, Valley Ford area, schist: Keith, Terry E. 02709
- Amphibole, Cazadero area, blueschist metamorphic facies: Coleman, R. G. 01932

California—Continued*Mineralogy—Continued*

- Alcime, San Joaquin Valley, granitic alluvium soils: Baldar, N. A. 01851
- Augelite, Mono County, structure: Araki, T. 06788
- Biotite, Cartridge Pass pluton, analyses, occurrence: Dodge, F. C. W. 00797
- Borates, Tick Canyon, Sterling Borax mine: Pemberton, H. Earl. 01613
- Copper in fulgurites, Riverside County: Webb, Robert W. 05646
- Epidote, Salton Sea geothermal system: Keith, Terry E. C. 07537
- Feldspar, barium-zoned eastern, quartz monzonite: Dickson, F. W. 09991
- Feldspar, Sierra Nevada batholith, source: Pivinskii, A. J. 02522
- Fluoborite, Hope area, composition: Flamini, A. 11175
- Glaucophane, structure, composition, Tiburon Peninsula: Papike, J. J. 06768
- Hornblende, Sierra Nevada batholith, composition: Dodge, F. C. W. 04812
- Hornblende, Sierra Nevada batholith, occurrence, composition: Dodge, Frank C. W. 07761
- Kaolinite, anauxite, Ione Formation: Allen, Victor T. 08598
- Los Angeles County, collecting areas: Carnahan, Veryl. 10689
- Magadiite, Trinity County, altered volcanic rocks: McAtee, J. L., Jr. 07528
- Nissonite, Panoche Valley, Franciscan Formation: Mrose, Mary E. 07831
- Phengite, Tiburon Peninsula, structure: Guven, N. 01575
- Plagioclase phenocrysts, zoning, Miocene volcanics: Blackerby, Bruce A. 06441
- Pyroxene, amphibole, Cazadero, glaucophane schist: Coleman, R. G. 07790
- Pyroxene, blueschist facies, central: Coleman, R. G. 00276
- Silicate minerals, distribution, genesis in tuffs, Inyo County: Sheppard, Richard A. 02592
- Svanbergite, Imperial County, Vitrefax Formation: Pemberton, H. Earl. 02085
- Titanaugite, zoned, southern, olivine basalt: Fischer, Joseph F. 09995
- Wollastonite, Sierra Nevada, low-temperature metamorphic rocks: Stuart-Alexander, Desiree E. 09708
- Zeolites, Coast Ranges, Obispo Formation: Surdam, Ronald C. 08335
- Zeolites, Hunt Canyon area, Vasquez Formation: Pemberton, H. Earl. 00802
- Paleoclimatology*
- Miocene-Pliocene, planktonic faunas: Bandy, Orville L. 09968
- Quaternary, Sierra Nevada, fluctuations: Curry, Robert Rodney. 07188
- Quaternary, Wisconsinan, Searles Lake: Smith, G. I. 03975
- Tertiary, feldspar-bearing rocks, southern: Todd, Thomas W. 03542
- Tertiary, Sespe Formation, southern: Flemal, Ronald C. 01209
- Paleomagnetism*
- Northern, Bucks pluton, reversals, mechanism: Merrill, Ronald Thomas. 01754
- Paleontology*
- Angiosperms, Cretaceous, Panoche Formation, central: Page, Virginia M. 00345

California—Continued

Paleontology—Continued

- Aves, Tertiary, Laguna Hills, fauna: Howard, Hildegard. 06803
- Cephalopoda, Jurassic, Lower, ammonites: Im-lay, Ralph W. 00933
- Cretaceous-Eocene, Salinas reservoir to Big Pine fault, table: Vedder, John G. 04056
- Diatoms, Cretaceous-Holocene, *Aulacodiscus*, review: Burke, Joseph F. 10987
- Diatoms, morphology, diatomite deposits, microscopic methods: Hanna, G. Dallas. 10963
- Diatoms, Tertiary, Barstow Formation, Black Canyon area: Lohman, Kenneth E. 01843
- Diatoms, Tertiary, floras, cf. circum-Pacific: Wornardt, Walter William, Jr. 10802
- Fauna, Miocene, fossil beds, Barstow area: Walker, Helen. 03099
- Fauna, Miocene, Mohnian Stage, biofacies: Rudel, C. H. 02863
- Fauna, Pleistocene, marine, Santa Barbara Island, terraces: Lipps, Jere H. 02202
- Flora, Quaternary, Sierra Nevada, alpine, disjunct: Major, Jack. 02089
- Foraminifera, Cenozoic, coastal, Globigerina evolution, zonation: Asano, K. 09128
- Foraminifera, Cretaceous, Hex Formation, Kern County: Church, Clifford C. 00170
- Foraminifera, Cretaceous, Upper, southern coast: Sliter, William V. 06699
- Foraminifera, Eocene, San Juan Bautista Formation: Waters, J. N. 00329
- Foraminifera, Miocene, Adelaida quadrangle: Smith, Patsy B. 04774
- Foraminifera, Miocene, *Globigerina bulloides*, chamber variations: Bandy, Orville L. 10889
- Foraminifera, Miocene, Monterey Shale, Salinas Valley, paleoecology: Smith, Patsy B. 09470
- Foraminifera, Miocene-Holocene, Pacific margin, evolution: Asano, Kiyoshi. 03808
- Foraminifera, Miocene-Holocene, planktonic, zonation, climate: Bandy, Orville L. 09127
- Foraminifera, Paleocene, Santa Susana Formation, Simi Valley: Schmidt, Ronald R. 08868
- Foraminifera, Permian, Calaveras Formation, Tethyan fusulinids: Douglass, Raymond C. 10701
- Foraminifera, Quaternary, Tamales Bay, benthonic: Maurer, Don. 04407
- Fossils, problematic, Precambrian, Reed Dolomite, Inyo County: Taylor, Michael E. 09166
- Fossils, problematic, worm tube(?), Harkless Formation, Inyo Mts.: Lipps, Jere H. 02192
- Gymnosperms, Pleistocene, Sierra Nevada: Morey, P. R. 02309
- Insecta, Pleistocene, Bautista Formation, damselfly, nomenclature: Carpenter, F. M. 06335
- Invertebrata, Pleistocene, terrace deposits, southern, collecting: Frazier, Kenneth. 00019
- Malacostraca, Pliocene, Etchegoin Formation, Kettleman Hills, crab: Nations, J. Dale. 00492
- Mammalia, Aves, Pleistocene, McKittrick tar pits: Church, C. C. 02857
- Mammalia, Eocene, Sespe Fm., Ventura County, rodent teeth: Lindsay, Everett. 08021
- Mammalia, Miocene, Barstow Formation, Alvord Mtn. area: Lewis, G. Edward. 02722
- Mammalia, Miocene, Tropic Group, Boron area, new fauna: Whistler, David P. 11029
- Mammalia, Pleistocene, Palm Springs Formation, porcupine: White, John A. 04335

California—Continued

Paleontology—Continued

- Mammalia, Pleistocene, Palos Verdes area: Miller, Wade E. 08303
- Mammalia, Pleistocene, Rancho La Brea, bison, camel: Miller, Wade E. 06900
- Mammalia, Pleistocene, Rancho La Brea, tigers: Miller, George J. 01132
- Mammalia, Pliocene, Mehrrens Fm., Merced area, sloth: Hirschfeld, Sue E. 08054
- Mammalia, Tertiary, Barstow Formation, Mojave Desert: Lindsay, Everett. 08296
- Mammalia, Tertiary, Barstow Formation, Mud Hills area: Lewis, G. Edward. 01842
- Mollusca, Jurassic-Pleistocene, San Diego County, guide: Moore, Ellen J. 04354
- Mollusca, Miocene, southern, taxonomy: Fritzsche, A. Eugene. 09997
- Mollusca, Oligocene-Miocene, Carrizo Plain-Temblor Range, correlation: Addicott, Warren O. 04037
- Mollusca, Pliocene, Fernando Group, Ventura basin: Meade, Robert Francis. 02037
- Ostracoda, Holocene, La Jolla submarine canyon cliff: Holden, John C. 08063
- Palynomorphs, Tertiary, San Joaquin Valley, catalog: Traverse, A. 04328
- Pisces, Holocene, Tamales Bay: Follett, W. I. 01777
- Pisces, Miocene, Pleistocene, southern, istiophorids: Fierstine, Harry L. 01649
- Pisces, Miocene, Sharktooth Hill, carangid, dorsal fin: Fierstine, Harry L. 06801
- Pisces, Pleistocene, Timms Point silt, San Pedro: Fitch, John Edgar. 06804
- Pliocene-Pleistocene, Santa Barbara fauna, southern: Meade, Robert F. 07879
- Protista, Cretaceous-Tertiary, Moreno Formation, Escarpado Canyon: Drugg, Warren S. 07704
- Protista, Jurassic-Cretaceous, Sacramento Valley: Warren, John Stanley. 09862
- Protista, silicoflagellates, Cretaceous-Miocene, catalog, correlation: Mandra, York T. 04790
- Radiolaria, Cretaceous, Moreno Formation, Fresno County: Foreman, Helen P. 06670
- Vertebrata, faunal succession, Plio-Pleistocene, Colorado Desert: Downs, Theodore. 05061
- Vertebrata, Pleistocene, Irvington Formation, new additions: Firby, Jean B. 09994
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- Petrology*
- Box Springs Mountains, granitic rocks, genesis: Joshi, Martand S. 10665
- Box Springs Mountains, granodiorite: Joshi, Martand Shripad Rao. 01747
- Burro Mountain ultramafics: Burch, Stephen H. 01124
- Cascade Range, Quaternary lavas, genesis, composition: Smith, A. L. 05294
- Cascade Range, Tuscan Formation, lahars: Lydon, Philip A. 06577
- Cazadero area, blueschist facies, alkali amphiboles: Coleman, R. G. 01932
- Coast Ranges, granitic, metamorphic rocks: Compton, Robert R. 08253
- Emigrant Gap area, ultramafic rocks: James, Odette Francine Brimont. 09846
- Glaucophane schist, temperature of formation, cf. Oregon: Taylor, Hugh P., Jr. 05054
- Inyo County, Lake Tecopa area, tuffs, silicate facies: Sheppard, Richard A. 02592

California—Continued

Petrology—Continued

- Klamath Mountains, rodingites in ultramafic rocks: Miguels, Richard. 03594
- Los Angeles County, basalt, plagioclase phenocrysts, convolute zoning: Blackerby, Bruce A. 06441
- Marin County, Tiburon Peninsula, glaucophane schists: Dudley, Priscilla Perkins. 03029
- Mono Basin, Pleistocene-Holocene volcanics: Lajoie, K. R. 08774
- Mono Basin, volcanics, eruptive history: Gilbert, C. M. 06355
- Mono County, Bodie Hills, Pliocene volcanics: Chesterman, Charles W. 06493
- Mono Craters, Southern Coulee rhyolite flow: Loney, Robert A. 06503
- Mount Eden area, pre-Cenozoic crystalline rocks: Taylor, Bruce E. 09306
- Mount Pinos basement complex: Lofgren, Gary. 10015
- Novato quadrangle, Cretaceous sandstone, prehnitization: Berkland, James O. 08238
- Owens Gorge, Bishops Tuff, double cooling-units: Sheridan, Michael F. 10041
- Panamint Range-Kingston Range area, metamorphism, talc belt: Wright, Lauren A. 07862
- Sierra Nevada batholith, feldspar study: Piwinski, A. J. 02522
- Sierra Nevada batholith, melting relation, experimental: Piwinski, A. J. 04433
- Sierra Nevada, leucocratic dikes, genesis: Fournier, Reba Benedict. 10666
- Sierra Nevada, reverse-zoned pluton, evolution: Turner, George D. 10052
- Southern, metamorphic-igneous rock associations, anatexis: Warnke, Detlef A. 07999
- Sutter Buttes, andesite, miogeosynclinal: Hatherton, Trevor. 02981
- Tiburon Peninsula, serpentinite lens, composition, paragenesis: Page, Norman J. 00800
- Valley Ford area, albite-pyroxene-glaucophane schist: Keith, Terry E. 02709
- White Mountains, Inyo batholith, classification of plutons: Krauskopf, Konrad B. 00549
- White Mountains, Inyo batholith, processes, randomness: Krauskopf, Konrad B. 03057
- White Mountains, Inyo batholith, processes, randomness: Shea, James H. 03056
- Yosemite National Park, leucocratic dikes: Fournier, Reba Benedict. 06354

Sedimentary petrology

- Central, alluvial and marine sediments, compaction: Meade, Robert H. 00811
- Central, San Andreas fault zone, Santa Clara Formation, facies: Cummings, Jon C. 04053
- Central, subsiding areas, sediments: Johnson, A. I. 00312
- Colorado River delta, sediments, composition, provenance: Muffler, L. J. Patrick. 04462
- Continental slope, sediments, provenance, rates: Wright, Frederick F. 07984
- Cretaceous turbidites, fabric, relation to sole marks: Colburn, Ivan P. 01437
- Death Valley, Kingston Peak Formation, structures: Troxel, Bennie W. 08342
- Fort Bragg area, podzolic soils, genesis: Gardner, Robert Alexander. 04446
- Franciscan Formation, Great Valley sequence, cf. New Zealand's axial, marginal facies: Dickinson, William R. 09990
- Franciscan pelagic limestones, electron microscopy: Garrison, Robert E. 07734

California—Continued

Sedimentary petrology—Continued

- Fresno County, near-surface subsidence crack, prehistoric: Bull, William B. 09974
- Gualala area, Stewarts Point, Anchor Bay, German Rancho rocks: Wentworth, Carl M. 04036
- Kern County, sandstone dikes: Peterson, Gary L. 02858
- Kingston Range, Beck Spring Dolomite, facies: Gutstadt, Allan M. 06603
- La Jolla submarine canyon and fan, sediments, magnetic fabric: Rees, Anthony I. 04425
- Merced River, granite pebbles, morphology: Pittman, Edward D. 04991
- Monterey Bay, beach sediments, heavy minerals: Sayles, Frederick L. 10685
- Northern, coastal drainages, sediments, heavy minerals: Kuhl, L. D. 09265
- Northern, Venado Formation, Logan Ridge Member: Lowe, Donald Ray. 02635
- Palos Verdes Hills, Monterey Shale, dolomite: Murata, K. J. 10025
- Paso Robles Formation, paleocurrents, indicators: Galehouse, Jon S. 01078
- Potrero Hills-Rio Vista area, Domingue Formation: Todd, Thomas W. 06737
- Rubicon River, sediments, shape, size analyses, flood effects: Scott, Kevin M. 07531
- Sacramento Valley, Cretaceous section: Ojankangas, Richard W. 02696
- Sacramento Valley, Cretaceous submarine slump deposit: Lowe, Donald R. 08784
- Sacramento Valley, Jurassic-Cretaceous sedimentation: Ojankangas, Richard W. 07852
- Sacramento Valley, sandstone dikes, flow structures: Peterson, Gary L. 05554
- San Diego area, Cretaceous-Cenozoic clastics, provenance: Peterson, G. L. 08843
- San Diego County, Cretaceous conglomerate: Nordstrom, Charles E. 10029
- San Diego trough, sediment cores, flysch structures: VonRad, Ulrich. 09481
- San Joaquin Valley, Cretaceous rocks, concretions, genesis: Shawa, Monzer S. 08326
- San Nicolas Basin, Recent sediments, hydrocarbons from kerogen on heating: Mitterer, R. M. 01582
- Santa Clara River basin, silts, mineral composition: Fan, Pow-Foong. 07717
- Sierra Nevada, streams, gravel transport: Janda, Richard J. 10010
- Southern, Paleogene conglomerates, tuff clasts, source: Woodford, A. O. 04291
- Tanner Basin, marine sediments, late Pleistocene, sedimentation: Gorsline, D. S. 08706
- Truckee River, outwash deposits, size analysis: Birkeland, Peter W. 00538
- Wheeler Gorge, turbidite conglomerates, inverse grading: Fisher, Richard V. 06688
- Stratigraphy*
- Cenozoic, Neogene formations, Coalinga region, biostratigraphy: Adegoke, Oluwafeyisola S. 07744
- Cenozoic, Paso Robles Formation, paleocurrent study: Galehouse, Jon S. 01078
- Cenozoic, San Joaquin Valley, western: Foss, Charles D. 02867
- Cenozoic, Santa Clara Formation, central, facies: Cummings, Jon C. 04053
- Cretaceous, Franciscan coastal belt units, Cape Mendocino area: Nason, Robert D. 04030

California—Continued

Stratigraphy—Continued

Cretaceous, Late, Coalinga area: Shawa, Monzer S. 09163

Cretaceous, sedimentation, paleogeography, Sacramento Valley: Ojakangas, Richard W. 02696

Cretaceous, Upper, evidence of large post-Cretaceous fault slip: Hill, Mason L. 04035

Cretaceous, Venado Formation, Logan Ridge Member, northern: Lowe, Donald Ray. 02635

Cretaceous-Cenozoic, southern, biostratigraphy, lateral facies: Allison, Edwin C. 10700

Cretaceous-Eocene, contact relations, San Diego area: Nordstrom, C. E. 08829

Cretaceous-Eocene, relations along Nacimiento fault: Vedder, John G. 04056

Cretaceous-Eocene, Sacramento Valley: Safonov, Anatole. 02124

Cretaceous-Miocene, silicoflagellates, correlation, analysis: Mandra, York T. 04790

Cretaceous-Quaternary, Adelaida quadrangle, section: Durham, David L. 04212

Cretaceous-Quaternary, Fox Mtn. quadrangle, sections: Vedder, J. G. 04414

Cretaceous-Tertiary, Gualala area, post-Cretaceous fault slip evidence: Wentworth, Carl M. 04036

Cretaceous-Tertiary, revision, Berkeley-San Leandro Hills: Case, J. E. 06014

Desert Hot Springs area: Proctor, Richard J. 06722

Eocene, Domingine Formation, Potrero Hills-Rio Vista area: Todd, Thomas W. 06737

Jurassic-Cretaceous, *Buchia* zones, Sacramento Valley: Jones, D. L. 07906

Jurassic-Cretaceous, Franciscan Formation, southern: Yeats, Robert S. 05052

Jurassic-Cretaceous, Franciscan-Knoxville paradox, melanges: Hsu, K. Jinghwa. 09403

Jurassic-Quaternary, Kelseyville quadrangle: McNitt, James R. 01776

Jurassic-Quaternary, Marin County (western) area: Gluskoter, Harold J. 07068

Magruder Mountain area: McKee, Edwin H. 05983

Mesozoic-Cenozoic, Fremont Peak and Opal Mtn. quadrangles: Dibblee, T. W., Jr. 01841

Miocene, Adelaida quadrangle: Smith, Patsy B. 04774

Miocene, Barstow Formation, Alvord Mtn. area: Lewis, G. Edward. 02722

Miocene, Caliente Range, southeastern, fault effect on sedimentation: Clifton, H. Edward. 04040

Miocene, Mohnian Stage, pseudosaucesian facies: Rudel, C. H. 02863

Miocene, Monterey Shale, Salinas Valley, paleoecology: Smith, Patsy B. 09470

Miocene, phosphatic facies, San Andreas fault area, correlation: Dickert, Paul F. 04039

Miocene-Pliocene boundary, Coast Ranges, biostratigraphy: Stanton, Robert J., Jr. 10043

Miocene-Pliocene boundary, San Joaquin Valley, biostratigraphy: Adegoke, Oluwafeyisola S. 09960

Miocene-Pliocene boundary, Santa Cruz Mts.: Clark, Joseph C. 09978

Miocene-Pliocene, differentiation, diatoms: Wornardt, W. W., Jr. 10057

Oligocene, Refugian Stage, type area, re-evaluation: Weaver, Donald W. 10055

California—Continued

Stratigraphy—Continued

Oligocene-Miocene, Carrizo Plain-Temblor Range, correlation across fault: Addicott, Warren O. 04037

Pleistocene, marine terrace deposits, Santa Barbara Island: Lipps, Jere H. 02202

Pleistocene, Sherwin Till, Bishop Tuff, Sierra Nevada: Sharp, Robert P. 01077

Pliocene, Bodie Hills, revised names: Chesterman, Charles W. 06493

Pliocene, Bouse Formation, Parker-Blythe-Cibola area: Metzger, D. G. 05185

Pliocene, Towsley Formation, Ventura basin, paleoecology: Kern, John Philip. 06552

Pliocene-Pleistocene, vertebrate faunal succession, Colorado Desert: Downs, Theodore. 05061

Precambrian, Crystal Spring Fm., Panamint-Kingston Ranges area: Wright, Lauren A. 07862

Quaternary, Sierra Nevada, correlation with Lake Lahontan area: Birkeland, P. W. 03976

Quaternary, Wisconsin sediments, Searles Lake basin, paleoclimatology: Smith, G. I. 03975

San Bernardino Mountains, north flank: Hollenbaugh, Kenneth Malcolm. 06551

San Diego area, unconformities: Peterson, G. L. 07844

San Rafael Mountains, central: Vedder, J. G. 10053

Tertiary, Black Canyon area mudstone, correlation, Nevada: Lohman, Kenneth E. 01843

Tertiary, lower, Santa Cruz Mts. area, correlation across fault: Clark, Joseph C. 04038

Tertiary, middle, San Joaquin basin, foraminiferal facies: Bandy, Orville L. 01322

Tertiary, San Joaquin Valley, western: Callaway, David C. 02865

Tertiary, San Juan Bautista Formation, basal, Eocene age: Waters, J. N. 00329

Tertiary, Sespe Formation, southern: Flemal, Ronald C. 01209

Tertiary, Silver Peak region, volcano-sedimentary sequence: Robinson, Paul T. 06578

Twenty-nine Palms quadrangle: Dibblee, T. W., Jr. 04766

Waucoba Wash quadrangle, sections: Ross, Donald C. 10675

Structural geology

Berkeley, Hayward fault, slippage, measurement: Bolt, Bruce A. 08239

Buena Vista Hills, fault movement, 1932-59: Howard, J. H. 05236

Buena Vista Hills thrust, horizontal displacement data, analysis: Howard, J. H. 08740

Caliente Range, southeastern, San Andreas fault, Miocene movement: Clifton, H. Edward. 04040

Cape Mendocino area, San Andreas fault, relation to fracture zones: Nason, Robert D. 04030

Carrizo Plain-Temblor Range segment of San Andreas fault, Tertiary movement: Addicott, Warren O. 04037

Cenozoic geosyncline, exterior troughs, cf. Sakhalin, Hokkaido, Taiwan: Melankholina, Ye. N. 07026

Central, San Andreas fault, post-Pliocene movement: Cummings, Jon C. 04053

Cholame and Taft-Maricopa areas, San Andreas fault, deformation: Howard, John H. 04047

California—Continued

Structural geology—Continued

- Cholame-Camp Dix area, San Andreas fault, stream channel displacements: Wallace, Robert E. 03952
- Clark Mountains, pluton, emplacement, salt-dome tectonics analog: Burchfiel, B. C. 10829
- Coast Ranges, development history: Crowell, John C. 02482
- Coast Ranges, Nacimiento-Sur fault system: Page, Ben M. 10033
- Coast Ranges, San Andreas fault, strain analysis: Burford, Robert Oliver. 00868
- Coast Ranges, squeezing between granitic blocks, high fluid potentials: Berry, Frederick A. F. 04048
- Coyote Mountain, mylonite zones, deformation episodes: Theodore, Ted G. 08031
- Death Valley-Furnace Creek fault zone, displacement, age, rate: McKee, E. H. 01069
- Desert Hot Springs area, Mission Creek fault: Proctor, Richard J. 06722
- Diablo Range, serpentine diapirs: Oakeshott, Gordon B. 03246
- Emigrant Gap area, ultramafic bodies, intrusion: James, Odette Francine Bricmont. 09846
- Fremont area, Hayward fault, slippage: Bonilla, M. G. 08242
- Fremont area, Hayward fault, slippage: Cluff, Lloyd S. 08252
- Great Basin, right-lateral displacements, evidence: Stewart, John H. 03830
- Gualala area, San Andreas fault, post-Cretaceous slip: Wentworth, Carl M. 04036
- Hayward, Calaveras, Pleasanton faults, activity, history: Radbruch, Dorothy H. 04050
- Hollister area, fault slippage, survey lines: Nason, R. D. 10388
- Hollister area, San Andreas and Calaveras fault zones, recent movement: Rogers, Thomas H. 04049
- Hollister area, San Andreas fault, strain: Ham-tak, Frank J. 10548
- Kelseyville quadrangle, faults: McNitt, James R. 01776
- Kern County, Buena Vista fault, creep: Nason, Robert D. 02862
- Kern River fault, strains, observations: Vali, V. 04364
- Klamath and Sierra Nevada Mts., tectonic relations: Davis, G. A. 10493
- Klamath Mountains, thrust faulting: Davis, G. A. 01993
- Long Valley, Mono Basin: Pakiser, L. C. 05051
- Los Angeles basin, faulting, role in subsidence: Shelton, John W. 00912
- Magruder Mountain area, folds, faults: McKee, Edwin H. 05983
- Melanges, definition, Franciscan-Knoxville paradox: Hsu, K. Jinhwa. 09403
- Mojave Desert, faults, northwest-trending, relation to San Andreas: Troxel, Bennie W. 04019
- Mono Basin, evolution: Gilbert, C. M. 06355
- Mount Eden area: Taylor, Bruce E. 09306
- Nacimiento fault, Salinas reservoir to Big Pine fault: Vedder, John G. 04056
- Northern, continental accretion: Seyfert, Carl. 10654
- Owens Valley fault zone, right-lateral movement and creep: Bonilla, Manuel G. 03957
- Paicines-Camp Dix area, San Andreas fault, recent movement: Brown, Robert D., Jr. 03953

California—Continued

Structural geology—Continued

- Pajaro Gap, San Andreas fault, movement, evidence, Franciscan rocks: Maddock, Marshall E. 04034
- Palmdale area, San Andreas fault zone, analysis: Evans, James G. 08267
- Parkfield area, San Andreas fault, movement, recent: Hofmann, R. B. 10005
- Peninsular Ranges, San Andreas fault system and earlier structures: Sharp, Robert V. 04023
- Peninsular Ranges, shear zone, ancient, fault displacements, relations: Sharp, Robert V. 08325
- Rancho Santa Fe area, Santiago Peak volcanics, thrust fault: Peterson, Gary L. 11062
- Sacramento Valley: Safonov, Anatole. 02124
- Sacramento Valley, Cretaceous tectonics: Lowe, Donald Ray. 02635
- Sacramento Valley, faults, displacement indicated by *Buchia* zones: Jones, D. L. 07906
- Salinas area, San Andreas fault, stress accumulation at depth: Eisler, Joseph D. 04052
- Salton Sea: Meidav, Tsvi. 10499
- San Andreas and Garlock faults, displacements, schist bodies: Ehlig, Perry L. 04024
- San Andreas fault, creep, piezomagnetic effect: Breiner, Sheldon. 02046
- San Andreas fault, displacement, evidence: Oakeshott, Gordon B. 07850
- San Andreas fault, history: Crowell, John C. 07797
- San Andreas fault, large post-Cretaceous slip: Hill, Mason L. 04035
- San Andreas fault, large slip, evidence, evaluation: Gastil, R. Gordon. 04054
- San Andreas fault, lateral dislocation, post-early Miocene: Addicott, Warren O. 09959
- San Andreas fault, Miocene movement: Dickert, Paul F. 04039
- San Andreas fault, post-Miocene movement: Berry, Frederick A. F. 07823
- San Andreas fault, problems: Wallace, Robert E. 07970
- San Andreas fault, slip measurements: Burford, R. O. 10359
- San Andreas fault, stress changes at depth, piezomagnetic effects: Breiner, Sheldon. 04033
- San Andreas fault system, active, inactive areas, tectonic environments: Allen, Clarence R. 04041
- San Andreas fault system, displacement, strain: Burford, Robert O. 07774
- San Andreas fault system, geologic problems, conference: Stanford Univ. School Earth Sci. 03956
- San Andreas fault system, large-scale displacements, pre-Cretaceous rocks: Silver, Leon T. 04018
- San Andreas fault system, movement, recent changes: Hofmann, Renner B. 04046
- San Andreas fault system, recent strain from triangulation surveys: Burford, Robert O. 04045
- San Andreas fault, tectonics, seismicity: Allen, Clarence R. 07745
- San Benito County, fault creep: Tocher, Don. 08339
- San Bernardino Mountains, north flank: Hollenbaugh, Kenneth Malcolm. 06551
- San Francisco area, Franciscan rocks: Ohrbom, R. 10031
- San Francisco-San Bernardino area, fault movement: California Dept. Water Resources. 09028

California—Continued*Structural geology—Continued*

San Gabriel fault, displacement: Ehlig, Perry L. 07707

San Gabriel Mountains, crystalline complex, history: Silver, Leon T. 07966

San Joaquin Valley, field trip, road log: Manning, John C. 02850

San Luis Obispo County, San Andreas fault, cumulative movement: Vedder, J. G. 08344

Santa Cruz Mountains area, San Andreas fault, post-Eocene movement: Clark, Joseph C. 04038

Santa Lucia Range, Burro Mtn. ultramafics, emplacement: Burch, Stephen H. 01124

Santa Lucia Range, Franciscan terranes, melange units: Hsu, K. Jinhwa. 07900

Santa Maria area, Francisco Formation-Great Valley sequence, thrust contact: Brown, James A. 09972

Santa Monica Mountains, detachment faults: Campbell, R. H. 08248

Santa Monica Mountains, gravity folding, in progress: Ehlig, Perry L. 08671

Sea-floor tectonics, mechanism, off Cape Mendocino: McEvilly, T. V. 05048

Sevier orogenic belt, deformation: Fleck, Robert Joseph. 01744

Shadow Mountains area, gravity tectonics: Wilson, Raymond C. 10594

Shadow Mountains, Mesozoic intrusive complex, geometry, mechanism: Troxel, Bennie W. 10050

Sierra Nevada, Cenozoic crustal movements: Christensen, M. N. 00536

Sierra Nevada, Cenozoic crustal movements: Lovejoy, Earl M. P. 00535

Sierra Nevada, West Walker River, post-glaciation faulting: Clark, Malcolm Mallory. 11232

Similarity to New Zealand: Hatherton, Trevor. 04995

Southeastern, Clark Mountain thrust complex, mechanics: Burchfiel, B. C. 07773

Southeastern, Pinto Mountain fault: Dibblee, T. W., Jr. 09989

Southern, basalt, vesicles, flow-direction indicators, evaluation: Peterson, G. L. 08842

Southern, history, relation to sea-floor spreading: Yeats, Robert S. 05052

Southern, lateral fault system: Corey, William Henry. 09983

Southern, tectonic evolution: Yeats, Robert S. 04025

Sutter Buttes, geosynclinal tectonics, rejuvenation: Hatherton, Trevor. 02981

Tectonic history, relation to East Pacific Rise: Crowell, John C. 04026

Tectonics, Cenozoic, relation to Pacific basin: Hamilton, Warren B. 04027

Tectonics, seismologic evidence, central and northern: Bolt, B. A. 05458

Transverse Ranges, eastern, strike-slip faults: Hope, Roger A. 07896

Transverse Ranges, San Andreas fault system: Dibblee, Thomas W., Jr. 04017

Wheeler Ridge, tilt measurements: Riley, F. S. 10362

Volcanology

Death Valley, Ubehebe Crater, energy of formation: Roddy, David J. 08858

Weathering

Cascade Range, andesite: Hendricks, D. M. 01072

California—Continued*Weathering—Continued*

Cascade Range, geochemistry: Hendricks, D. M. 01073

Mojave Desert, rates: Warnke, Detlef A. 08564

Monterey-Carmel submarine canyons: Martin, Bruce D. 07942

San Luis Rey watershed, tonalite grus, soil development: Nettleton, Wiley D. 06077

Serpentine, soils, montmorillonite formation: Wildman, W. E. 05960

Serpentinities, geochemistry: Wildman, W. E. 06756

Sierra Nevada, granitic rocks, biotite: Clark, Malcolm M. 08644

Southern, saprolite on tonalite: Flach, K. W. 07418

Cambrian*Alaska*

East-central, Trilobita, biostratigraphy: Palmer, Allison R. 00264

Alberta

Banff area, Coelenterata, Gog Group: Arai, Mary Needler. 00487

Nomenclature, correlation, surface to subsurface, southern: Aitken, J. D. 00548

Appalachians

Northern, biostratigraphy, review: Theokritoff, George. 07179

Arizona

Southeastern, Bolsa and Abrigo Formations: Krieger, Medora H. 02671

British Columbia

Dogtooth Mountains, northern, Hamill Group: Ellison, A. H. 04084

Revelstoke area, Shuswap complex: Ross, John V. 02740

Rocky Mountain Trench, Peace River Reservoir area, stratigraphy: Rutter, N. W. 00984

California

Inyo Mountains, worm tube(?), Harkless Formation: Lipps, Jere H. 02192

Canada

Northwestern, Selwyn Mountains, Flat River tungsten area: Blusson, S. L. 08055

Saint Lawrence Lowland, Potsdam Formation, subsurface: Roliff, W. A. 08185

Coelenterata

Geographic distribution: Fox, Steven K., Jr. 03845

Connecticut

North-central, correlation, Massachusetts: Hatch, Norman L., Jr. 07131

Conodonts

Evolution, distribution: Clark, David L. 00014

Maryland

Piedmont, Glenarm Series: Hopson, Clifford A. 08181

Massachusetts

Southwestern, correlation, Connecticut: Hatch, Norman L., Jr. 07131

Mexico

Oaxaca, Mollusca, Tinu Formation, Tremadocian: Yochelson, Ellis L. 03233

Oaxaca, Trilobita, new, Tinu Formation: Robison, Richard A. 03232

Missouri

Saint Francois Mountain area, stratigraphy: Howe, Wallace B. 02312

Trilobita, Bonnetterre Dolomite: Lochman, Christina. 05710

Cambrian—Continued*Montana*

- Missoula area, stratigraphy: Dobell, Joseph P. 10223
 Western, gradational boundary with Belt Series: Illich, Harold A. 07902

Nevada

- Lander County, Trilobita: Palmer, Allison R. 00490
 White Pine County, Trilobita, Pioche Shale: Fritz, W. H. 01044

New England

- Biostratigraphy, review: Theokritoff, George. 07179
 Western, biostratigraphy: Theokritoff, George. 09940

New York

- Cambridge quadrangle, stratigraphy: Metz, Robert. 01350
 Columbia County, Trilobita, Taconic sequence, correlation: Bird, John M. 03642
 East-central, Zion Hill, Diamond Rock Quartzites: Harris, William H. 09785

Newfoundland

- New World Island, Trilobita: Kay, Marshall. 04443
 Strait of Belle Isle, Middle: Whittington, H. B. 10798

North Carolina

- Great Smoky Mountains National Park: King, Philip B. 00263

Northwest Territories

- Baffin Island, Navy Board Inlet, stratigraphy: Blackadar, R. G. 01526
 Ellesmere Island, Early fauna: Cowie, J. W. 03888
 Mackenzie Mountains, southern, Sekwi Formation: Handfield, R. C. 04072
 Mackenzie, Trilobita, Middle faunule: Norford, B. S. 03718

Ontario

- Holleford meteorite crater, arenites: Saint John, Brian E. 02730

Pennsylvania

- Caledonia Park area, stratigraphy: Fauth, John L. 06754
 Franklin County, southeastern, stratigraphy: Root, Samuel I. 06744
 Lancaster quadrangle, carbonate rocks, stratigraphy: Meisler, Harold. 01644
 Nomenclature, Conococheague Group, Zullinger and Shadygrove Formations: Root, Samuel I. 06744

Quebec

- Sutton area, stratigraphy, tectonics: Clark, T. H. 07135

South Carolina

- Central, Piedmont, metamorphic belts: Secor, D. T. 04728

South Dakota

- Black Hills, Deadwood Formation: Kulik, Joseph W. 10110

Tennessee

- Eastern, Chilhowee Group: Whisonant, Robert Clyde. 09864
 Great Smoky Mountains National Park: King, Philip B. 00263

Texas

- Central, Trilobita, Wilberns Formation: Longacre, Susan Ann Burton. 05507

Cambrian—Continued*United States*

- Cordilleran region, carbonate sedimentation, regional relations: Palmer, Allison R. 09153
 Great Basin, sedimentation: Stewart, John H. 09164
 Mid-continent, southern, paleogeography, sedimentation: Chenoweth, Philip A. 03766

Utah

- Beaver Mountains, Prospect Mtns. Quartzite, correlation: Woodward, Lee A. 03778
 Correlation, Middle and Upper formations, Ogden thrust section: Rigo, Richard J. 06136
 Huntsville area, stratigraphy: Crittenden, Max D., Jr. 10221
 Northern, Middle and Upper, allochthon cf. autochthon: Rigo, Richard J. 06136
 Silver Island Mountains, nomenclature, revision: Robison, Richard A. 00052

Vermont

- Highgate Falls, Gorge Formation: Shaw, Alan B. 02205
 Highgate Falls, Trilobita, Gorge Formation: Clark, Mary Gilman. 02206
 Northwestern, Trilobita, Gorge Formation: Clark, Mary Gilman. 05768

Virginia

- Lee County, L. S. Bales well, log: Harris, Leonard D. 09630
 Lincoln and Bluemont quadrangles, stratigraphy: Parker, Pierre E. 02951

Wisconsin

- Nomenclature, Dresbach Group and Franconia Formation: Ostrom, Meredith E. 09194

Wyoming

- Big Horn Mountains, conodonts, Upper: Koucky, Frank L. 11035
 Black Hills, Deadwood Formation: Kulik, Joseph W. 10110

Canada*Absolute age*

- Atlantic provinces, volcanic rocks, Rb-Sr: Fairbairn, H. W. 07716
 C-14, Geological Survey of Canada list: Lowdon, J. A. 09425
 C-14, ISOTOPES list: Buckley, James D. 03787
 C-14, Saskatchewan University list: McCallum, K. J. 03042
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 Hudson Bay area, raised beaches, C-14: Wagner, Frances J. E. 01423
 Igneous and metamorphic rocks, eastern: Lyons, J. B. 07250
 K-Ar, rocks and minerals: Wanless, R. K. 05265
 Manicouagan Crater, glass, fission-track: Fleischer, R. L. 08505

Areal geology

- Canadian Shield, meteorite impact structures: Dence, Michael R. 07807
 Hudson Bay Lowlands: Sanford, B. V. 04265

Earthquakes

- Seismicity, western, relation to tectonics: Miyamura, Setumi. 04672

Economic geology

- Beryllium, occurrence: Mulligan, Robert. 06082
 Diamonds, prospecting, Great Lakes discoveries: Gunn, Christopher B. 11150
 Evaporites, petroleum, western, occurrence: Klingspor, A. M. 01172
 Metals, fahllands, sulfide schists: Boyle, R. W. 06978

Canada—Continued

Economic geology—Continued

- Metals, Precambrian shield, production, distribution: Sarcia, Jacqueline A. 02906
- Mineral exploration, continental margin, offshore programs for gas and oil: Little, C. H. 09621
- Mineral exploration, sulfides, geological concepts, 1930-67: Sullivan, C. J. 09212
- Mineral exploration, trends and developments, 1967: Hood, Peter. 09600
- Mineral industry, influence on national economy: Drolet, J.-P. 09219
- Mineral resources, Atlantic provinces, development, history, production: Stewart, Keith J. 09624
- Mineral resources, by region: Griffin, Paul F. 10945
- Mineral resources, exploration, deposits under Quaternary sediments: Robinson, S. C. 11147
- Mineral resources, exploration, Geological Survey program: Gross, G. A. 11144
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- Petroleum, natural gas, general: Hilborn, James D. 07079
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- Petroleum, western, occurrence, selected papers: Warner, M. A. 09485
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- Salt, Maritime Provinces: Shaw, William S. 01020
- Silver, general: Boyle, R. W. 04720
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- Uranium, exploration developments, geochemistry: Griffith, John William. 09565
- Uranium, exploration, production, reserves, 1967: Williams, R. M. 09598
- Uranium, resources, reserves: Robertson, David S. 09559
- Uranium, types of deposits: Little, H. W. 11145
- Engineering geology*
- Clays, eastern, Leda clay, properties: Crawford, Carl B. 04195
- Clays, pore-pressure measurements, transducer piezometer: Brooker, E. W. 06063
- Geotechnical research, national development: Leggett, Robert F. 09216
- Highways, planning, photogrammetric studies: Higgs, R. W. 09658
- Materials, properties, thermal conductivity, rocks: Mirkovich, V. V. 02354

Canada—Continued

Engineering geology—Continued

- Permafrost, distribution, research, map: Brown, R. J. E. 09618
- Rock mechanics, bedded deposits, applications: Ignatieff, A. 07755
- Slope stability, open-pit mines: Brawner, Carroll O. 06867
- Soil mechanics, spiral-foot settlement gage: Bozozuk, M. 04261
- General*
- Arctic Archipelago, submersible PISCES, feasibility: Pelletier, B. R. 09449
- Automatic data processing, national system for storage and retrieval: Burk, C. F., Jr. 09211
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- Earth sciences, research, applications, symposium: Neale, E. R. W. 09206
- Economic development, aerial photography, future needs, panel discussion: Drolet, J. P. 10933
- Education in hydrology: Morris, W. V. 05595
- Education, universities, history, data, problems: Stearn, Colin W. 09210
- Geographical interpretation: Canadian Association of Geographers. 05042
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- Geochemistry*
- Canadian shield, chemical evolution: Fahrig, W. F. 05447
- Impact(?) craters: Currie, K. L. 01633
- Lead-zinc in carbonate rocks, element groups, atomic ratios: Sangster, D. F. 02908

Canada—Continued

Geochemistry—Continued

- Natural gas, helium distribution: Voronov, A. N. 08922
 Phosphorus, organic fraction in soils: McKercher, R. B. 07432
 Precambrian shield rocks, U, Th, K concentrations: Shaw, D. M. 08026
 Prospecting methods, development: Boyle, R. W. 09214
 Western, natural gas, composition, variations: Hitchon, Brian. 03398

Geomorphology

- Assiniboine River, meander formation, south-central: Thakur, T. R. 00385
 Bay of Fundy, landform evolution: Swift, Donald J. P. 06123
 Hydrographic networks, original aspects: Hamelin, Louis-Edmond. 08129
 Landform evolution and description: Clibbon, Peter B. 05037
 Meteor craters, arctic and subarctic distribution, age: Sandner, Werner. 06955
 Permafrost, distribution, features, map: Brown, R. J. E. 09618
 Regional geography: Griffin, Paul F. 10945
 Stream features, sedimentation, sediment surveys: Stichling, W. 08925

Geophysical surveys

- Bay of Fundy, acoustic sounding: Swift, Donald J. P. 06123
 Canadian shield, Churchill province, seismic, mantle structure: Weichert, D. H. 11439
 Canadian shield, magnetic, interpretation: MacLaren, A. S. 04713
 Eastern, heat flow, conductivity, in situ measurement: Wright, J. A. 03214
 General, radioactivity methods, new, spectrometer: Pemberton, Roger. 05343
 Gulf of Saint Lawrence, continental shelf, seismic: Sheridan, Robert E. 01997
 Hudson Bay area, gravity, seismic, crust-mantle boundary: Weber, J. R. 05476
 Methods, success in ore-finding: Pemberton, R. H. 07880
 Mineral exploration, methods: Seigel, Harold O. 09213
 Mineral exploration, trends and developments, 1967: Hood, Peter. 09600
 Research, trends, applications: Garland, G. D. 09208
 Western, mantle, seismic: Kanasewich, E. R. 10464
 Western, well logging, formation factor values: Smith, W. D. M. 05935

Glacial geology

- Eastern seaboard, Pleistocene glaciation, maximum extent, determination, field problems: Ives, J. D. 11399
 Glacial features, nomenclature, description, Glacial Map of Canada: Prest, V. K. 00547

Hydrogeology

- General, water resources, development and problems: Morris, W. V. 06658
 Ground-water fluctuations and pore pressures, in clay shales, transducer piezometer: Brooker, E. W. 06063
 Ground-water network: Brown, I. C. 05493
 Interior Plains, clastic aquifers, automatic data processing: Gilliland, J. A. 01940
 Research, practice, resource development, evaluation: Meyboom, P. 10967
 Research projects, glaciological: Henoch, Wladyslaw. 06965

Canada—Continued

Hydrogeology—Continued

- Water resources development, sediment surveys program: Stichling, W. 08925
 Western, exploration, photogeologic interpretation: Mollard, J. D. 09671
 Western, formation waters, blow systems, geochemistry, hydrodynamics: vanEverdingen, R. O. 01968

Maps, geologic

- Hudson Bay Lowlands: Sanford, B. V. 04265
 Northwestern, Flat River area, Canada tungsten mine: Blussón, S. L. 08055

Maps, geomorphologic

- Glacial features: Prest, V. K. 01827
 Lakes, rivers and glaciers: Canada Dept. Energy, Mines, Resources. 06714
 Lakes, rivers, and glaciers: Fremlin, G. 06707
 Permafrost distribution: Brown, R. J. E. 09618

Maps, isopach

- Plains, west of shield, Devonian stages: Bassett, H. G. 03179

Maps, lithofacies

- Plains, west of shield, Devonian stages: Bassett, H. G. 03179

Maps, magnetic

- Canadian shield, airborne: MacLaren, A. S. 04713

General: Morley, L. W. 03764

- Gulf of Saint Lawrence, Miscou Island area, airborne: Canada Geological Survey. 03345

Maps, mineral resources

- Beryllium: Mulligan, Robert. 06082
 General: Canada Dept. Energy, Mines and Resources. 05990
 Silver: Boyle, R. W. 04720
 Titanium: Canada Geological Survey. 09030

Mineralogy

- Clay minerals, Columbia River basin: Knebel, H. J. 03564
 Clay minerals, podzolic soils: Brydon, J. E. 07431

Paleomagnetism

- Precambrian, cf. Africa, relative positions: McElhinny, M. W. 01101

Paleontology

- Anthozoa, Devonian, northwestern, taxonomy: Crickmay, C. H. 04157
 Brachiopoda, Devonian, western, new, sections: Crickmay, C. H. 01699
 Carboniferous, continental facies, eastern, assemblages: Belt, Edward S. 03439
 Cephalopoda, Silurian, James Bay lowland: Flower, Rousseau H. 11279
 Foraminifera, Holocene, continental shelf, eastern, depth assemblages: Hooper, Kenneth. 07980
 Graptolithina, Silurian-Devonian, Upper-Lower, northwestern, zoning: Lenz, A. C. 02832
 Invertebrata, Canada Geol. Survey collection, catalog: Bolton, Thomas E. 06184
 Palynology, Holocene, Western Interior: Lichti-Federovich, S. 11421

Petrology

- Frontenac axis, monzonite plutons, genesis, mobility: Wynne-Edwards, H. R. 11132
 Shield, Precambrian: Wilson, M. E. 04374

Sedimentary petrology

- Atlantic provinces, Carboniferous continental facies: Belt, Edward S. 03439
 Laurentian Channel, glacial sediments, quartz-grain surface textures: Krinsley, D. H. 08212
 Prairies, Saskatchewan gravels and sands, identification: Stalker, A. MacS. 02178

Canada—Continued*Sedimentary petrology—Continued*

Western sedimentary basin, rock type volume and pore volume: Hitchon, Brian. 05750

Stratigraphy

Cambrian, Potsdam Formation, St. Lawrence Lowland: Roliff, W. A. 08185

Carboniferous, continental facies, eastern: Belt, Edward S. 03439

Carboniferous, eastern: Belt, Edward S. 07140

Cretaceous, Mannville Group, western Canada basin: Vigrass, Laurence W. 04511

Cretaceous, western interior, correlation with Europe: Jeletzky, J. A. 01798

Devonian, Appalachians: Cumming, L. M. 03163

Devonian, Old Red Sandstone and equivalents, Arctic area: Allen, J. R. L. 03187

Devonian, plains, west of shield, paleogeography: Bassett, H. G. 03179

Mississippian, salt deposits, Maritime Provinces: Shaw, William S. 01020

Mississippian, western, relation to Williston basin: Proctor, Richard M. 04509

Precambrian, Canadian shield, geochronology, methods: Stockwell, C. H. 07477

Precambrian, shield: Wilson, M. E. 04374

Silurian-Devonian, Upper-Lower, northwestern, biostratigraphy: Lenz, A. C. 02832

Triassic-Jurassic, western: Carlson, C. E. 11230

Structural geology

Arctic, postglacial rebound: Andrews, J. T. 02169

Canadian shield, Archean protocontinents: Goodwin, A. M. 05066

Canadian shield, evolutionary trends: Goodwin, A. M. 04715

Continental accretion, formation miogeoclinal, Precambrian: Dietz, Robert S. 00511

Continental accretion, miogeoclinal formation, Precambrian: Clifford, Paul M. 00526

Continental accretion, miogeoclinal formation, Precambrian: Dietz, Robert S. 00510

Continental accretion, miogeoclinal formation, Precambrian: Young, Grant M. 00527

Eastern, Appalachians, post-Acadian rifts: Belt, Edward S. 07140

Shield, Precambrian, general: Wilson, M. E. 04374

Weathering

Soils, C to Ae horizons, clay minerals: Brydon, J. E. 07431

Carbon*Analysis*

Gasometric technique, KOH absorption by CO₂: Kolpack, Ronald L. 03565

Geochemistry

Diamonds, genesis: Kennedy, George C. 04229

O-CO₂ balance, atmosphere since Precambrian, control: Tappan, Helen. 01832

R-sidence time, atmosphere-hydrosphere-biosphere system: Holland, Heinrich D. 08020

Sea water, organic, cycle: Ryther, John H. 08864

Isotopes

C-13, C-12, fractionation, calcareous marine invertebrates: Weber, Jon N. 00299

C-14, cosmogenic, variations, climatic changes: Suess, Hans E. 04173

C-12, enrichment in methane gas: Sackett, William M. 03867

C-14, fossil bone and enamel: Haynes, Vance. 03059

Carbon—Continued*Isotopes—Continued*

C-12, marine plankton, enrichment: Degens, E. T. 04440

C-13, marine sediments: Choquette, Philip W. 03167

C-13, metabolic fractionation in marine plankton: Degens, E. T. 04439

C-13, organic matter, aquatic: Scalan, Richard S. 08867

C-13, petroleum: Kvenvolden, Keith A. 07925

C-13, petroleum, Permian basin: Meister, Frederic H. 01180

C-13, plankton-sea water relationship: Deuser, W. G. 02341

C-13, Ponca City reference petroleum, variations: Ferguson, William S. 08683

C-14 transfer in nature: Nydal, Reidar. 01953

C-13, variations in grasses: Bender, Margaret M. 03121

C-13:C-12, interstitial water, near-shore sediments: Presley, B. J. 04865

C-13:C-12, metamorphic rocks, Vermont, Ontario: Sheppard, Simon M. F. 10800

C-13:C-12, water systems, Texas, pollution index: Calder, John A. 01774

Carbonate rocks, metamorphism, composition, changes: Deines, P. 08660

Carbonatite, Quebec: Deines, Peter. 03037

Composition, peridotite, Pennsylvania: Deines, P. 07758

Composition, travertine, Colorado, genesis: Steven, T. A. 00801

Fractionation, graphite-calcite-methane-carbon dioxide: Bottinga, Yan. 04545

Ratios, British Columbia: Chrismas, L. 09363

Ratios, echinoid, calcite, Devonian-Recent: Weber, Jon N. 00493

Ratios, fluid inclusions: Rye, Robert O. 01914

Carboniferous*Alberta*

Southwestern, Etherington Formation, Foraminifera: Mamet, Bernard L. 04097

Arkansas

Scranton-New Blaine quadrangles, stratigraphy: Haley, Boyd R. 05972

British Columbia

Connor Lakes area, Foraminifera, Lower, correlation: Mamet, B. L. 04061

Correlation, thickness, distribution, Lower: Mamet, B. L. 04061

Northeastern, stratigraphy: Bamber, E. W. 05743

California

San Bernardino Mountains, Furnace Creek Formation: Hollenbaugh, Kenneth Malcolm. 06551

Southern, Mississippian-Pennsylvanian boundary: Gordon, Mackenzie, Jr. 06810

Canada

Atlantic provinces, continental facies, stratigraphy: Belt, Edward S. 03439

Eastern, post-Acadian rifts: Belt, Edward S. 07140

Illinois

Gymnosperms, pteridophytes, ontogeny, coal beds: Delevoryas, Theodore. 07920

Kansas

Pisces, bradyodont, cf. Pennsylvanian, Ohio: Hansen, Michael C. 02486

Carboniferous—Continued*Nebraska*

Pisces, bradyodont, cf. Pennsylvanian, Ohio:
Hansen, Michael C. 02486

Nevada

Eastern, Chainman Formation, biostratigraphy:
Sadlick, Walter. 08065
Southern, Mississippian-Pennsylvanian bound-
ary: Gordon, Mackenzie, Jr. 06810

New Brunswick

Beaver Harbour, plant assemblage recently con-
sidered Devonian: Helmstaedt, Herwart.
01605
Moncton map-area, nomenclature, pa-
lynomorphs: Carr, P. A. 00977

Ohio

Amphibia, microsaurs: Carroll, Robert L. 05715

United States

Midcontinent, Mississippian-Pennsylvanian
boundary, correlation with Europe: Sullivan,
Herbert J. 10088

Utah

Western, Chainman Formation, biostratigraphy:
Sadlick, Walter. 08065

Caribbean region*Economic geology*

Petroleum, Paleozoic rocks, potential: Meyer-
hoff, A. A. 01161
Petroleum, possible provinces: McCaslin, John
C. 11267

Geophysical surveys

Lesser Antilles, Guadeloupe region, seismic,
magnetic: Fink, L. Kenneth, Jr. 08686

Paleoclimatology

Quaternary: Zonneveld, J. I. S. 07296

Paleontology

Bryozoa, Tertiary, cheilostome genera, first fos-
sil records: Lagaaij, Robert. 11424
Foraminifera, Cenozoic, new genera: Sellier de
Civrieux, J. M. 11418
Foraminifera, Eocene, orbitolinids, taxonomic
revision: Butterlin, Jacques. 04324
Foraminifera, Holocene, benthonic, bibliog-
raphy: Seiglie, George A. 06024
Foraminifera, Oligocene, larger, variations:
Cole, W. Storrs. 01876
Foraminifera, Quaternary, reefs, assemblages,
correlation: Seiglie, George A. 06349
Foraminifera, Tertiary cf. Holocene, oil source
beds, indicators: Seiglie, George A. 05712
Foraminifera, Tertiary, *Globigerina mexicana*,
taxonomy: Blow, W. H. 05012
Gastropoda, Pliocene-Holocene, *Glyptaesopus*,
taxonomy: Radwin, George E. 09020
Ostracoda, Miocene-Pliocene, trachyleberid dis-
tribution: Bold, W. A. van den. 09130
Palynomorphs, Tertiary, correlation: Ger-
meraad, J. H. 07373
Pelecypoda, Miocene, Guadeloupe Island, pec-
tinids: Mongin, Denise. 05149
Protista, coccolithophores, Pleistocene, core:
Cohen, C. L. D. 05624

Stratigraphy

Miocene, Guadeloupe Island, biostratigraphy:
Mongin, Denise. 05149

Structural geology

Continental drift, literature review: MacDonald,
William D. 06023
Lesser Antilles Island Arc: Fink, L. Kenneth, Jr.
07719

Caribbean region—Continued*Volcanology*

"Kick-'em Jenny", submarine eruption, T-
phase: Northrop, John. 00964

Caribbean Sea*Geochemistry*

Mn, Co, Ni solids, stability conditions: Carvajal,
Marta Campa. 07784

Geophysical surveys

Caribbean submarine escarpment, seismic: Tal-
wani, Manik. 08013
Cayman trough, interpretation: Bowin, Carl O.
03223
Cayman Trough, magnetic: Gough, D. I. 08407
Lesser Antillean Arc, structure: Bunce, E. T.
08444
Nicaragua Rise, seismic: Bolli, H. M. 01070
Venezuelan basin, seismic: Ewing, John I. 07986

Paleontology

Nannofossils, Plio-Pleistocene, Nicaragua Rise:
Bolli, H. M. 01070
Protista, dinoflagellates, Quaternary, cal-
ciodinellids, peridinioid cysts: Wall, David.
06029
Protista, Plio-Pleistocene boundary, Nicaragua
Rise, nannoplankton: Hay, W. W. 10985

Sedimentary petrology

Cariaco, Bonaire, Los Roques trenches, sedi-
ments: Lidz, Louis. 07934
Caribbean submarine escarpment, sediments:
Talwani, Manik. 08013
Sediments, elasticity vs. porosity and grain
diameter: Schreiber, B. Charlotte. 00285

Stratigraphy

Pliocene-Pleistocene boundary, Nicaragua Rise:
Bolli, H. M. 01070
Quaternary, base of Pleistocene, foraminiferal
biostratigraphy: Beard, John H. 09326
Tertiary, base of Pliocene, foraminiferal bios-
tratigraphy: Beard, John H. 09326

Structural geology

Cayman trough, evolution: Bowin, Carl O.
03223

Cartography*Instruments*

Stereoscopic plotters, color compatible, aerial
photos: Lewis, James G. 02489

Projections

General: Rothwell, Stuart C. 09181

Caves*Alabama*

Madison County: Jones, Walter B. 07905

Alaska

Glacier Bay National Monument, glacier cave:
Peterson, D. N. 08072

Appalachians

Vertebrate fossils, climatic, speleologic sig-
nificance: Guilday, John E. 08950

Bibliography

Texas: Reddell, James R. 08921

British Columbia

Glacier National Park, Nakimu Caves, develop-
ment: Ford, D. C. 07785

California

Mitchell Caverns, history of formation: Taylor,
Frank. 04563

Cuba

Grand Cavern of Saint Thomas, hollow
stalagmites, genesis: Nemec, Frantisek. 02823

Detection

California, microwave survey: Kennedy, J. M.
01889

Caves—Continued

Detection—Continued

Cavernous dolomite: Vineyard, Jerry D. 06696

Features

Geometry, changing, solution processes: Lange, Arthur L. 04353

Geometry, wall solution, constant solution gradient: Lange, Arthur L. 01155

Geometry, wall solution, exponential gradient: Lange, Arthur L. 01135

Solution channels, sinuosity: Deike, George H., 3d. 07878

Speleothems, popular account: Broughton, Paul L. 01598

General

Earth sciences and speleological studies: Davies, William E. 08074

Earth sciences and speleological studies: Quinlan, James F. 08075

Speleology, growth of science: Broughton, Paul. 02846

Genesis

Boundary conditions, glaciation effects: Baker, Victor R. 07781

Chemical and hydrologic factors: Thrailkill, John. 00545

Iowa, Dubuque area, Galena dolomite, sulfuric acid: Morehouse, David F. 01492

Idaho

Owl Cave, sediment fill: Ore, H. Thomas. 02538

Indiana

Blue Spring Cave, ground-water flow system conduit: Palmer, Arthur N. 06911

Wyandotte Cave, relation to Blue River: Powell, Richard L. 06910

Kentucky

Mammoth Cave, genesis: Thrailkill, John. 00545

Mammoth Cave region, genesis: Deike, George Herman, 3d. 03028

Mexico

New discoveries, exploration: Russell, William H. 08969

Mineralogy

Popular and elementary account: Nickell, Walter P. 08113

Missouri

Devils Icebox Cave, chert zone effect: Hargrove, Gene. 06708

Highway Cave, Buckhorn area: Vineyard, Jerry D. 06696

Ozark Mountains: Owen, Luella Agnes. 11031

Montana

High-mountain, gravity sliding origin: Campbell, Newell P. 07784

New Mexico

Carlsbad area, genesis: Motts, Ward S. 01074

Carlsbad Caverns: Bullington, Neal R. 10166

Carlsbad Caverns, carbonate mineralogy, dolomitization: Thrailkill, John. 02083

New York

Schoharie and Albany Counties, hydrology: Baker, Victor R. 07786

Ontario

Niagara Escarpment, Dickson Quarry, crevice type: Churcher, C. S. 01493

Oregon

Eastern, Officer's Cave: Parker, Garald G. 09154

Sedimentation

Review: Thrailkill, John. 08973

Sediment transport, dynamics: White, Elizabeth L. 09820

Caves—Continued

Solution processes

Atmospheric CO₂, titration apparatus: Delecour, F. 11044

Structural control

Limestone, survey data correlation: Rutherford, John M., Jr. 07783

Texas

Distribution: Smith, A. Richard. 00806

Stockton Plateau: Kunath, Carl E. 08158

Virginia

Gilley Cave: Baroody, Roger. 07873

Southwestern, summary: Holsinger, John R. 08954

West Virginia

Bone-Norman system: Davis, John O. 07876

Cassell Cave, effect of faulting: Eddy, G. E. 07877

Flower Pot Cave, description: Medville, Douglas. 07874

Friars Hole karst area: Bicking, Lewis A. 09178

Great Savanna: Rutherford, John M. 08970

Greenbrier County, correlation with joints: Rutherford, John M., Jr. 07783

The Hole, description: Rutherford, John M., Jr. 07875

Tucker County, Cave Hollow System: Smith, Gordon L. 10867

*Cenozoic**Alaska*

Bering land bridge, history: Cohen, Gaston. 03132

Lichens, geographic distribution: Krog, Hildur. 04410

Arctic

Holarctic tundra ecosystems, history, vertebrate faunas: Hoffman, R. S. 02080

Arizona

Northwestern, Hindu Canyon, stratigraphy: Gray, Robert. 11383

Pena Canyon and Walker Canyon areas, stratigraphy: Nelson, Frank J. 11334

Roskrige Mountains, stratigraphy, summary: Bikerman, Michael. 02657

Southern, absolute age: Damon, Paul E. 02639

Superstition Mountains, Goldfield area, volcanic geology: Sheridan, Michael F. 02653

Atlantic Coastal Plain

Southern, Gastropoda, Muricidae: Vokes, Emily H. 05057

Atlantic Ocean

North, Plio-Pleistocene sediments, paleomagnetic stratigraphy: Phillips, J. D. 02676

North-central, Plio-Pleistocene boundary, core, dating: Berggren, W. A. 09126

Puerto Rico Trench, north slope, Cenomanian rocks: Chase, R. L. 09502

California

Cascade Range, volcanic history, summary: Macdonald, G. A. 02963

Central, Santa Clara Formation: Cummings, Jon C. 04053

Coalinga region, Neogene formations, biostratigraphy: Adegoke, Oluwafeyisola S. 07744

Coastal, Foraminifera, Globigerina evolution, zonation: Asano, K. 09128

Desert Hot Springs area, stratigraphy, revision: Proctor, Richard J. 06722

San Diego area, clastic sequence, provenance: Peterson, G. L. 08843

San Diego County, Mollusca, collecting guide: Moore, Ellen J. 04354

Cenozoic—Continued

California—Continued

San Joaquin Valley, stratigraphy: Foss, Charles D. 02867

Southern, biostratigraphy: Allison, Edwin C. 10700

Southern, Foraminifera, planktonic, zonation, paleoclimatology: Bandy, Orville L. 09127

Southern, Pisces, istiophorid: Fierstine, Harry L. 01649

Tectonics, cf. Sakhalin, Hokkaido, Taiwan: Melankholina, Ye. N. 07026

Caribbean region

Foraminifera, new buliminacean, cassidulacean genera: Sellier de Civrieux, J. M. 11418

Caribbean Sea

Correlation, Plio-Pleistocene boundary, Nicaragua Rise, nannoplankton: Hay, W. W. 10985

Nicaragua Rise, Pliocene-Pleistocene boundary: Bolli, H. M. 01070

Colorado

Slick Rock district, stratigraphy: Shawe, Daniel R. 07018

Correlation

Pliocene-Pleistocene events, geomagnetic reversals: Glass, Billy Price. 04537

Upper Pliocene and Pleistocene, radiometric-magnetic polarity data: Cox, Allan. 07330

Florida

Gastropoda, Muricidae: Vokes, Emily H. 05057

Southwestern, Foraminifera: Cohen, Arthur D. 05014

Foraminifera

Planktonic, Miocene-Holocene, zonation, paleoclimatology: Bandy, Orville L. 09127

General

Boundaries: Berggren, W. A. 08609

Correlation, Plio-Pleistocene boundary, glacial chronology, evolution of man: Emiliani, Cesare. 10951

Greenland

Sea-level changes, glacioeustatic, Plio-Pleistocene boundary: Mercer, John H. 04057

Gulf Coastal Plain

Correlation, eastern, cross sections: Maher, John C. 07067

Gastropoda, Muricidae: Vokes, Emily H. 05057

Gulf of Mexico

Sigsbee Knolls, stratigraphy: Pyle, Thomas E. 11048

Kansas

Stratigraphy, nomenclature, classification: Jewett, John Mark. 07665

Louisiana

Northern, stratigraphy: Shreveport Geological Society. 02164

Southern, stratigraphy: Lafayette Geological Society. 02121

Maryland

Charles County, major aquifers: Slaughter, Turbit H. 00568

Salisbury area, Salisbury Formation and other hydrologic units: Boggess, Durward H. 11261

Mexico

Baja California, biostratigraphy: Allison, Edwin C. 10700

Baja California, Mollusca, diatoms: Hertlein, Leo G. 04300

Chihuahua, Hueco and Mesilla bolsons: Strain, William S. 10175

San Luis Potosi, El Salado area, stratigraphy: Garcia-Calderon, Jorge. 07648

Cenozoic—Continued

Mexico—Continued

Tijuana area, clastic sequence, provenance: Peterson, G. L. 08843

Zacatecas, El Salado (S.L.P.) area, stratigraphy: Garcia-Calderon, Jorge. 07648

Montana

Kalispell Valley, Tertiary graben sediments, Quaternary fill: Konizeski, R. L. 03621

Nevada

Nevada Test Site, tuff, thickness, volcanic: Healey, D. L. 10954

Pah Rah Range, Virginia Mountains, stratigraphy: Bonham, Harold F. 08240

Yucca Flats area, alluvial fans: Fernald, Arthur T. 06825

New Mexico

Valles Caldera, paleomagnetism, absolute age: Doell, Richard R. 06579

North America

Correlation, Eurasia, mammals, absolute age: Gabunia, L. 05062

Correlation, with Europe, nannoplankton: Lipps, Jere H. 02018

Mammalia, Pliocene-Pleistocene megalonychid sloths: Hirschfeld, Sue E. 08054

Paleoclimatology, fossil floras as indicators: Barghoorn, E. S. 04691

Northwest Territories

Prince Gustaf Adolf Sea area, sedimentation: Marlowe, J. I. 02054

Pacific Ocean

Deep-sea cores, Radiolaria, trissocyclids: Goll, R. M. 06006

North, Foraminifera, Globigerina evolution, zonation: Asano, K. 09128

Paleoclimatology

Cooling trend, causes: Hamilton, Warren. 04170

Palynology

Catalog: Traverse, A. 04328

Pisces

Myripristis, tropical oceans, zoogeography, phylogeny: Greenfield, David W. 00907

Protista

Calcareous nannoplankton, worldwide, stratigraphic markers: Bukry, David. 06348

Ebriata, review: Mandra, York T. 08790

Puerto Rico

Tectonic sequences: Mattson, Peter H. 08216

Rocky Mountains

Southern, volcanism: Epis, Rudy C. 05127

South Dakota

Black Hills area, catalog of formation names: Wolf, George R. 05883

Texas

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El Paso area, Mesilla and Hueco bolsons: Strain, William S. 10175

Northeastern, stratigraphy: Nichols, P. H. 02156

United States

North Carolina-Georgia, marine-continental facies, faunal isolation: Colquhoun, Donald J. 01232

Southeastern, Bryozoa, *Floridina*, restriction of genus: Schager, Sten A. N. 11395

Southeastern, sea-level fluctuations: Alt, David. 04014

Utah

Sevier Plateau, stratigraphy, volcanic: Rowley, Peter DeWitt. 06557

Cenozoic—Continued

Virginia

Suffolk area, Yorktown to Sand Bridge formations: Coch, Nicholas K. 05573

Washington

Cascade Range, central and southern, stratigraphy: McKee, Bates. 07218

Wyoming

Grand Teton National Park, stratigraphy: Love, J. D. 11319

Medicine Bow Mountains, east-central, history: McCallum, M. E. 01713

Western, tectonics: Crosby, Gary W. 04512

Central America

Economic geology

Petroleum, exploration: McCaslin, John C. 09507

Geochemistry

Volcanic rocks, strontium isotope ratios, island arcs: Pushkar, Paul. 00518

Geomorphology

Arid, semiarid regions, terrain features: Howe, George M. 07633

Morphotectonic units based on geologic structure: Dengo, Gabriel. 06324

Paleontology

Foraminifera, Tertiary, large: Eames, F. E. 01042

Petrology

Rhyolite, occurrences, differentiation: McBirney, Alexander R. 07875

Structural geology

Chamelecon fault zone: Walper, Jack L. 10093

Cordillera, regional tectonics: Sales, John K. 05904

Tectonic histories of geologic divisions: Dengo, Gabriel. 06324

Cephalopoda

Actinoceratida

Ordovician, North America, Whiterock Stage: Flower, Rousseau H. 01775

Adamoceras

Ordovician, North America, Whiterock Stage, descriptions: Flower, Rousseau H. 01775

Ammonites

Morphology, shell, similarity to nautiloids: Birkelund, T. 10947

Ammonitida

Cretaceous, Texas-Mexico, upper Albian: Young, Keith. 00496

Ammonoidea

Cretaceous, taxonomy and evolution: Wiedmann, Jost. 07894

Devonian, North America, zonation, correlation, Europe: House, M. R. 02876

Jurassic, Oregon and California, Lower: Imlay, Ralph W. 00933

Mesozoic, recent literature, review: Haas, Otto. 03231

Paleozoic, late, shell modifications: Davis, Richard Arnold. 06548

Suture line drawing, microscope technique: Palframan, D. F. B. 05691

Triassic, North America, biostratigraphic unit correlation: Silberling, N. J. 04891

Arietoceras lupheri, n.sp.

Jurassic, Oregon, Lower: Imlay, Ralph W. 00933

Baculites lomaensis

Cretaceous, Mexico, Baja California, Rosario Formation: Perrillat Montoya, Maria del Carmen. 09131

Cephalopoda—Continued

Baschkirites librovitchi, n.sp.

Pennsylvanian, Arkansas, Hale Formation, northern: Quinn, James H. 02958

Belemnosella

Eocene, Alabama, Moodys Branch Formation, n.spp.: Allen, James E. 02974

Belosaepia

Eocene, Alabama, Louisiana, n.spp.: Allen, James E. 02974

Botryceras Flower, n. gen.

Ordovician, New Mexico, Second Value Formation: Flower, Rousseau H. 11054

Cameroceras alternatum

Ordovician, Quebec, Black River Group: Flower, Rousseau H. 11055

Carboniferous

Nevada-California, Mississippian-Pennsylvanian boundary: Gordon, Mackenzie, Jr. 06810

Choanoceras(?)

Silurian, Ontario, Attawapiskat Limestone, northern: Hansman, Robert H. 02186

Cyrtonyboceras

Ordovician, North America, Whiterock Stage, descriptions: Flower, Rousseau H. 01775

Enchoteuthis melanae, n.gen., n.sp.

Cretaceous, Kansas, Niobrara Fm.: Miller, Halsey W. 07787

Farroceras liskeardense, n.gen., n.sp.

Silurian, Ontario, Haileybury area, Farr Formation: Flower, Rousseau H. 11279

Geographic distribution

Cretaceous, paleotemperatures, belemnites: Lowenstam, H. A. 04688

Goniatites

Mississippian, Arkansas, Moorefield-Fayetteville Formations, suture lines: Drahovzal, James A. 08160

Hudsonoceras moorei, n.sp.

Pennsylvanian, Arkansas, Hale Formation, northern: Quinn, James H. 02958

Hypophylloceras sp.

Cretaceous, Greenland, west, shell structure: Birkelund, T. 10947

Jeletzkyia douglassae

Pennsylvanian, Illinois, Middle, squid: Johnson, Ralph Gordon. 00087

Kansasteuthis lindneri, n.gen., n.sp.

Cretaceous, Kansas, Niobrara Fm.: Miller, Halsey W. 07787

Leptaleoceras dickinsoni, n.sp.

Jurassic, Oregon, Lower: Imlay, Ralph W. 00933

Leptaleoceras? morganense, n.sp.

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Metacoceras thompsoni, n.sp.

Permian, Arizona, Toroweap Formation, description: Beus, Stanley S. 02467

Morphology

Nautiloidea, Ordovician, Whiterock Stage, Nevada-Utah: Flower, Rousseau H. 01778

Mortonoceras (Boesites), n. subgen.

Cretaceous, Texas-Mexico, Albian: Young, Keith. 00496

Nartheococeratidae

Ordovician-Silurian, North America, taxonomy, revision: Flower, Rousseau H. 11279

Nautiloidea

Ordovician, Nevada-Utah, Whiterock Stage, systematics: Flower, Rousseau H. 01778

Nomenclature

Ammonoid systematics, history of study and development: Nelson, Clifford M. 04861

Cephalopoda—Continued**Ordovician**

Alaska, Canadian beds, endoceroids: Flower, Rousseau H. 09890

Alaska, Chazyan beds, new species: Flower, Rousseau H. 09891

Orthoceras* (?) *attawapiskatense

Silurian, Ontario, Attawapiskat Limestone, possibly *Choanoceras*: Hansman, Robert H. 02186

Paleozoic

Type specimens, Smithsonian Institution collection, catalog: Purnell, Louis R. 01595

Pennsylvanian

Ammonoids, Arkansas, Oklahoma, Bloyd Formation: McCaleb, James A. 03723

Ammonoids, phylogenetic sequences, Atokan Stage: Furnish, W. M. 02494

Arkansas, Hale Formation, descriptions, zonation: Gordon, Mackenzie, Jr. 09388

Platylithophycus cretaceum

Cretaceous, Kansas, sepiid not algae: Miller, Halsey W. 07787

Plesiacanthoceras wyomingense

Cretaceous, Kansas, Graneros-Greenhorn contact, correlation: Hattin, Donald E. 05692

***Protogrammoceras ochocoense*, n.sp.**

Jurassic, Oregon, Lower: Imlay, Ralph W. 00933

Pseudorthoceras knoxense

Pennsylvanian, Iowa, Cherokee Group, Marion County: Davis, Richard Arnold. 03629

***Rioceras*, n.spp.**

Ordovician, Mexico, Oaxaca, Tinu Formation: Flower, Rousseau H. 03791

Rosoceras

Ordovician, Utah, Garden City Limestone, Green Canyon: Flower, Rousseau H. 01778

Saghalinites

Cretaceous, Greenland, west, shell structure: Birkelund, T. 10947

Scaphites

Cretaceous, Greenland, west, shell structure: Birkelund, T. 10947

Shell strength

Experimental studies: Raup, David M. 08050

Sicanitinae

Permian, ammonoids, medlicottiid: Furnish, W. M. 08699

Silurian

Canada, James Bay lowland: Flower, Rousseau H. 11279

Solenochilus springeri

Pennsylvanian, Iowa-Arkansas, Middle: Mikesh, David L. 03628

Taxonomy

Nautiloidea, Ordovician, Whiterock Stage, Nevada-Utah: Flower, Rousseau H. 01778

Permian, Paragastrioceratidae: Mikesh, David Leonard. 06554

Tertiary

Alabama, Louisiana, Eocene, sepiids: Allen, James E. 02974

Triassic

Nevada, Thaynes Formation, ammonites: Collinson, James W. 06949

Wiedeyoceras sanctijohannis

Pennsylvanian, Iowa, Cherokee Group: Furnish, W. M. 03631

Williamsoceras

Ordovician, Utah, Garden City Limestone, Green Canyon: Flower, Rousseau H. 01778

Cephalopoda—Continued***Wutinoceras***

Ordovician, North America, Whiterock Stage, descriptions: Flower, Rousseau H. 01775

Wutinoceratidae

Ordovician, North America, Whiterock Stage: Flower, Rousseau H. 01775

Ceramic materials**Alabama**

Northeastern, occurrence, properties: Clarke, Otis M., Jr. 03166

Southeastern, clays: Clarke, Otis M., Jr. 07667

Appalachians

Resources, review: Wedow, Helmuth, Jr. 01373

Colorado

Evergreen area, topaz, sillimanite, occurrence: Sheridan, Douglas M. 01142

Experimental studies

Clay bodies, design, firing strength, microstructure: Robinson, Gilbert C. 10960

Clay bodies, design, firing strength, microstructure: Robinson, Gilbert C. 10974

Clays and clay-graphite mixtures, extrusion, microstructures: Kilgore, R. V. 09185

Extrudability, determining parameters, synthetic mixtures: Robinson, Gilbert C. 09187

Mullite formation, effects: Shutt, T. C. 11023

Sintered spinel formation, isothermal reaction: Bailey, Joseph T. 09188

Genesis

Flint clay: Keller, W. D. 11239

Mexico

San Luis Potosi area, refractory clay, genesis: Keller, W. D. 05567

Properties

Clay bodies, design, firing strength, microstructure: Robinson, Gilbert C. 10960

Clay bodies, design, firing strength, microstructure: Robinson, Gilbert C. 10974

Clays and clay-graphite mixtures, extrusion, microstructures: Kilgore, R. V. 09185

Clays, textbook: Worrall, W. E. 07037

Extrudability, determining parameters, synthetic mixtures: Robinson, Gilbert C. 09187

South Carolina

Little Mountain area, kyanite, resources, genesis: McKenzie, John C. 02555

Tennessee

Western, clays, electron microscopy: Larson, L. T. 10317

Western, clays, mineralogy: Merschat, Carl E. 10325

West Virginia

Randolph County, refractory clay: Englund, Kenneth J. 02612

Cesium**Analysis**

Activation, coincidence-counting technique: Greenland, L. Paul. 00790

Atomic absorption, X-ray fluorescence, standard reference samples: Mountjoy, Wayne. 00777

Flame photometry, precise system for trace amounts in sea water: Folsom, T. R. 01152

Ion-exchange and X-ray fluorescence technique: Hayden, John A. 03484

Geochemistry

River water, United States, cf. marine sediments: Sreekumaran, C. 05345

Sediments, Texas, Guadalupe River: Clanton, Uel S., Jr. 06545

Cesium—Continued*Isotopes*

Transport in clay suspensions, model river system: Purushothaman, Krishnier. 09853

Changes of level*Alaska*

Holocene, Augustine Island: Detterman, Robert L. 02704

Atlantic Ocean

Quaternary, Carolina-Florida margin: Zarudski, E. F. K. 05050

Quaternary, northern, late land connections: Lindroth, Carl H. 11398

Bahamas

Holocene, effects on coastal landforms: Lind, Aulis Olaf. 07150

Barbados

Pleistocene, terraces: Broecker, Wallace S. 00211

Pleistocene, terraces, solar-radiation maximums: Mesoella, Kenneth J. 08805

California

Holocene, Camp Parks area, geodetic network, releveling: Gibson, W. M. 01125

Quaternary, Santa Cruz area: Bradley, William C. 03004

Caribbean Sea

Pleistocene, eustatic: Bolli, H. M. 01070

Florida

Florida Keys, possible tilting: Hoffmeister, J. E. 04292

Holocene, subaerial laminated crusts: Multer, H. G. 00465

Pleistocene, shore lines, tectonic movements: Hoyt, John H. 08742

Pleistocene-Holocene, sea level, Apalachicola coast: Schnable, Jon E. 06659

Quaternary, water level, central lake basins, rise: Bullen, Ripley P. 02847

Georgia

Holocene, shoreline submergence: Wait, Robert L. 05176

Pleistocene, shore lines, tectonic movements: Hoyt, John H. 08742

Pleistocene, shorelines, dating: Hoyt, J. H. 03977

Quaternary, Atlantic coast: Hails, John R. 07319

Great Lakes region

Lake Erie, Quaternary: Wall, Robert E. 00543

Greenland

Glacioeustatic, Plio-Pleistocene boundary: Mercer, John H. 04057

Holsteinsborg area, Quaternary: Weidick, Anker. 02067

Guam

Holocene, sea-level fluctuations: Curray, J. R. 08652

Gulf of Mexico

Holocene, Sabine-High Island area: Nelson, Henry F. 07864

Gulf of Panama

Holocene sea-level rise: Golik, Abraham. 04429

Gulf of St. Lawrence

Quaternary, Northumberland Strait: McRoberts, Jill H. E. 07979

Indicators

Transgressive deposits, unconformities, ravine-ments: Swift, Donald J. P. 03894

Maine

Coast, carbon-14: Stuiver, Minze. 09939

Changes of level—Continued*Methods*

Pleistocene, terrace chronology, erosion profile analysis: Flemming, N. C. 03455

Mexico

Baja California, Cenozoic, Concepcion Bay area: McFall, C. Carew. 02556

New England

Holocene, coast, southern, subsidence: Fairbridge, Rhodes W. 04836

New York

Holocene, New York City, greater, subsidence: Fairbridge, Rhodes W. 04836

North America

Tertiary sea-level fluctuations: Tanner, William F. 04015

Northwest Territories

Cenozoic, Prince Gustaf Adolf Sea area: Marlowe, J. I. 02054

Quaternary, Baffin Island: Andrews, J. T. 01133

Nova Scotia

Continental margin, Pleistocene shorelines: Stanley, Daniel J. 07340

Puerto Rico

Quaternary, northwestern: Monroe, Watson H. 02706

Quebec

Hudson Bay, Little Whale River area, upper marine limit: Archer, David R. 05035

Quaternary, Lake Saint Jean area: Dionne, Jean-Claude. 06904

Quaternary, Montreal archipelago, Champlain Sea, stages: Macpherson, Joyce Brown. 06339

Rates

United States, coastal variations, secular sea-level trends: Hicks, Steacy D. 09204

South Carolina

Tertiary, sea-level fluctuations, history: Colquhoun, D. J. 04009

Texas

Tertiary, sea-level fluctuations: Wilson, John A. 04007

United States

Atlantic Coast, northern, Holocene: Newman, Walter S. 11007

Cenozoic, southeastern: Alt, David. 04014

Holocene, Atlantic coast: Newman, Walter S. 04551

Northeastern, Texas, continental shelves, Holocene: Emery, K. O. 08677

Quaternary, northeastern, post-glacial submergence: Bloom, Arthur L. 07988

Tertiary, Cape Cod to Cape Hatteras, tectonic control: Richards, Horace G. 04010

Tertiary, southeastern, sea level, multiple influences: Tanner, William F. 04008

Virginia

Pleistocene, Suffolk area, marine terraces: Coch, Nicholas K. 05573

Washington

Recent, Puget Sound area, observation program: Bostrom, R. C. 01522

Worldwide

Tertiary fluctuations, glacial control: Bandy, Orville L. 04016

Chemical analysis*Chromatography*

Beryllium, rapid, ultra-trace: Ross, William D. 02252

Gas, mass spectrometry combined, alkanes, sedimentary rocks: Modzeleski, Vincent E. 09637

Chemical analysis—Continued*Chromatography—Continued*

Hydrocarbons in sediment, with mass spectroscopy: MacLeod, William D., Jr. 05441

Metals, PAQH complexes, iron, nickel, copper, cobalt: Frei, R. W. 03436

Colorimetry

Copper, new reagent, DMDPQ: Trusell, Fred C. 11364

Niobium and zirconium in uranium, BPHA applications: Vita, O. A. 03437

Soils, phosphorus content, vanadate-molybdate reagent: Tandon, H. L. S. 00900

Sulfides, methylene blue, sulfur: VanLoon, J. C. 11368

Fire assay

Au, Pt, Pd analysis: Barnett, Paul R. 02686

Gasometric

Technique, carbon in sediments: Kolpack, Ronald L. 03565

General

Lake waters, methods, Lakes Erie, Ontario: Chawla, V. K. 07092

Techniques, rocks and minerals, textbook: Maxwell, John A. 07301

Glass electrode

Calcium: Truesdell, A. H. 09895

Sea water: Garrels, Robert M. 09897

Soils: Pommer, Alfred M. 09896

Graphic representation

Equilibrium composition, volcanic gases: Heald, Emerson F. 02546

Mineral groups, feldspar deviations: Perry, Kenneth, Jr. 05650

Gravimetric

Fluosilicates, silica determination: Tewari, D. N. 09640

Paper chromatography

Uranium: Plamondon, J. 00483

Polarographic

Copper in iron meteorite: Vickers, Richard S. 11387

Uranium in plutonium: Plock, C. E. 03435

Reflectometry

Gold, fineness: Eales, Hugh V. 04120

Sample preparation

Estuary sediments and water, trace-element exchange: Duke, Thomas W. 04496

Lake waters, trace elements for spectrographic analysis: Bradford, G. R. 04472

Spectrophotometry

Technique, palladium, platinum: Grimaldi, F. S. 00774

Tracer technique

Sulfur, partial pressure: Giletti, B. J. 04137

Volumetric

Nitrates in saline minerals: Reichen, Laura E. 04002

Wet

Chelation-extraction, Pb, Co, Ni in fresh water: Fishman, Marvin J. 04308

Gold, mercurous chloride: Jenne, E. A. 09410

Gravimetric, bismuth, oximes as precipitating reagents: Wiersma, Lawrence D. 11373

Igneous rocks, standard: Carmichael, I. S. E. 02511

Ion-exchange electrode, calcium and zinc: Mukherji, Anil K. 11333

Ion-exchange, K, Rb, Cs analysis, combined with X-ray fluorescence: Hayden, John A. 03484

Iron and aluminum in podzolized soils, reagents compared: Bernier, B. 02051

Chemical analysis—Continued*Wet—Continued*

Lanthanons in aluminosilicate zeolites, DTPA titration, arsenazo III: Marsh, William W., Jr. 06742

Molybdenum, field kit: Barakso, John. 04118

Molybdenum, field kit: Bloom, Harold. 00473

Molybdenum, field kit: Lapointe, Guy. 04241

Molybdenum, rapid: Marshall, N. J. 01908

Thioacetamide-precipitation, trace elements in water: Mallory, Edward C., Jr. 03750

Chlorine*Abundance*

Ultramafic rocks: Stueber, A. M. 00903

Geochemistry

Meteorites, terrestrial contamination indicator: Berkey, E. 08047

Volcanic rocks, sea water, migration from mantle: Iwasaki, I. 04659

Chromite*Appalachians*

Resources, review: Thayer, T. P. 01376

Geochemistry

Elemental composition, variation with geographic location: Kramer, Henry H. 04706

Montana

Stillwater Complex, occurrence, genesis: Jackson, Everett D. 05356

North Carolina

Western, resources, review: Thayer, T. P. 01376

Chromium*Abundance*

Carbonaceous chondrites: Yates, Ann M. 06999

Geochemistry

Magnetite, contents: Collins, Lorence G. 01900

Cirripedia*Balanus concavus*

Eocene, Mexico, Baja California, Tepetate Formation: Perrilliat Montoya, Maria del Carmen. 09131

Balanus humilis Conrad

Miocene, Florida, phosphatized internal filling, identity obscure: Ross, Arnold. 04199

Clay mineralogy*Areal studies*

Alabama, Paleocene-Eocene formations, clay and claystone suites: Reynolds, William R. 01189

Alaska, Taku estuary: Kunze, G. W. 07660

Alberta, southern, Whitemud and Battle Formations: Irish, E. J. W. 06312

Arizona, Ray area, copper-bearing: Stephens, J. D. 07902

Arizona, Roosevelt Lake, sediments: Pipkin, Bernard W. 11385

Arkansas, Crawford County, Atoka Sandstone, diagenesis: Triplehorn, Don W. 00414

Atlantic Ocean, Barracuda Escarpment: Bonatti, Enrico. 06443

Atlantic Ocean, Florida shelf to Blake Plateau, sedimentary rocks: Weaver, Charles E. 02540

British Honduras, continental shelf: Scott, Martha R. 08075

California, Monterey-Carmel submarine canyons: Martin, Bruce D. 07942

California, serpentinite weathering, montmorillonite formation: Wildman, W. E. 05960

Canada, podzolic soils: Brydon, J. E. 07431

Columbia River reservoirs, evaluation, statistical technique: Knebel, H. J. 03564

Cuba, Isle of Pines, kaolin: Pokryshkin, V. I. 04703

Clay mineralogy—Continued

Areal studies—Continued

- Georgia, sediments, relations: Pevear, David R. 08966
- Great Lakes region, mineral-water equilibrium, aluminosilicates: Sutherland, Jeffrey Clark. 07203
- Gulf of Mexico, cores: Scafe, Donald William. 04547
- Hawaii, wet uplands, mica genesis, biological recycling: Juang, T. C. 00899
- Hawaiian Islands, authigenic marine: Moberly, Ralph, Jr. 09433
- Illinois, underclays, industrial uses: Odom, I. E. 02825
- Indiana, south-central, Pembroke soils: Post, Donald F. 06903
- Indiana, south-central, Pembroke soils, quantitative analysis, methods: Post, Donald F. 06919
- Indiana-Ohio, Great Miami River basin, sediments: Huff, Warren D. 01222
- Iowa, southeastern, tills, weathering profiles: Milling, Marcus Eugene. 06555
- Kansas, dickite, Pennsylvanian limestone: Hayes, John B. 07960
- Kansas, Doniphan County, Pleistocene deposits, differentiation: Tien, Pei-Lin. 05091
- Kansas, Manhattan area, Permian rocks, clays in solution cavities, genesis: Russell, John L. 02484
- Kansas, north-central, Peoria loess, gleying: Crumpton, Carl F. 10981
- Kansas, southeastern, dickite and kaolinite in Pennsylvanian limestones: Schroeder, Richard J. 05093
- Kentucky, Jackson Purchase region, Eocene: Olive, Wilds W. 10329
- Manitoba, Winnipeg area, swelling clay soils: Quigley, Robert M. 04260
- Maryland, Baltimore area, schist, silicate-water interaction: Bricker, Owen P. 04307
- Maryland, glauconite pellets, morphology, X-ray patterns: Tapper, M. 04742
- Michigan, Keweenaw copper district, alteration: Ruotsala, Albert P. 06961
- Mississippi-Louisiana, Pleistocene loess: Snowden, J. O., Jr. 05668
- Montana, northeastern, weathering: Klages, M. G. 05262
- Montana, southwestern, Morrison and Kootenai Fms.: Suttner, Lee J. 06947
- Nevada, Lander County, adsorption, copper: Clement, Stephen C. 04237
- New Brunswick, Podzol soils: Kodama, H. 04330
- New Jersey, Triassic argillite and shale, weathering: Lodding, William. 07030
- New Jersey, Woodstown area, macro-kaolinite, genesis: Isphording, Wayne C. 05571
- New Mexico, Laguna district, Jackpile Sandstone: Nash, J. Thomas. 06991
- New Mexico, Santa Rita, paragenesis: Nielsen, Richard L. 00471
- New York, soils, degradation zones: Bullock, Peter. 06528
- North Carolina, Slate Belt, mica weathering: Goss, Don Woodson. 07181
- Ohio, Cincinnati area, Kope and Fairview Formations: Bassarab, Dennis R. 02007
- Ohio, southeastern, illitic shales, stability tests: Fisher, Stanley P. 09084
- Ohio, western, Celina and Morley soils, argillic horizons: Smeck, Neil E. 04193

Clay mineralogy—Continued

Areal studies—Continued

- Oklahoma, Cloud Chief Formation: Nalewaik, Gerald Guy. 02039
- Oklahoma, Kiowa County, diabase dikes: Nichols, Clayton R. 02501
- Oregon, offshore, sediments: Russell, Kenneth L. 08481
- Pennsylvania, underclays, Pennsylvanian: Williams, E. G. 06595
- Puerto Rico, distribution in river sediments: Ehlmann, Arthur J. 03528
- South Carolina, Hawthorne Fm.: Heron, S. Duncan, Jr. 08528
- Tennessee, western, ceramic materials: Mersch, Carl E. 10325
- Texas, Llano County, soils, drainage effects: Goss, D. W. 02256
- Texas, Mound Lake, sepiolite: Parry, W. T. 06444
- Texas, pluvial lakes, High Plains: Parry, W. T. 03561
- Texas-Louisiana-Arkansas, Upper Jurassic, mudstones: Dickinson, Kendall A. 01238
- Utah, Kane Creek, uranium-bearing veins: Davidson, Donald M., Jr. 09371
- Utah, Lehi area, Manning Canyon Shale, pyrophyllite: Henderson, G. V. 01630
- Wisconsin, drumlin soils, carbonate effects: Allan, R. J. 02263
- Wisconsin, Jefferson County, soils: Borchardt, G. A. 02262
- Wisconsin, Saint Croix-Pierce Counties, soils: Foss, J. E. 02267
- World ocean, distribution: Griffin, John J. 05986
- Wyoming, Big Horn Mts., Gypsum Spring and Sundance Fms.: Furlong, Robert B. 06946
- Experimental studies*
- Adsorption isotherms, montmorillonite, vermiculite, biotite, muscovite: Weber, J. B. 05968
- Alteration, fluid-release mechanism in compacting bedrock: Powers, Maurice C. 00826
- Attapulgite, alteration, acid-leaching environment, Florida: Gremillion, L. Ray. 08712
- Bentonite, Na-Wyoming, water adsorption, infrared study: Jorgensen, Per. 05563
- Bentonites, exchangeable cations: Rollins, M. B. 07028
- Boron retention, Al-Fe-coated silicates: Sims, J. R. 09468
- Boron retention, sesquioxides: Sims, J. R. 02264
- Calcium carbonate, solubility, Mg-saturated suspensions: Doner, H. E. 05130
- Cation equilibria, fractionated clays: Fertl, Walter. 04745
- Cation exchange, solution theory: Truesdell, A. H. 02547
- Cationic diffusion, homogeneous and heterogeneous systems: Lai, T. M. 00901
- Cationic diffusion, orientation effects, vermiculite: Lai, T. M. 07015
- Cations, diffusion pathways: Lai, Tung-Ming. 01703
- Chemical reduction with diagenesis: Velde, B. 01434
- Chlorite:expandable clay mixture, expandability vs. particle size: Tettendorst, Rodney. 05967
- Clay suspensions, Sr and Cs transport, model river system: Purushothaman, Krishnier. 09853
- Composition, relation to structure, dioctahedral 2:1 minerals: Weaver, Charles E. 05147

Clay mineralogy—Continued

Experimental studies—Continued

- Continuous particle electrophoresis system: Dr-e-ver, James I. 10791
- Crystallite size distribution in loess-derived soils: Arnold, R. W. 06641
- Equilibrium with sea water: Siever, Raymond. 05101
- Exchange capacity, cation selectivity: Dolcater, D. L. 05961
- Exchange capacity, Rb-Na ion pairs, kaolinite and bentonite: Kunishi, H. M. 01852
- Expandable three-sheet minerals, interlayer hydration, charge-site influence: Kerns, Raymond L., Jr. 05092
- Expanding clays, interlayers, hydroxyl stretching frequencies: Ahlrichs, J. L. 05148
- Freeze-drying: Malcolm, R. L. 02693
- Gibbsite, diaspore, stability relations: Apps, John A. 08606
- High-temperature changes, electron diffraction and transmission: Furlong, Robert Burton. 01344
- Illite, alteration, hydrous character: Wentworth, Sally Ann. 01758
- Illite, boron fixation: Couch, Elton L. 05570
- Illite, boron sorption and fixation: Couch, Elton Leroy. 01341
- Illite, K bentonite, potassium extraction: Huff, Warren D. 08536
- Illite, K-Rb ratio, paleosalinity determination, Kansas: Gafford, Edward L. 09300
- Ion exchange, kaolinite clay: Brown, D. A. 07042
- Ion exchange with brines: vanEverdingen, R. O. 05474
- Iron analysis by Mossbauer spectroscopy: Taylor, G. L. 06960
- Kaolin, differentiation, hydrazine intercalation-intersalation: Wada, Koji. 02229
- Kaolinite, electron micrographs, acid-edge attack: Miller, Raymond J. 01065
- Kaolinite, inversion to Na-carbonate: Kubo, Yasushi. 06584
- Kaolinite-muscovite-quartz mixtures, high-temperature reactions: Cole, W. F. 09247
- Lithium-calcium exchange equilibria: Bair, F. L. 02255
- Mineral weathering, salt-affected soils: Rabie, Farida Hamed. 07147
- Moisture, acrylic plastic as protective agent: Wilding, L. P. 01063
- Moisture, glass flask for rapid determination: Prihar, S. S. 01064
- Montmorillonite, absorption of organic compounds: Lailach, G. E. 04743
- Montmorillonite, absorption of organic compounds: Lailach, G. E. 08993
- Montmorillonite, Ca-, expansion, effect on X-rays: Senich, Donald. 03626
- Montmorillonite, flow properties, changes with reduction: Alcorido, Isabelo Suelo. 04445
- Montmorillonite group, low temperature synthesis: Levinson, A. A. 04521
- Montmorillonite, hydroxy-aluminum interlayers, formation: Hsu, Pa Ho. 04744
- Montmorillonite, ketone adsorption: Parfitt, R. L. 02254
- Montmorillonite, manganese reactions, soil organic material: Rosell, Ramon Antonio. 04447
- Montmorillonite, Mg-saturated, infrared absorption study: Serratos, J. M. 06748

Clay mineralogy—Continued

Experimental studies—Continued

- Montmorillonite, organic absorption: Heydemann, Annerose. 06774
- Montmorillonite, particle size, interlayer-cation relations: Morrison, Garrett L. 09302
- Montmorillonite, soils, exchange capacity, K: Yaalon, D. H. 02220
- Montmorillonite, surface area from dynamic sorption: Thomas, Josephus, Jr. 05146
- Montmorillonite, vermiculite, cation-exchange equilibrium constants: Foscolos, A. E. 02952
- Montmorillonite, vermiculite, hydroxy-Al and -Fe interlayers, formation: Carstea, D. D. 05568
- Na-montmorillonites, size-fractionated, morphology: Roberson, H. E. 05569
- Organic complexes, cation-dipole interactions: Bissada, Kadry Kaddis. 04530
- Oxygen, hydrogen isotope ratios: Savin, Samuel Marvin. 01668
- Potassium content of clay, X-ray spectrochemical method: Johnson, Leon J. 06959
- Sediments, deep-sea, diagenesis, Sr-isotope variations: Dasch, E. Julius. 08654
- Sepiolite, genesis: Wollast, Roland. 11377
- Shale, ion exchange capacity: Williams, H. H. 04089
- Small-angle X-ray scattering: Watanabe, Takashi. 06446
- Sodium degraded mica, preparation method: Marques, J. M. 04734
- Soil chemistry: Rich, C. I. 09612
- Soil clays, quantitative analysis, methods: Post, Donald F. 06919
- Soils, magnesium exchange capacity, North Carolina: Rice, H. B. 02266
- Soils, nitrogen-induced changes: Schafer, John William, Jr. 06531
- Soils, quantitative, analysis, limitations, parameter effects: McNeal, Brian L. 00989
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J. 00457
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Charles L. 00380
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Hughes, Richard F. 09120

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04155

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Thomas A. 05398

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R. P. 04773

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- Denver area, seismic reflection, recent earthquake region: Rummerfeld, Ben F. 06142
- Green River Formation, oil shale, density logging: Smith, James Ward. 07280
- Heat flow: Decker, E. R. 00044
- Loveland Basin landslide, seismic: Carroll, Roderick D. 00792
- Mineral Belt, gravity: Brinkworth, G. 10368
- North Park area, gravity, magnetic: Behrendt, John C. 10206
- Northeastern, electrical, crustal studies: Mines Magazine. 07762
- Northeastern, magnetotelluric: Harthill, Norman. 10230
- Southwestern, gravity: Plouff, Donald. 10365
- Straight Creek Tunnel pilot bore, seismic, electrical: Scott, J. H. 00376
- West-central, gravity: Smithson, Scott B. 10399

Glacial geology

- Boulder County, Front Range, stages, till deposits: Wallace, Ronald Gary. 02623
- Colorado Front Range, Holocene history: Benedict, James B. 00723
- Grand Mesa area, history: Yeend, Warren E. 09174
- Hayden Park-Rampart Range area, till: Weber, W. Mark. 10274
- Nederland area, Arapahoe Glacier, till fabric, speed of motion: Harris, Stuart A. 02509

Hydrogeology

- Big Sandy Creek, channel width, relation to vertical permeability: Coffin, Donald L. 00732
- Bijou Valley, ground-water resources: Code, W. E. 09497
- Denver basin, western, hydrodynamics, sedimentary rocks: Hoeger, Roger L. 03940
- Front Range, fractured metamorphic rocks, permeability: Snow, David T. 03821
- Ground-water levels, 1961-65: U.S. Geological Survey. 02411
- Hanover NW quadrangle, Quaternary paleochannels: Soister, Paul E. 01425
- Kiowa Creek basin, K-79 reservoir, trap efficiency: Mundorff, James C. 00588
- Loveland area, ground-water movement: Akhavi, Manouchehr S. 10422
- Northwestern, Piceance Creek basin, ground-water data: Coffin, D. L. 02086
- South Platte River valley, ground-water pollution, nitrogen: Stewart, B. A. 00569

Maps, geochemical

- Summitville mining district: Sharp, William N. 00355

Maps, geologic

- Banty Point quadrangle: Cullins, Henry L. 01601
- Black Ridge quadrangle: Hansen, Wallace R. 02911
- Canyon City area: Gerhard, Lee C. 07262
- Chair Mountain quadrangle: Godwin, Larry H. 01602
- Corral Bluffs quadrangle: Soister, Paul E. 04411
- Elk Springs quadrangle: Dyni, John R. 01432
- Hanover NW quadrangle: Soister, Paul E. 01425
- Hot Sulphur Springs quadrangle: Izett, Glen A. 05557
- La Junta quadrangle, with structure contours: Scott, Glenn R. 06671

Colorado—Continued

Maps, geologic—Continued

- Lake Agnes-Whiteley Peak quadrangles: Hail, William J., Jr. 05982
- Morrison quadrangle, western: Gable, D. J. 02397
- Mount Tyndall quadrangle: Brock, M. R. 00992
- Powderhorn-Black Canyon region, Tertiary volcanics: Olson, J. C. 00374
- Rabbit Ears Peak-Spicer Peak quadrangles: Hail, William J., Jr. 05982
- San Juan region, San Juan peneplain: Steven, Thomas A. 01700
- Slick Rock district: Shawe, Daniel R. 07018
- Spanish Peaks region: Johnson, Ross B. 01702
- Teal Lake-Coalmont quadrangles: Hail, William J., Jr. 05982
- Uncompahgre primitive area: Fischer, R. P. 04773
- Virginia Dale area: Egger, D. H. 04295

Maps, gravity

- Trinidad quadrangle: Peterson, D. L. 04408

Maps, isopach

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Maps, mineral resources

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Maps, oil and gas

- Anadarko basin, western: Stevens, Curtis. 02930

Mineralogy

- Dawsonite, Rio Blanco County, Green River Formation: Schmidt-Collerus, Josef J. 06151
- Ferroselite, Colorado Plateau: Santos, E. S. 07556
- Jalpaite, Clear Creek, Boulder, Custer Counties: Grybeck, Donald. 07539
- Precious-metal suite, Gilman area, paragenesis: Titley, Spencer R. 10269
- Silver sulfosalts: Hall, H. T. 01907
- Triplite, Fremont County, structure, Mica Lode pegmatite: Waldrop, L. 01675

Paleomagnetism

- Oligocene, Thirtynine Mile volcanic field: Graebner, P. 11069
- Pennsylvanian-Triassic, red beds, Colorado Front Range: McMahon, B. E. 01616
- Pennsylvanian-Triassic, red beds, Kiaman magnetic division, Rocky Mts.: McMahon, Beverly E. 01086
- Precambrian, Front Range, reversals, pole position: Egger, D. H. 00369
- Spanish Peaks: Larson, E. E. 08374
- Triassic, Moenkopi Formation, western, reversals: Helsley, Charles E. 08381

Paleontology

- Algae, Pennsylvanian, Molas Pass area, reef cf. modern: Girdley, W. Arch. 01226
- Algae, Pennsylvanian, western: Wray, John L. 10279
- Conodonts, Ordovician, Harding Sandstone, chordea(?): Miller, Halsey W. 07670
- Conodonts, Pennsylvanian, Desmoinesian rocks: Stone, Wayne David. 07129
- Foraminifera, Cretaceous, Greenhorn Formation, paleoecology, water depths: Eicher, Don L. 10878
- Foraminifera, Cretaceous, Mancos Shale, biofacies, northwestern: Kent, Harry C. 05719
- Foraminifera, Cretaceous, Mancos Shale, zonation: Lamb, George M. 01893
- Foraminifera, Cretaceous, Niobrara Formation, Mancos Shale, biostratigraphy: Kent, Harry C. 10880

Colorado—Continued

Paleontology—Continued

- Foraminifera, Pennsylvanian, Middle, distribution, water-depth control: Stevens, Calvin H. 01198
- Mammalia, Eocene, Huerfano Formation, opossum: Simpson, George Gaylord. 11008
- Palynomorphs, Cretaceous, Paleocene rocks, northwestern: Newman, Karl R. 07834
- Palynomorphs, Tertiary, conifer pollen: Ting, William S. 07632
- Protista, Cretaceous, Canon City area, coccoliths, biostratigraphy: Trexler, David W. 10879
- Reptilia, Jurassic, Morrison Formation, Dominguez Creek canyon, dinosaurs, new: Jensen, James A. 00089

Petrology

- Audubon-Albion stock, chemical variation, crystal cumulate evidence: Mathews, Geoffrey W. 08793
- Boulder County, telluride ore, thermometry: Kelly, William C. 07911
- Boulder Creek batholith, modal composition, structural control: Wadsworth, William B. 10272
- Creede area, welded tuff, ash-flow boundaries: Ratte, James C. 11074
- Front Range, mid-Tertiary intrusives: Taylor, Richard B. 05126
- Leadville Limestone, metamorphism: Banks, Norman Guy. 01723
- Morrison quadrangle, western, Precambrian rocks: Gable, D. J. 02397
- Mesquite Range, Buckskin Gulch pluton: Kuntz, Mel A. 08770
- Mummy Range, Precambrian metamorphic rocks: Kirst, Paul W. 08593
- North-central, Never Summer stock, assimilation: Corbett, Marshall K. 10220
- Pitkin County, Mount Sopris stock: Foland, Kenneth A. 10226
- Powderhorn-Black Canyon region, Tertiary volcanics: Olson, J. C. 00374
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- Purgatoire River valley, coal, thermal alteration: Crelling, John C. 03828
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- Rocky Mountain Arsenal, disposal well, Precambrian rocks: Wruke, Chester T. 00787
- Rosita Hills-Silver Cliff district, Tertiary volcanics: Siems, Peter L. 05125
- San Juan Mountains, Alum Creek area, igneous rocks: Calkin, William S. 10214
- San Juan Mountains, Summer Coon Volcanic center, general: Lipman, Peter W. 05118
- San Juan Mountains, Tertiary volcanics, cauldron development: Luedke, Robert G. 05116
- South-central, Precambrian metamorphic series: Heinrich, E. William. 11065
- Spanish Peaks region, igneous rocks: Johnson, Ross B. 01702
- Specimen-Lulu-Iron Mountain area, Tertiary volcanics: Corbett, Marshall K. 05128
- Thirtynine Mile volcanic field, eruptive history: Epis, Rudy C. 05129
- Virginia Dale ring-dike complex: Eggler, D. H. 04295

Colorado—Continued

Sedimentary petrology

- Canon City area, Morrison Formation: Brady, Lawrence L. 10065
- Denver, Alameda Avenue cut, Dakota Sandstone: MacKenzie, D. B. 00193
- Dripping Rock Creek, dendritic surge marks: High, Lee R., Jr. 01333
- Golden area, Clear Creek, sediment transport, fluorescent sand: Kennedy, Vance C. 10703
- Grand Mesa area, mudflows, till, landslides, fabric analyses: Yeend, Warren E. 09173
- Greenhorn Formation, Cretaceous, sedimentation, paleoslope: Eicher, Don L. 10878
- Inclusions, Lower Paleozoic sediments in diatremes: Chronic, John. 00019
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- San Juan Mountains, Pennsylvanian coralline limestone, environment: Girdley, W. Arch. 09308
- Slick Rock district, Mancos Shale, lithofacies, pyrite, trace-elements: Shawe, Daniel R. 02720
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- Uinta Mountain area, Gartra Member of Popo Agie Formation, sedimentary structures: McCormick, C. D. 02487
- West-central, Parting Formation, dispersal patterns, analyses: Campbell, John A. 02871
- White River Plateau, Leadville Limestone, fossil beachrock: Conley, C. D. 07792

Stratigraphy

- Black Ridge quadrangle, section: Hansen, Wallace R. 02911
- Cretaceous, Cimarron Ridge Formation, San Juan Mts.: Dickinson, Robert G. 05157
- Cretaceous, lower Mancos Shale, San Juan Basin: Lamb, George M. 01893
- Cretaceous, Mancos Shale, Niobrara-equivalent part, northern: Kent, Harry C. 05719
- Cretaceous, Mancos Shale, Slick Rock district, faunal zones, lithofacies: Shawe, Daniel R. 02720
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- Cretaceous-Quaternary, Banty Point quadrangle, section: Cullins, Henry L. 01601
- Cretaceous-Quaternary, Chair Mtn. quadrangle, section: Godwin, Larry H. 01602
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- Devonian, western, biostratigraphy: Pampe, William Riley. 04541
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- Mississippian, type and typical sections: Foster, Norman H. 07263
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Colorado—Continued*Stratigraphy—Continued*

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 Pennsylvanian, salt deposits, Paradox basin: Hite, Robert J. 01029
 Pennsylvanian, salt-bearing beds, Paradox basin: Jones, C. L. 01025
 Pennsylvanian-Permian, Elk Mountains, nomenclature: Bartleson, Bruce L. 02714
 Permian-Quaternary, Elk Springs quadrangle, sections: Dyni, John R. 01432
 Precambrian, Golden area, Rocky Mtn. front: Lickus, R. J. 03820
 Precambrian-Holocene, San Juan basin: Peterson, James A. 05606
 Slick Rock district: Shawe, Daniel R. 07018
 Tertiary, volcanics, Powderhorn-Black Canyon region: Olson, J. C. 00374
 Tertiary-Quaternary, volcanics, Sangre de Cristo Mts. area: Johnson, Ross B. 11070

Structural geology

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 Colorado Springs, Pikes Peak Granite, microfractures: Norman, Carl Edgar. 02636
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 Denver area, secular strains: Romig, Phillip. 10390
 Denver area, seismic survey for tectonic instability: Rummerfield, Ben F. 06142
 Denver area, tectonics, creep, regional strain: Romig, Phillip R. 06633
 Denver basin, structural trends: Haun, John D. 11297
 Elk Mountains, Snowmass Mtn. pluton, emplacement: Allen, Jack C. 10199
 Front Range, fracture deformation, metamorphic rocks: Snow, David T. 03868
 Front Range, frontal fault, movement history: Kupfer, D. H. 06111
 Glenwood Springs area, flexural slip: Murray, Frederick N. 10247
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 Mesquite Range, Buckskin Gulch pluton, emplacement: Kuntz, Mel A. 08770
 Mummy Range, Precambrian metamorphic rocks: Kirst, Paul W. 08593
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 Pitkin County, Mount Sopris stock: Foland, Kenneth A. 10226
 Rocky Mountains, tectonics: Eardley, A. J. 02479
 San Juan cauldron complex, central: Steven, Thomas A. 11078
 San Juan Mountains, joints, veins, relations to doming, collapse: Schwarz, Frederick P. 10261
 San Juan Mountains, Late Cretaceous uplift: Dickinson, Robert G. 05157
 San Juan Mountains, paleotectonics, faulted anticline: Baars, D. L. 01075
 San Juan Mountains, volcanic depression: Luedke, Robert G. 05116
 San Juan Mountains, western, cauldron development: Burbank, Wilbur S. 10212
 South-central, Rio Grande depression, extension: VanAlstine, Ralph E. 02702
 Spanish Peaks region, igneous rocks: Johnson, Ross B. 01702

Colorado—Continued*Structural geology—Continued*

- Treasure Mountain dome, emplacement: Mutschler, Felix Ernest. 07196

Colorado Plateau*Economic geology*

- Uranium, vanadium, occurrence: Fischer, R. P. 05389

Geochemistry

- Navajo Sandstone, mercury content, variation: Cadigan, Robert A. 08635
 Western margin, basalt, Th, U, K concentrations: Brimhall, W. H. 08577

Geomorphology

- Landform evolution, review: Badoux, Heli. 04729

Petrology

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Sedimentary petrology

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 Sandstones, multiple parallel-truncation bedding planes: Stokes, William Lee. 03574

Stratigraphy

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Structural geology

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Concretions*General*

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Genesis

- CaCO₃ type, decomposition of organic matter: Berner, Robert A. 00130
 California, San Joaquin Valley, Cretaceous rocks: Shawa, Monzer S. 08326

Growth

- Rate, mathematical expressions: Berner, Robert A. 01955

Illinois

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Mineralogy

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Oklahoma

- Woodford Chert, dahllitic spherulites: Shead, A. C. 05139

Ontario

- Ravenswood area, Ipperwash Beach, Devonian shale, iron carbonate: Zuidema, Henry P. 00018

Oregon

- Astoria Formation, northwestern: Boggs, Sam, Jr. 10210

Pisolithes

- Texas, Permian, weathering genesis: Thomas, Carroll. 07998

Utah

- Southern, collecting, ironstone and limonite: Doelling, Hellmut H. S. 06129

Connate water*California*

- Composition, San Joaquin Valley oil fields: Weddle, James R. 02866

Canada

- Western, sedimentary basin, flow systems: van Everdingen, R. O. 01968

Composition

- Chlorinity in shale: Hedberg, William Hollis. 01345

Mississippi Valley

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Connecticut*Absolute age*

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- Middletown pegmatites, fission track: Miller, Donald S. 02822
- Paludal sediments, coastal marshes: Bloom, Arthur L. 09356
- Rogers Lake, sediments, pollen-accumulation rates, C-14: Davis, Margaret B. 07771
- Western, metamorphic and igneous rocks: Clark, George S. 05213

Areal geology

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- Southwestern, field trip, ground-water development: Wilson, W. E. 05944
- Southwestern, Glenville area, field-trip road log: Hall, Leo M. 06000
- Western: Stanley, Rolfe S. 05921

Engineering geology

- Highways, field trip: Siebert, Harry L. 05936

General

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Geochemistry

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- Linsley Pond, bottom muds, exchangeable cations, emission spectroscopy: Cowgill, Ursula M. 04884
- Linsley Pond, element distribution, eutrophication: Cowgill, Ursula M. 03054
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- Linsley Pond, sediment, iron-rich interstitial water: Doyle, Roger W. 05229
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Geomorphology

- Ansonia and Milford quadrangles, general: Flint, Richard Foster. 04722
- Lake Hitchcock, glacial, level changes: Hartshorn, J. H. 11042

Geophysical surveys

- Southeastern, magnetic: Griscom, Andrew. 07207

Glacial geology

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- Western, periglacial features, field trip: Schafer, J. P. 05943

Connecticut—Continued*Hydrogeology*

- Hamden-Wallingford area, ground-water resources: LaSala, A. M., Jr. 00935
- New London area, water resources: Thomas, Chester E., Jr. 07642
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- Southwestern, aquifers, ground-water quality: Wilson, W. E. 05944
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Maps, aeromagnetic

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- Wales (Mass.) quadrangle: U.S. Geological Survey. 02421
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Maps, geologic

- Ansonia and Milford quadrangles, surficial: Flint, Richard Foster. 04722
- Ashaway (R.I.) quadrangle, surficial: Schafer, J. P. 00994
- Bridgeport quadrangle: Crowley, William Patrick. 04302
- Danielson quadrangle: Dixon, H. Roberta. 01107
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- Durham quadrangle, surficial: Simpson, Howard E. 04769
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- Meriden quadrangle: Hanshaw, Penelope M. 01801
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Maps, ground water

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Maps, magnetic

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Connecticut—Continued*Maps, magnetic—Continued*

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Paleontology

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Petrology

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Eastern, blastomylonites: Lundgren, L. 07170
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Southeastern, Westerly Granite dikes: Feininger, Tomas. 05192

Sedimentary petrology

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Stratigraphy

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Cambrian-pre-Pennsylvanian, Danielson quadrangle, section: Dixon, H. Roberta. 01107
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Quaternary, swamp deposits, environments, field trip: Bloom, Arthur L. 09356
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Triassic, Newark Group, central-southern: Rodgers, John. 05937
Triassic, Newark Group, facies, field trip: Klein, George deVries. 05938
Triassic, Newark Group, Meriden quadrangle: Hanshaw, Penelope M. 01801
Triassic, Upper, central and southern: Sanders, John E. 03434

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Eastern highlands, Stony Creek antiform: Sanders, John E. 06002
Eastern, recumbent syncline: Dixon, H. Roberta. 06044
Monson area: Peper, John D. 09815

Connecticut—Continued*Structural geology—Continued*

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South-central, Gaillard graben: Sanders, John E. 05926
Western, folds, field trip: Dieterich, James H. 07011

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Wyoming, Big Horn Mountains: Koucky, Frank L. 11035

Carboniferous

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Alberta, Upper, biostratigraphic zones: Mound, Michael C. 02896
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Kansas, western, zones: Goebel, Edwin D. 03768
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Missouri, Lower strata, fauna, descriptions: Canis, Wayne F. 02197
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Conodonts—Continued*Ordovician*—Continued

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Scolopodus

Ordovician, Oklahoma, Arbuckle Group, lower: Mound, Michael C. 05018

Silurian

Arkansas, Batesville district, biostratigraphy: Craig, William Warren. 04534

Indiana, Brassfield Limestone, assemblage zones: Nicoll, Robert S. 06701

Nova Scotia, Arisaig area, Stonehouse Formation, zones: Legault, J. A. 06732

Triassic

Nevada, Thaynes Formation, Medicine Range: Collinson, James W. 06949

North America, western, descriptions, correlation, Europe: Mosher, L. Cameron. 05671

Platform types, evolution, North America, Europe: Mosher, L. Cameron. 05672

Youngquistina mitteni, n.gen., n.sp.

Ordovician, Colorado, Harding Sandstone, chor-date(?): Miller, Halsey W. 07670

Construction materials*Alaska*

Lightweight aggregates, shale: Heiner, Lawrence E. 09831

Appalachians

Dimension stone, resources, review: Newman, William L. 01326

Lightweight aggregate, resources, review: Bush, A. L. 01384

Lime, resources, review: Ericksen, George E. 01385

Resources: U.S. Geological Survey. 01408

Arkansas

Greenwood quadrangle, occurrence: Haley, Boyd R. 05451

Experimental studies

Granular aggregates, frost susceptibility, road base courses: Leary, Robert M. 10869

Geochemistry

Shale, fine aggregate, pop-outs in concrete: Ellwell, James H. 06640

Kentucky

Appalachian region, distribution of limestone: McGrain, Preston. 10937

Cravens quadrangle, occurrence: Peterson, Warren L. 02950

Construction materials—Continued*Kentucky*—Continued

Mays Lick quadrangle, occurrence: Gibbons, A. B. 07385

Panola quadrangle, sand, shale, clays: Greene, Robert C. 00450

Maine

Exploration, recent activity, review: Young, Robert S. 05421

Missouri

Maxville quadrangle, occurrence: Stinchcomb, Bruce L. 02934

New Mexico

Tuff as aggregate: Pettitt, Roland A. 05656

North Carolina

Orange County: Allen, Eldon P. 07663

Ontario

Hamilton map-area, stone and shale: Hewitt, D. F. 07326

Toronto-Hamilton area, resources, production: Hewitt, D. F. 02569

Pennsylvania

Franklin County, southeastern, resources: Root, Samuel I. 06744

Waterville quadrangle, flagstone, occurrence: Colton, George W. 07668

Properties

Chert aggregates, durability, Michigan: Johnson, Allan M. 09290

Foliated rocks, coarse cement aggregates: Ozol, Michael A. 07858

Frost susceptibility, crushed limestone for base courses: Kalcheff, I. V. 10868

Granular aggregates, frost susceptibility, road base courses: Leary, Robert M. 10869

Texas

Coastal area, oyster shells, exploration: Scott, Alan J. 07443

West-central, occurrence: Mattis, Lynn. 11428

United States

Dimension stone, occurrence, production: Barton, William R. 04105

Virginia

Buckingham quadrangle, resources: Ern, Ernest H. 03194

Washington

Grays River quadrangle, occurrence: Wolfe, Edward W. 04889

Continental drift*Atlantic Ocean*

Appalachian-Caledonian evidence: Dewey, John. 05890

Continental framework development, opening of basin: Sutton, John. 06127

Paleozoic, late, rifting, palinspastic restoration: Webb, Gregory W. 00172

Causes

Close approach of Moon, Tertiary: Niini, Aarno. 04998

Sea-floor spreading, changes in direction: Menard, H. W. 03917

Sea-floor spreading, geometric model: LePichon, Xavier. 01981

Sea-floor spreading, Mid-Oceanic Ridge, rift, popular account: Briggs, Peter. 09495

Sea-floor spreading, recent evidence: Simmons, Gene. 00341

Crustal structure

General theory: Wilson, J. Tuzo. 05087

New England, Paleozoic ocean, evolution of Atlantic Ocean: Wilson, J. Tuzo. 09953

West Indies, negative evidence: Fourmarier, P. 06700

Continental drift—Continued

General

- Caribbean region, literature review: MacDonald, William D. 06023
 Gulf of Mexico, Gulf Basin, structural evolution: Yarborough, Hunter. 11134
 Popular account: Frisch, Bruce. 04795
 Review, semipopular account: Hurley, P. M. 01913
 Sea-floor spreading, mobile Earth, new concept: Wilson, J. Tuzo. 07870
 Symposium, Internat. Astron. Union: Markowitz, William. 03624
 Theory, evidence, review: Marvin, Ursula. 02084

Greenland

- Tertiary, separation from Baffin Island, basal evidence: Clarke, D. B. 02063

Mechanism

- Atlantic Ocean opening, subsialic crustal movement: Dineley, D. L. 07016
 Atlantic Ocean region: Funnell, B. M. 03920
 Convection currents: Elsasser, Walter M. 05086
 Diapiric rise of mantle material: Maxwell, John C. 00599
 Dynamic theory of polar wandering: Pan, Cheh. 02398
 Mid-Atlantic Ridge, crustal spreading questioned: Watkins, N. D. 02815
 Rotating blocks: Morgan, W. Jason. 00643
 Sea-floor spreading, concept, impact on earth science: Wilson, J. Tuzo. 06329
 Sea-floor spreading, concept questioned: Belousov, V. V. 06328
 Sea-floor spreading, evidence: Stubbs, Peter. 00156
 Sea-floor spreading, evidence: Vine, Frederick J. 05085
 Sea-floor spreading, gravitational mechanism: Pollack, Henry N. 00032
 Sea-floor spreading, magnetic anomaly evidence: Heirtzler, James R. 00655
 Sea-floor spreading, Mid-Atlantic Ridge: Fleischer, R. L. 02682
 Sea-floor spreading, popular account: Opdyke, Neil D. 05205
 Sea-floor spreading, review: Heirtzler, J. R. 06126
 Viscosity contrasts, mantle: McConnell, Robert K., Jr. 05897

Mexico

- Baja California, separation, relation to East Pacific Rise: Crowell, John C. 04026

North America

- Mesozoic, sea-floor spreading: Kay, Marshall. 05088
 Permian-Holocene, overriding of East Pacific Rise: Palmer, Harold. 04996

Observations

- Accuracy, Doppler Satellite observations: Anderle, R. J. 08359
 Astronomical: Markowitz, William. 03633
 Differentiation from Earth motions: Runcorn, S. K. 03634

Paleoclimatology

- Latitudinal asymmetry before middle Tertiary: Hamilton, Warren. 04170

Paleomagnetism

- Canada, cf. Africa, relative positions: McElhinny, M. W. 01101
 Evidence, validity questioned: Stehli, Francis G. 09700

Continental drift—Continued

Paleomagnetism—Continued

- North America, Europe, polar wandering curves: Hospers, J. 07064
 Paleozoic polar wandering curves, continent reconstruction: Creer, K. M. 02972
 Polar wandering, evidence: Irving, E. 08369
 Polar wandering, relation to Quaternary glaciation: Cox, Allan. 04168

Paleontology

- Protista, Silurian acritarch distribution: Cramer, Fritz H. 10949

Rates

- Average and current: Garland, G. D. 03625
 North America, Atlantic Ocean opening, Triassic: Seyfert, Carl. 08450
 Sea-floor spreading, Mid-Atlantic Ridge, K-Ar ages: Aumento, F. 02681

Reconstructions

- Gulf of Mexico, origin, sequence of tectonic events: Tanner, William F. 09321

Continental margin

Alaska

- Bering Sea, Gulf of Alaska, geomorphology, sediments: Gershanovich, D. E. 06120
 Bering Sea shelf, structure, petroleum possibilities: Scholl, D. W. 02284
 Chukchi Sea shelf, seismic data: Holmes, Mark L. 08452
 Chukchi shelf, sedimentation: McManus, Dean A. 10848
 Gulf of Alaska, tectonic trends: Wright, F. F. 08453

Atlantic Coastal Plain

- Petroleum, potential, exploration: Barrow, Thomas D. 06106

Atlantic Ocean

- North America, sedimentation: Heezen, Bruce C. 02476

Bahamas

- Straits of Florida, Bahamian escarpment, sedimentary structures: Neumann, A. Conrad. 08441

British Columbia

- Queen Charlotte Sound, sediments, glauconite pellets: Murray, J. W. 01970

British Honduras

- Shelf, clay minerals distribution: Scott, Martha R. 08075

California

- Cape Mendocino area, sea-floor tectonics: McEvilly, T. V. 05048
 Klamath River delta, seismic profiles, structure: Moore, George W. 02719
 La Jolla canyon and fan, sediments, magnetic fabric: Rees, Anthony I. 04425
 La Jolla fan, San Diego trough, sedimentation: VonRad, Ulrich. 09481
 La Jolla submarine fan valley, channel geometry: Normark, W. R. 08461
 Monterey Submarine Canyon, genesis: Starke, George W. 01892
 Point Conception area, slope sediments, glauconite: Wright, Frederick F. 01412
 San Diego area, slope, sea cliffs, terraces: Dill, Robert C. 08460
 Shelf, off Klamath Mts., gold distribution: Moore, George W. 06330
 Shelf, phosphate diagenesis in carbonate sediments: d'Anglejan, Bruno F. 02173
 Slope, sediments, provenance, rates: Wright, Frederick F. 07984

Continental margin – Continued*California – Continued*

- Southern, La Jolla submarine fan-valley: Shepard, Francis P. 04552
- Southern, sediments, interstitial waters, trace elements: Brooks, R. R. 01594
- Tanner Basin, Pleistocene-Holocene sedimentation, C-14: Gorsline, Donn S. 01904

Canada

- Bay of Fundy, seismic survey: Swift, Donald J. P. 01163
- Eastern shelf, Foraminifera, depth assemblages: Hooper, Kenneth. 07980
- Franklin and Arctic shelf, magnetic survey, interpretation: Bhattacharyya, B. K. 04736
- Newfoundland-Labrador, seismic, gravity surveys: Fenwick, D. K. B. 01975
- Offshore programs, mineral exploration: Little, C. H. 09621

Delaware

- Bethany Beach, shelf, sand ridges: Moody, David W. 08204

Delaware Bay area

- Wilmington submarine canyon, sedimentation patterns: Stanley, Daniel J. 07376

Economic geology

- Mineral and chemical resources, exploration and exploitation: Fye, Paul M. 07485
- Mineral exploration, offshore, legal aspects: Stone, Oliver L. 05111
- Petroleum and natural gas, exploration rights, offshore: Goldie, L. F. E. 05110
- Petroleum, public policy, coastal-nation boundaries: Hedberg, Hollis D. 06108
- Shelf, exploration, need: Stewart, Harris B., Jr. 07380

Florida

- Blake Plateau area, Foraminifera, Eocene, new: Cordey, W. G. 02925
- Shelf, slope, Blake Plateau, sediments, organic constituents: Hulsemann, Jobst. 01147
- Shelf to Blake Plateau, sedimentary rocks, mineral facies: Weaver, Charles E. 02540
- Southeastern shelf, photogrammetric survey: Rebikoff, Dimitri. 07377
- Straits of Florida, Floridian escarpment, sedimentary structures: Neumann, A. Conrad. 08441
- Straits of Florida, gravity data: Ball, M. M. 08442

General

- Buried ridges, genesis: Burk, C. A. 01875
- Genesis, types: Wang, Chao-Siang. 07913
- Ocean to continent transition zone, seismic data: Kosminkaya, I. P. 04668
- Research, Atlantic Oceanog. Lab., Bedford Inst., Nova Scotia: Pelletier, B. R. 06590
- Shelf, pelecypod-shell orientation, application: Emery, K. O. 06604
- Submarine canyons, tectonic origin: Dulemba, Jean-L. 11022

Gulf of Mexico

- Sediment transport, space photography: Stevenson, Robert E. 09703

Gulf of Saint Lawrence

- Appalachian region, Paleozoic tectonics, cf. Europe: Dineley, D. L. 07016

Labrador

- Shelf, seismic profile: Grant, A. C. 05448

Louisiana

- Inner shelf, Holocene sediments: Krawiec, Wesley. 01047

Continental margin – Continued*Louisiana – Continued*

- Shelf, Pleistocene stratigraphy: Fails, Thomas G. 10898

Massachusetts

- Martha's Vineyard area, topography, slope sediments: Emery, K. O. 06338
- Slope off Cape Cod, Corsair Canyon, erosion: Ross, David A. 02010

Mexico

- Baja California, phosphate diagenesis in carbonate sediments: d'Anglejan, Bruno F. 02173
- Baja California, southern tip, areal geology: Nor-mark, William R. 04297
- Gulf of Mexico, structure, anticlines: Bryant, William R. 03777
- Yucatan coast, structure, seismic data: Uchupi, Elazar. 03773

New England

- Gulf of Maine, geologic history and structure, seismic data: Ballard, J. Alan. 00930

New Jersey

- Interstitial and bottom waters, geochemistry: McKinney, Thomas F. 08183

New York

- Continental rise, sediment provinces, currents: Heezen, B. C. 07882
- Interstitial and bottom waters, geochemistry: McKinney, Thomas F. 08183
- Long Island shelf, interstitial water in sediments: Friedman, Gerald M. 06599

Newfoundland

- Burgeo Bank, magnetic map: Canada Geological Survey. 02769
- Grand Bank, magnetic map: Canada Geological Survey. 02782
- Shelf, magnetic map, Sheets 10 (east half), and 1 P (west half): Canada Geological Survey. 02784
- Shelf, seismic survey, structure, rifting: Sheridan, Robert E. 01997
- Virgin Rocks, magnetic map: Canada Geological Survey. 02783

North America

- Bering Sea, geologic history: Scholl, David W. 06122
- Eastern, Cambro-Ordovician position: Rodgers, John. 07133
- Eastern, sediments, provenance, dispersion: Ross, David A. 08861
- Eastern, Tertiary-Quaternary history: Emery, K. O. 08947
- General, geophysical survey data, summary: Worzel, J. Lamar. 09865
- Nova Scotia to Florida, structure, seismic studies: Uchupi, Elazar. 08197
- Nova Scotia-Florida Keys, shelf and slope: Uchupi, Elazar. 00926
- Scotian Shelf, The Stone Fence, magnetic map: Canada Geological Survey. 02778
- Structure, development: Belousov, V. V. 03638
- Structure, geophysical data: Worzel, J. Lamar. 03622
- Western, major faulting, transverse and peripheral: Burk, Creighton A. 04028

North Carolina

- Cape Fear, submerged shoreline features: Riggs, Stanley R. 10339
- Cape Hatteras area, bathymetry: Rona, Peter A. 09926
- Cape Hatteras, slope, canyon, genesis, sediment draping: Rona, Peter A. 08056

Continental margin—Continued*North Carolina—Continued*

- Shelf, Foraminifera, distribution: Schnitker, Detmar Friedrich. 02627
Shelf, slope, rise, evolution, seismic study: Rona, Peter Arnold. 02040

Northwest Territories

- Prince Gustaf Adolf Sea area, changes of level, sedimentology: Marlowe, J. I. 02054

Nova Scotia

- Banquereau, magnetic map: Canada Geological Survey. 02779
Gully submarine canyon, sedimentation patterns: Stanley, Daniel J. 00320
Middle Bank, magnetic map: Canada Geological Survey. 02780
Misaine Bank, magnetic map: Canada Geological Survey. 02781
Sable Island Bank east, magnetic map: Canada Geological Survey. 02775
Sable Island Bank West, magnetic map: Canada Geological Survey. 02776
Scotian Shelf, magnetic map, Sheet 11 G/12: Canada Geological Survey. 02767
Scotian shelf, magnetic map, Sheet 11 G/14: Canada Geological Survey. 02768
Scotian Shelf, magnetic map, Sheet 1D: Canada Geological Survey. 02777
Shelburne area, magnetic map: Canada Geological Survey. 02770
Shelf, sediments, recent, chlorins, pigment source: Baker, B. L. 03106
Shelf, seismic survey, structure, rifting: Sheridan, Robert E. 01997
Shelf, terraces, Pleistocene shorelines: Stanley, Daniel J. 07340
Slope, Oligocene-Miocene stratigraphy, paleoecology: Bartlett, Grant A. 09353
Yarmouth area, magnetic map: Canada Geological Survey. 02774

Oregon

- Cape Mendocino area, sea-floor tectonics: McEvilly, T. V. 05048
Geomorphology, effects of East Pacific Rise: Byrne, John V. 07779
Shelf, sediment, radioactive, distribution: Gross, M. Grant. 07741
Shelf, sediments, geochemistry, mineralogy: White, Stanton Moore. 03034
Shelf, sediments, glauconite-boron association: White, Stan M. 01391
Southern, shelf, gold possibilities: Clifton, H. Edward. 01720
Southern shelf, sedimentary petrology, heavy mineral analysis: Kulm, L. D. 10962

Pacific Ocean

- Gulf of Alaska, tectonic trends: Wright, F. F. 08453

Panama

- Gulf of Panama, Holocene sedimentation, history: Golik, Abraham. 04429

South Carolina

- Shelf sediments, geochemistry, heavy minerals: Stone, Irving C., Jr. 11355

United States

- Atlantic rise, sedimentation, stratification, shaping by currents: Heezen, B. C. 07350
Atlantic, sea level, past 35,000 yrs, C-14 ages: Milliman, John D. 04870
Atlantic shelf, carbonate minerals, sand-sized fraction: Pilkey, Orrin H. 03538
Atlantic shelf, sonar surveys, sidelooking: Sanders, John E. 07353

Continental margin—Continued*United States—Continued*

- Atlantic shelf, southeastern, iron-stained quartz: Judd, James B. 06034
Atlantic shelf, structure, seismic data: Emery, K. O. 07349
Cape Hatteras, rise, magnetic anomaly: Brakl, J. 03228
Cape Hatteras-Cape Fear, seismic survey: Dowling, John J. 02017
Delaware, sedimentation, geosyncline, Holocene environments: Kraft, John C. 03738
Eastern, aeromagnetic survey, implications: Zietz, Isidore. 09866
Eastern, areal geology, summary: Drake, Charles L. 11010
Eastern, exploration history, 19th century: Schopf, Thomas J. M. 05867
Eastern, magnetic anomalies, geologic interpretation: Taylor, Patrick. 03805
Eastern, mineral resources, exploration: Emery, Kenneth O. 07996
Eastern, sedimentary rocks, thickness, distribution: Uchupi, Elazar. 05552
Eastern, seismic survey: Lewis, B. 02789
Eastern, shelf, Cretaceous-Cenozoic development: Garrison, Louis Eldred. 04536
Eastern, shelf, slope, sediments, topography: Pratt, Richard M. 04519
Eastern, shelf, structure, Pleistocene history: Knott, S. T. 08959
Eastern, Wilmington Canyon area, sedimentation: Stanley, Daniel J. 07975
General, structure, geomorphology, cf. worldwide: Emery, K. O. 05502
Gulf coast, structure, seismic data: Uchupi, Elazar. 03773
Gulf of Maine, sonar survey: Sanders, John E. 06391
Maryland-Delaware-Virginia, submarine canyons, seismic profiles: Uchupi, Elazar. 07060
North Atlantic shelf, geologic sample inventory: Weiss, Martin. 09005
Northeastern, Cretaceous-Pleistocene strata, paleontology: Gibson, Thomas G. 05234
Northeastern, sand and gravel: Schlee, John. 05155
Northeastern, shelf, sediments: Trumbull, James V. A. 08974
Northwestern, geosynclinal environment, sediments: McManus, Dean A. 07878
Northwestern, magnetic surveys: Emilia, David A. 02689
Northwestern, Pioneer Fracture Zone-Delgada Fan intersection: Winterer, E. L. 07061
Oregon to Tufts Abyssal Plain, mantle structure: Dehlinger, P. 03623
Petroleum, exploration and production technology: Barrow, Thomas D. 06106
Shelf, economic geology, mineral resources, popular account: Bodenhorn, Gregory S. 10825
Shelf, sand resources for beach fill: Duane, David B. 07347
South Carolina-Florida, reefs, seismic survey: Zarudzki, E. F. K. 05050
Southeastern, sediment texture and bottom currents: Hollister, Charles D. 07351
Southeastern, sedimentation: Doyle, Larry J. 10297
Southeastern, shelf, carbonate sedimentation: Pilkey, Orrin H. 11039

Continental margin—Continued*United States—Continued*

Southeastern, shelf, sedimentation processes:

Pilkey, Orrin H. 06629

Southern, shelf-depositional regime, use of mica:

Doyle, Larry J. 07370

Virginia-North Carolina, seismic survey, structure: Hales, A. L. 02015

Virginia-North Carolina

Shelf, morphology, quantitative analysis: Fisher,

John J. 07619

Washington

Continental terrace, topography: McManus, Dean A. 08801

Gray's Harbor area, structure, seismic profiles: Grim, Muriel S. 08458

Juan de Fuca submarine canyon, evolution: Carson, Bobb. 08641

Shelf, sediment, radioactive, distribution: Gross, M. Grant. 07741

Shelf, sediments, geochemistry, mineralogy: White, Stanton Moore. 03034

Shelf, sediments, glauconite-boron association: White, Stan M. 01391

Shelf structure, seismic data: Bennett, Lee C., Jr. 08457

World

General, geophysical survey data, summary: Worzel, J. Lamar. 09865

Petroleum, natural gas, sulfur resources: Weeks, Lewis G. 01418

Shelf sediments, relict: Emery, K. O. 00921

Continents*Areal distribution*

Compared to ocean basins, 5° band, 0°-75° lat: Krause, Dale C. 08449

Evolution

Canadian Shield, history: Goodwin, A. M. 04715

Continental drift and accretion: Marvin, Ursula. 02084

North America, popular account: Ogburn, Charlton, Jr. 02239

Silurian lithofacies as evidence: Berry, W. B. N. 06114

Structure

Margins, differing types: Belousov, V. V. 03638

Margins, geophysical data: Worzel, J. Lamar. 03622

Copper*Alaska*

Clearwater Mountains, occurrence, distribution: Glavinovich, Paul Stephen. 09833

Cosmos Hills area, Ruby Creek prospect, mineralization: Runnells, Donald D. 08061

Analysis

Atomic absorption, meteorites: Nava, David Francis. 05510

Atomic absorption, silicate rock standards, U.S.G.S.: Huffman, Claude, Jr. 00795

Atomic absorption spectroscopy: Heller, R. L., Jr. 09636

Chromatographic, PAQH complexes: Frei, R. W. 03436

Polarographic, content in iron meteorites: Vickers, Richard S. 11387

Spectrophotometric, colorimetric reagent, DMDPQ: Trusell, Fred C. 11364

Appalachians

Resources, review: Kinkel, Arthur R., Jr. 01378

Southern, exploration, geochemical: Tan, Li-Ping. 08908

Copper—Continued*Arizona*

Ajo area, Cornelia pluton, occurrence: Wadsworth, William B. 01910

Bagdad district, occurrence: Baker, Arthur. 3d. 05348

Banner mining district, Christmas mine area, genesis: Eastlick, John T. 05381

Bisbee area, genesis: Bryant, Donald G. 00540

Exploration, unconformities, porphyry copper: Livingston, Donald E. 00541

Garnet Ridge, breccia dike: Gavasci, Anna T. 07634

Kalamazoo-San Manuel orebody, alteration zones: Guilbert, J. M. 11117

Mineral Park district, occurrence, genesis: Eidel, J. J. 05430

Occurrence, genesis: Anderson, Charles A. 05380

Pima County, Esperanza mine, occurrence: Lynch, Dean W. 02669

Pima mining district, occurrence, field trip, road log: Lynch, Dean. 02649

Pinal County, Magma mine area, occurrence, genesis: Hammer, Donald F. 05347

Ray area, occurrence: Metz, R. A. 02670

San Manuel district, exploration, guides: Lowell, J. David. 04123

Southern, porphyry deposits, genesis: Guilbert, John M. 02667

Yavapai County, Iron King mine, occurrence, genesis: Gilmour, Paul. 05429

British Columbia

Bethlehem Copper property, grade control: Ewanchuk, H. G. 05310

Brenda mines, exploration, electrical: Fountain, D. K. 01097

Exploration, geochemical: Horsnail, R. F. 06845

Exploration, geophysical methods: Fountain, David K. 07754

Phoenix mine, open pit, reserve estimation: Kermeen, J. S. 05308

Queen Charlotte Islands, occurrence: Brown, A. Sutherland. 07615

Tasu deposit, occurrence: Wade, E. J. 01096

Exploration

Geochemical prospecting: Dahlberg, Eric C. 04236

Hydrothermal alteration, zoning: Guilbert, John M. 04139

Geochemistry

Biologic concentration: Boyle, R. W. 04234

Carbonate replacement deposits: Titley, Spencer R. 04155

Hudson River water, New York: Fabricand, Burton P. 03551

Native, lavas, British Columbia: Surdam, Ronald C. 07641

Newport pallasite: Buseck, Peter R. 00469

Porphyry deposits, O, H isotopes: Sheppard, Simon M. F. 09684

Sphalerite, siting, valence, effect of Al cations, experimental study: Manning, P. G. 03457

Stability relations in system Cu-Pb-S: Craig, James R. 02218

Sulfides, covellite solubility: Romberger, Samuel Bergstresser. 05511

Greenland

Southern, Lilianmine area, occurrence: Ghisler, Martin. 07700

Copper — Continued

Haiti

Geochemistry, Meme mine, occurrence, genesis: Kesler, Stephen E. 10956

Jamaica

Barbecue prospect, exploration: Black, C. D. G. 07175

Maine

Eastport area, geochemistry: Greenwood, Robert. 01897

Mexico

Durango, Mapimi district, occurrence: Hoffman, Victor J. 11303

Fresnillo, exploration: Villasenor, Luis. 04133

Metallogenetic provinces: Wilson, Ivan F. 04148

Michigan

Copper Harbor Conglomerate: Brecke, E. A. 01909

Copper Harbor Conglomerate, genesis: Ohle, Ernest L. 01898

Northern, genesis, experimental: Mackasey, William O. 09294

Northern, native deposits, occurrence, genesis: White, Walter S. 05386

White Pine area, occurrence, genesis: Ensign, C. O., Jr. 05409

White Pine mine, reserve estimation, grade control: Ensign, C. O., Jr. 05311

White Pine mine, silver-bearing: Finlay, Walter L. 06318

Minnesota

Ely area, Duluth Gabbro ores, mineralogy, beneficiation: Vifian, A. 06351

Montana

Butte district, occurrence, genesis: Meyer, Charles. 05351

Butte, geochemistry: Doe, B. R. 07636

Nevada

Lander County, occurrence: Sayers, R. W. 09461

Lander County, supergene, altered plagioclase: Clement, Stephen C. 04237

Mountain City mine, occurrence, genesis: Coats, Robert R. 05375

New Mexico

Grant County, Central mining district, occurrence, genesis: Hernon, Robert M. 05382

Lincoln County, genesis: Thompson, Tommy B. 07639

Occurrence, genesis: Anderson, Charles A. 05380

Red River district, occurrence: Clark, K. F. 04226

Santa Rita area, genesis: Nielsen, Richard L. 00471

Southern, porphyry deposits, genesis: Guilbert, John M. 02667

Newfoundland

Whalesback mine, evaluation, trend analysis: Agterberg, F. P. 05217

Whalesback mine, evaluation, trend analysis: Agterberg, F. P. 05228

Whalesback mine, evaluation, trend analysis cf. others: Piloski, M. J. 05315

Whalesback mine, occurrence: Kanehira, K. 07239

Northwest Territories

Copper Mine River area, occurrence: Watts, Murray. 01134

Coppermine River area, Precambrian possibilities: Watts, Murray. 09561

Copper — Continued

Northwest Territories — Continued

Coppermine River region, exploration: Mining in Canada. 07883

Ontario

McIntyre mine, reserve estimation, grade control: Parfitt, P. O. 05319

North Coldstream mines, estimated reserves cf. production: Heim, R. C. 05328

Porcupine area, McIntyre mine: Carter, O. F. 10155

Porcupine district, McIntyre mine, occurrence: Griffis, A. T. 01768

Robb Township, Kam-Kotia mine: Somerville, R. 10158

Saganagons Lake area, possibilities: Harris, F. R. 02251

Stevens-Kagiano Lake area, possibilities: Coates, M. E. 02399

Strathcona mine, occurrence: Cowan, J. C. 00116

Panama

Petaquilla and Botija prospects, geochemical discovery: World Mining. 08173

Quebec

Chibougamau area, Campbell mines, reserve estimation, occurrence: Krause, C. A. 05325

Chibougamau area, Copper Rand mines, occurrence, grade control: Parrish, I. S. 05326

Murdochville area, Gaspé mines and open pits, grade control: MacIsaac, W. 05307

Saskatchewan

Anglo-Rouyn deposit, reserve calculation: Skopos, M. J. 05318

Coronation mine, reserve estimation: Cairns, R. B. 05329

Kipahigan Lake deposit, occurrence: Netolitzky, R. K. 04087

Tennessee

Ducktown district, occurrence, genesis: Magee, Maurice. 05415

United States

Midcontinent ore district, general: Snyder, Frank G. 05385

Southwestern, production, prehistoric: Ross, Stanley H. 01643

Utah

Bingham, absolute age: Moore, W. J. 04239

Bingham district, occurrence, genesis: Rubright, R. D. 05483

Tintic district, occurrence, genesis: Shepard, W. M. 05485

Vermont

Exploration: Jenks, William F. 00835

Wyoming

New Rambler district, occurrence: McCallum, M. E. 07983

Yukon

Keno Hill area, content in stream and spring sediments: Gleeson, C. F. 06678

Whitehorse area, occurrence: Morinaga, Shigeru. 01833

*Coprolite**Utah*

Cretaceous, Ferron Sandstone: Stokes, William Lee. 07355

*Core**Composition*

Exploration, clues, textbook: Phillips, O. M. 00561

Shock wave compression, density models: Stewart, Roger M. 10622

Core—Continued

Depth

PcP traveltimes: Taggart, James. 03108

Elastic waves

Core-mantle boundary, elastic waves, reflection, transmission: Teng, Ta-Liang. 10048

Free oscillations, limits, modes: Derr, John S. 08508

PcP amplitudes, traveltimes, natural and artificial sources: Carder, Dean S. 08249

PKP, diffraction theory: Phinney, Robert A. 10527

P-waves, traveltime curve, shadow zone: Espinosa, A. F. 08266

Velocity models, structure, properties: Toksoz, M. N. 10465

Experimental studies

Iron-silicon alloys, isothermal compression to 300 kb: Silberman, Miles L. 10602

Turbulent flow, genesis of magnetic field of Earth: Malkus, W. V. R. 00595

Physical properties

Composition, density, size, recent observations: Simmons, Gene. 00341

Conductivity: Skiles, Durward D. 08399

Exploration, clues, textbook: Phillips, O. M. 00561

Processes

Fluid motions: Ball, R. H. 08400

Kinematics, magnetic field, secular variations: Booker, John Ratcliffe. 04531

Precessing flow, turbulent transitions, experimental: Malkus, Willem V. R. 08398

Stress planes, tangent, relation to surface features: Rouse, George E. 07779

Structure

Radius, seismic waves, multiple reflection in outer: Engdahl, Eric R. 01923

Velocity model: Husebye, Eyestein S. 10526

Temperature

Gradients: Clark, Sydney P., Jr. 11094

Theoretical studies

Kinematics, geomagnetic data: Booker, John R. 08397

Magnetic field, secular variations: Backus, George E. 08396

Correlation

Methods

Dendrograph, two-dimensional tool: McCammon, Richard B. 04281

General: Harbaugh, John W. 04704

Granites and gneisses, New England: Liese, Homer C. 05049

Lava-tube sediments, Idaho, Owl Cave fill, variation factors: Ore, H. Thomas. 02538

Lithologic markers, Cretaceous, Upper, Alberta, Kneehills Tuff zone, electric logs: Irish, E. J. W. 06312

Paleomagnetic reversals: Burek, P. J. 08382

Paleomagnetism, Quaternary: Cox, Allan. 03986

Paleontologic, model: Horowitz, Alan Stanley. 07897

Palynomorph distributions, floral succession: Gibson, L. B. 02187

Pleistocene deposits, techniques, criteria: Frye, John C. 07679

Pteropods in pelagic sediments, Pleistocene biostratigraphy: Chen, Chin. 03129

Quaternary, North America, symposium: Morrison, Roger B. 03988

Subsurface, chemical analyses, possibilities: Sanford, John T. 04719

Correlation—Continued

Methods—Continued

Zircon types, use in Precambrian rocks: Robertson, James A. 07324

Principles

Pleistocene, glacial deposits: Ray, L. L. 03990

Quaternary, North America, symposium: Morrison, Roger B. 03988

Costa Rica

Absolute age

Cocos Island, basalt flows: Dalrymple, G. Brent. 00142

Areal geology

Turrialba zone: Malavassi V., Enrique. 10673

Maps, geologic

General: Dondoli B., Cesar. 08919

Valle Central: Dondoli B., Cesar. 08920

Paleomagnetism

Cocos Island, basalt flows: Dalrymple, G. Brent. 00142

Stratigraphy

Cretaceous, Nicoya complex: Henningsen, Dierk. 09583

Structural geology

Nicoya complex, trends, possible oceanic crust: Henningsen, Dierk. 09583

Volcanology

Poas Volcano, 1953 activity: Fernandez Peralta, Ricardo. 09031

Cratering

Experimental studies

Chemical explosions, physical properties of taconite: Gnirk, Paul F. 07472

Coesite, growth, strained quartz aggregates: Green, Harry W., 2d. 10480

Crater structure, Jangle U, Teapot Ess nuclear events: Shoemaker, Eugene M. 07476

Hypervelocity impact, partitioning energy, loose sand: Braslau, David. 10440

Impact, stages of development: Gault, Donald E. 07406

Limestone, hugoniot study, to 50 kb: Froula, N. H. 10484

Mechanics: Cherry, J. T. 07470

Meteorite, deformation structures: Quaide, William L. 08095

Rock property effects, taconite, Minnesota: Gnirk, P. F. 11403

Shock metamorphism and structure, cf. meteorite impact: Dence, Michael R. 07807

Siliceous rocks, hugoniots: Shipman, F. H. 10483

Subsurface, nuclear, crater limits detection: Ballard, R. F., Jr. 07705

Throw-out products, size-frequency distribution: Fielder, G. 05097

Field studies

Craters with central peaks, Alberta: Roddy, David J. 08504

Ejecta, Nevada Test Site, Sedan crater: Roberts, Wayne A. 07407

Mechanism, Canada, Brent, East Clearwater Lake craters: Dence, M. R. 07492

Nuclear explosion, gas equation of state: Butkovich, T. R. 07405

Surface explosions, scaling laws: Vortman, L. J. 02362

Cretaceous

Alabama

Barbour County, Selma Group: Newton, J. G. 07393

Crenshaw County, stratigraphy: McWilliams, R. G. 06085

Cusseta Sand: Hester, Norman Curtis. 05518

Cretaceous—Continued

Alabama—Continued

- Eastern, Foraminifera, Blufftown Formation: Nikravesh, Rashel. 00856
 Pike County, stratigraphy: Shamburger, Victor M., Jr. 06087
 Southeastern, stratigraphy: Clarke, Otis M., Jr. 07667
 Southeastern, stratigraphy and structure: Moore, Donald B. 07695
 West-central, exposures: Bollman, James F. 09003

Alaska

- Northern, paleobotany: Smiley, Charles J. 08040

Alberta

- Cadomin area, Lower, stratigraphy: Mellon, G. B. 09680
 Correlation, Upper, Kneehills Tuff zone, subsurface marker: Irish, E. J. W. 06312
 Drumheller area, Reptilia, ceratopsid, Edmonton Formation: Langston, Wann, Jr. 05696
 Eastend and Whitemud Formations: Byers, P. R. 04082
 Edmonton Formation, angiosperms, new seeds: Binda, P. L. 07691
 Edmonton Formation, palynology: Srivastava, Satish K. 01989
 Foothills, central, Brazeau Formation: Jensen, E. 09682
 Foremost area, stratigraphy: Irish, E. J. W. 02922
 Fungi, Edmonton Formation, spores, n. spp.: Srivastava, Satish K. 09024
 General: Stelck, Charles R. 10924
 Gulf Spring Point, Saint Mary River-lower Wil-low Creek sandstones: Nelson, H. W. 07321
 Limestone Mountain area, Beaver Mines Formation, flora: Ollerenshaw, N. C. 06571
 Mammalia, Edmonton Formation: Lillegraven, Jason Arthur. 06521
 McLeod River area, Alberta Group: Stott, D. F. 09681
 Northwestern, Lower, shock event, evidence: Carrigy, Maurice A. 07505
 Palynomorphs, Edmonton Fm.: Srivastava, Satish K. 07921
 Palynomorphs, Edmonton Formation, triorate pollen, n. gen.: Srivastava, Satish K. 09023
 Rocky Mountain Foothills, Bullhead and Fort St. John Groups: Stott, D. F. 03137
 Rocky Mountain foothills, Foraminifera, paleoecology: Wall, John H. 11033
 Southern, Battle and Edmonton Formations, palynomorphs: Binda, P. L. 09354
 Southern, palynomorphs, Edmonton Formation: Srivastava, Satish K. 11354
 Southern, Whitemud and Battle Formations, Kneehills Tuff zone: Irish, E. J. W. 06312

Arizona

- Northeastern, Pteridophytes, Dakota Sandstone: Rushforth, Samuel R. 06140
 Northern, stratigraphy and paleontology, popular account: Breed, William J. 04337
 Pena Canyon and Walker Canyon areas, stratigraphy: Nelson, Frank J. 11334
 Roskrige Mountains, stratigraphy, summary: Bikerman, Michael. 02657
 Santa Rita Mountains, Fort Crittenden Formation, redefined: Drewes, Harald. 04108
 Southeastern, stratigraphy: Lootens, Douglas J. 08300
 Southeastern, stratigraphy: Schafroth, Don W. 02663

Cretaceous—Continued

Arkansas

- Coastal plain, Protista, coccolithophorids, zonation: Gartner, Stefan, Jr. 09385
 Southwestern, basal surfaces: Speer, John H. 10086

Atlantic Coastal Plain

- Sedimentary sequences, lithofacies: Owens, James P. 08964
 Southern, shelf rocks, sedimentation: Swift, Donald J. P. 09711

Atlantic Ocean

- Blake Escarpment, algae, Lower limestones: Johnson, J. Harlan. 07176
 Cat Island region, deep-sea cores, palynology: Habib, Daniel. 10902
 Mid-Atlantic Ridge, sediments: Tsunemasa, Saito. 08078
 Palynology, deep-sea sediment dating: Habib, Daniel. 05166

British Columbia

- Coastal, intermontane areas, palynology: Rouse, Glenn E. 08084
 Fort Nelson map-area, stratigraphy: Taylor, G. C. 06757
 Maxhamish Lake map-area, stratigraphy: Taylor, G. C. 06697
 Northeastern, Tetsa-LaBiche Rivers area, stratigraphy: Stott, D. F. 04070
 Rocky Mountain Foothills, Bullhead and Fort St. John Groups: Stott, D. F. 03137
 Rocky Mountain foothills, Foraminifera, paleoecology: Wall, John H. 11033
 Rocky Mountain Trench, Sifton Formation: Rutter, N. W. 00984
 Taseko Lakes map-area, stratigraphy: Jeletzky, J. A. 09409
 Vancouver Island, Kennedy Lake area, stratigraphy and petrology: Eastwood, G. E. P. 07924

California

- Berkeley-San Leandro Hills, Upper, revision: Case, J. E. 06014
 Cape Mendocino area, Franciscan coastal belt units, stratigraphy: Nason, Robert D. 04030
 Central, Angiosperms, Panoche Formation: Page, Virginia M. 00345
 Coalinga area, stratigraphy: Shawa, Monzer S. 09163
 Escarpado Canyon, Moreno Formation, Protista: Drugg, Warren S. 07704
 Fresno County, Radiolaria, Moreno Formation: Foreman, Helen P. 06670
 Gualala area, stratigraphy: Wentworth, Carl M. 04036
 Kern County, Foraminifera, Hex Formation: Church, Clifford C. 00170
 Protista, silicoflagellates, Maestrictian, catalog, stratigraphic analysis: Mandra, York T. 04790
 Sacramento Valley, *Buchia* zones, stratigraphy: Jones, D. L. 07906
 Sacramento Valley, Protista, biostratigraphy: Warren, John Stanley. 09862
 Sacramento Valley, sedimentation: Ojakangas, Richard W. 02696
 Sacramento Valley, sedimentation: Ojakangas, Richard W. 07852
 Sacramento Valley, submarine slump deposit: Lowe, Donald R. 08784
 Sacramento Valley, Venado Formation, Logan Ridge Member: Lowe, Donald Ray. 02635
 Sacramento Valley, stratigraphy: Safonov, Anatole. 02124

Cretaceous—Continued*California—Continued*

- San Diego area, clastic sequence, provenance: Peterson, G. L. 08843
 San Diego area, Upper, Eocene contact relations: Nordstrom, C. E. 08829
 San Diego County, new conglomerate unit, correlation: Nordstrom, Charles E. 10029
 Southern, biostratigraphy: Allison, Edwin C. 10700
 Southern coast, Foraminifera, Upper: Sliter, William V. 06699

Canada

- Correlation, marine fossils, western interior with Europe: Jeletzky, J. A. 01798
 Hudson Bay Lowlands, reconnaissance summary: Sanford, B. V. 04265
 Western Canada basin, stratigraphy: Vigras, laurence W. 04511

Cephalopoda

- Ammonoidea, taxonomy and evolution: Wiedmann, Jost. 08494

Colorado

- Canon City area, Protista, biostratigraphy, paleoecology: Trexler, David W. 10879
 Greenhorn Formation, sedimentation, water depths: Eicher, Don L. 10878
 Niobrara Formation, Mancos Shale, biostratigraphy: Kent, Harry C. 10880
 Northern, Mancos Shale, paleogeography: Kent, Harry C. 05719
 Northwestern, palynomorphs, Paleocene rocks: Newman, Karl R. 07834
 San Juan Basin, lower Mancos Shale: Lamb, George M. 01893
 San Juan Mountains, uplift, volcanism, stratigraphy: Dickinson, Robert G. 05157
 Slick Rock district, Mancos Shale: Shawe, Daniel R. 02720

Costa Rica

- Nicoya complex, oceanic crust: Henningsen, Dierk. 09583

Cuba

- Sierra de Nipe, southern: Kumpera, Otakar. 07896

Foraminifera

- Index species, catalog, smaller, planktonic: Ellis, Brooks F. 03145
 Planktonic, zonation: Bandy, Orville L. 07812

General

- Aptian, glossary: Sornay, Jacques. 04863

Georgia

- Coastal plain, kaolin deposits: Buie, B. F. 10286
 Cusseta Sand: Hester, Norman Curtis. 05518
 Mollusca, Ripley Formation: Smith, Allyn G. 02900
 Western, Foraminifera, Blufftown Formation: Nikravesh, Rashel. 00856

Greenland

- Nugssuaq Peninsula, angiosperms, Kome Formation: Pedersen, K. Raunsgaard. 02064
 West, Cephalopoda, morphology: Birkelund, T. 10947

Gulf Coastal Plain

- Central, depositional history, summary: Rainwater, E. H. 09324

Illinois

- Barry area, Baylis Formation, type section: Illinois State Geological Survey. 05855

Jamaica

- Foraminifera, new: Robinson, E. 05136

Kansas

- Carlile Shale, Greenhorn Limestone and Fairport Chalk Member: Hattin, Donald E. 10106

Cretaceous—Continued*Kansas—Continued*

- Central, Cephalopoda, Graneros-Greenhorn contact: Hattin, Donald E. 05692
 Central, Kiowa Formation, Mollusca: Scott, Robert W. 01354
 Invertebrata, Niobrara Formation: Miller, Halsey W. 09887
 Kiowa Formation, paleoecology: Scott, Robert W. 10876
 Northwestern, Pierre Shale, palynology: Lammons, James M. 07926

Length of year

- Bivalve shell evidence: Berry, William B. N. 00354

Manitoba

- Southeastern, Vertebrata, Vermilion River Formation: Bardack, David. 02177

Maryland

- Baltimore-Aberdeen area, fall zone, saprolite: Cleaves, Emery T. 09760
 Charles County, major aquifers: Slaughter, Turbit H. 00568
 Southern, Coastal Plain, stratigraphy: Atlantic Coastal Plain Geol. Assoc. 08017
 Southern, sands, thickness and distribution: Hansen, Harry J., 3d. 03169

Mexico

- Baja California, biostratigraphy: Allison, Edwin C. 10700
 Baja California, Mollusca, Alsisos Formation: Allison, Edwin Chester. 00846
 Baja California, Mollusca, northwestern, Upper: Perilliat Montoya, Maria del Carmen. 09131
 Baja California, northwestern, Foraminifera, Upper: Sliter, William V. 06699
 Baja California, Vertebrata, El Gallo Formation: Morris, William J. 10024
 Chihuahua, Upper, biostratigraphy: Wolleben, James A. 09325
 Northern, Cephalopoda, upper Albian: Young, Keith. 00496
 Northern, salt deposits: Salas, G. P. 01019
 Porifera, *Rhaxella*, distribution, correlation: Trejo, M. 09226
 San Luis Potosi, Cardenas Fm.: Myers, Ralph L. 07967
 Santa Eulalia district, stratigraphy: Hewitt, William Paxton. 01509
 Southern, Foraminifera, new: Robinson, E. 05136
 Southern, salt deposits: Benavides G., Luis. 01014
 Tijuana area, clastic sequence, provenance: Peterson, G. L. 08843

Minnesota

- South-central, palynomorphs, Windrow Formation: Hall, John W. 05021

Mississippi

- Mallalieu oil field, Tuscaloosa sandstones, petrography: Berg, Robert R. 09331

Mississippi Valley

- Embayment, palynology, Tertiary boundary: Tschudy, Robert H. 10796

Montana

- Crazy Mountains, Livingston Group: Sims, John David. 01738
 Dawson County, pteridophytes, Hell Creek Formation: Hall, John W. 04527
 Eastern, pteridophytes, new salvinaceans: Hall, John W. 03146
 Hell Creek Formation, stratigraphy: Frye, Charles Isaac. 02034

Cretaceous—Continued

Montana—Continued

- Malta area, Reptilia, Bearpaw Shale: Rich, T. Hewitt. 08317
 North-central, Judith River Formation: Osterkamp, W. R. 04759
 Southeastern, Bell Creek oil field, Muddy Sandstone: Berg, Robert R. 04506
 Southeastern, Bell Creek oil field, stratigraphy: McGregor, Alexander A. 04505
 Southwestern, Kootenai Formation: Suttner, Lee J. 06947
 Sun River area, volcanism: Mudge, Melville R. 05186

Nebraska

- Denver basin, Dakota Sandstone: Exum, F. A. 04504

New Jersey

- Marlboro area, Bryozoa: Toots, Heinrich. 09942
 South Amboy-Raritan area, delta deposits: Owens, James P. 01403

New Mexico

- Cebolla quadrangle, stratigraphy: Doney, Hugh H. 08015
 San Juan Basin, lower Mancos Shale: Lamb, George M. 01893
 San Juan Basin, Semilla Sandstone Member, Mancos Shale: Dane, Carle H. 01035

North America

- Amber, localities, infrared spectra, botanical sources: Langenheim, Jean H. 04786
 Mammalia, marsupials: Clemens, William A. 01091
 Western, Foraminifera, geographic distribution: Douglas, Robert G. 07768
 Western Interior, Pelecypoda: Kauffman, Erle G. 07908
 Western, Mammalia, multituberculates, generic diversity: Fox, Richard C. 04842
 Western, transition beds with Jurassic: Jeletzky, J. A. 07904

North Carolina

- Phoebus Landing, Pisces, Black Creek Formation: Miller, Halsey W. 06760

North Dakota

- Hell Creek Formation, stratigraphy: Frye, Charles Isaac. 02034
 Pelecypoda, Fox Hills Formation: Feldmann, Rodney M. 00500
 Williston basin, Newcastle Formation: Reishus, Mark. 04724

Northwest Territories

- Cornwallis Island area, Eureka Sound Formation: Thorsteinsson, R. 06570
 Mackenzie, Flat River tungsten area, quartz monzonite: Blusson, S. L. 08055
 Somerset Island, Idlorak Formation, flora, Pisces: Dineley, D. L. 02724

Oklahoma

- Cimarron County, Omadi Formation, coal, palynology: Potter, Delbert E. 10079
 Marshall County, Albian palynomorphs, stratigraphy: Hedlund, R. W. 03740
 Southern, basal surfaces: Speer, John H. 10086

Oregon

- Mitchell quadrangle, stratigraphy: Wilkinson, W. D. 09487

Paleogeography

- General: Kurten, Bjorn. 06166

Paleomagnetism

- Quebec, Montereian Hills: Larochelle, A. 00957

Cretaceous—Continued

Paleontology

- General: Kurten, Bjorn. 06166

Pelecypoda

- Rudistacea, geographic distribution: Coogan, Alan H. 10695

Pisces

- Clupeomorpha, caudal skeleton, evolution, taxonomic relations: Cavender, Ted. 10944

Puerto Rico

- Mollusca, San German Formation: Smith, Allyn G. 02900
 Naranjito-Aguas Buenas area, stratigraphy: Pease, Maurice H., Jr. 01109
 Tectonic sequences: Mattson, Peter H. 08216

Quebec

- Brome Mountain, alkalic rocks, emplacement sequence: Valiquette, Guy. 06929

Reptilia

- Dinosaurs, extinction: Axelrod, Daniel I. 03742
 Dinosaurs, general: Kurten, Bjorn. 06166

Rocky Mountains

- Northern, Muddy Sandstone: Wulf, George R. 05905
 Northern, palynology: Tschudy, Robert H. 10796
 Pollen zones, tectonic events, relations: Newman, Karl R. 11072

Saskatchewan

- Eastend and Whitemud Formations: Byers, P. R. 04082
 Eastern, Foraminifera, zones: Caldwell, W. G. E. 07780

South Carolina

- Coastal plain, kaolin deposits: Buie, B. F. 10286

South Dakota

- Beadle County, Dakota Group-Pierre Shale, subsurface: Hedges, Lynn S. 06026
 Central, Fox Hills-Hell Creek Formations, biostratigraphy, paleoecology: Waage, Karl M. 10881
 Northwestern, Fox Hills Formation, type area: Waage, Karl M. 09882
 Palynomorphs, Hell Creek Formation, catalog: Traverse, A. 01651
 Palynomorphs, Inyan Kara Group: Cahoon, Elizabeth J. 02317

Texas

- Algae, Buda Limestone: Johnson, J. Harlan. 00917
 Algae, pre-Buda Limestone: Johnson, J. Harlan. 00918
 Austin area and Frio County, Protista, Navarro Group: Zaitzeff, James Boris. 01753
 Austin area, Austin Group, correlation: Paulson, Oscar L., Jr. 03857
 Central, Hog Creek watershed, Comanchean Series: Baylor Geological Society. 08927
 Central, Trinity sands: Boone, Peter A. 07066
 Coastal plain, Pisces, evolution: Slaughter, Bob H. 00485
 Coastal plain, Protista, coccolithophorids, zonation: Gartner, Stefan, Jr. 09385
 Comstock-Indian Wells area, stratigraphy: Freeman, Val L. 05865
 Eastern, environmental synthesis, oil and gas possibilities: Bushaw, Dewey J. 09346
 Eastern, Woodbine Formation: Hudnall, James S. 01221
 El Paso area, Cerro de Muleros, new formations: Strain, William S. 10174

Cretaceous—Continued

Texas—Continued

- Foraminifera, *Globotruncana*, Taylor Marl: Esker, George C., 3d. 04405
- Foraminifera, heterohelcid, Kemp Clay, possible index: Esker, George C., 3d. 04406
- Karnes County, northwestern, sedimentation: Tucker, Delos R. 03884
- Mammalia, Albian deposits, marsupials: Slaughter, Bob H. 03823
- McLennan County, new plesiosaur, Lake Waco Formation: Thurmond, John T. 05695
- North-central, Mammalia, earliest eutherians, premolar evolution: Slaughter, Bob H. 09081
- North-central, *Pisces*, holostean, Austin Chalk: Bardack, David. 05697
- Paluxy Valley, Glen Rose Formation: Nagle, J. Stewart. 03175
- Palynomorphs, Lower, Glen Rose Formation: Kessler, L. G., 2d. 10946
- Protista, coccolithophores: Bukry, John David. 03024
- South-central, stratigraphy: Rives, John S. 04317
- Tarrant County, Woodbine Fm., members and fauna, field trip: McNulty, C. L., Jr. 07769
- Tarrant County, Woodbine Fm., members, field trip: Dodge, Charles F. 07767
- Tarrant County, Woodbine Fm., members, field trip: Dodge, Charles F. 07768
- Tarrant County, Woodbine Fm., members, field trip: Powell, J. Dan. 07770
- Tarrant County, Woodbine Fm., stratigraphic nomenclature: Dodge, Charles F. 07751
- Tarrant County, Woodbine Fm., stratigraphy: Geological Society of America. 07771
- Tarrant County, Woodbine-Eagle Ford transition, Tarrant Member: Powell, J. Dan. 07780
- Trans-Pecos, Cephalopoda, ammonite zone, upper Albian: Young, Keith. 00496
- West-central, stratigraphy: Allen, Phillip. 11208
- Western, Upper, biostratigraphy: Wolleben, James A. 09325

United States

- Continental margin, northeastern, Late: Gibson, Thomas G. 05234
- Correlation, marine fossils, western interior, with Europe: Jeletzky, J. A. 01798
- Eastern coastal provinces, Upper, Reptilia: Gaffney, Eugene S. 01145
- Western Interior, Colorado Group, sedimentation, paleoecology: Kauffman, Erle G. 10877
- Western Interior, Gastropoda, assemblages, paleoecology: Sohl, Norman F. 10875
- Western Interior, paleoenvironments, symposium: Kauffman, Erle G. 10874
- Western, *Pisces*, actinopterygian, Niobrara Formation: Schaeffer, Bobb. 05716

Utah

- East-central, Panther Sandstone, structures: Howard, James D. 10309
- Garfield County, Straight Cliffs Sandstone, palynology: Orlansky, Ralph. 00858
- Northeastern, Upper, conformity with Tertiary: Catacosinos, Paul A. 00266
- South-central, Straight Cliffs Formation, coal beds: Peterson, Fred. 07840

Washington

- Stevens County, plutonic rocks, absolute age: Yates, Robert G. 05201

West Indies

- Bonaire, volcanic rocks, outcrop areas: Zonneveld, J. I. S. 07046

Cretaceous—Continued

Worldwide

- Paleotemperatures: Lowenstam, H. A. 04688

Wyoming

- Lance area, palynology, Lance-Fort Union Formations: Leffingwell, Harry A. 07933
- Osage area, Mowry Shale, Reptilia: Romer, Alfred Sherwood. 01484
- Ostracoda, Bear River Formation, *Metacypis*, synonyms: Pinto, Iraj Damiani. 10772
- Powder River basin, Fall River Sandstone sedimentation: Berg, Robert R. 05720
- Pteridophytes, Frontier Formation: Rushforth, Samuel R. 06140
- Wind River basin, stratigraphy: Paape, Donald W. 02141

Crinoidea

Allagecrinus, n.spp.

- Mississippian, Illinois, Kentucky, Chester Series, ontogeny, phylogeny: Gutschick, Raymond C. 05674

Ameliacrinus benderi, n.gen. n.sp.

- Devonian, Ohio, northwestern, Silica Formation, archaeocrinid: Kesling, Robert V. 06941

Collecting

- Illinois-Iowa, Burlington Limestone: Good, Donald L. 01846

Eucalyptocrinites

- Silurian, Indiana, Tennessee, ontogeny, regression analysis: Macurda, Donald B., Jr. 05740

Eucalyptocrinus foerstei

- Silurian, Kentucky, Brassfield Limestone, Estill County: Jillson, Willard Rouse. 07855

Gennaecrinus chilmanae n.sp.

- Devonian, Michigan, southeastern, Silica Formation: Kesling, Robert V. 06939

Logocrinus conicus, n.sp.

- Devonian, Michigan, Bell Shale, scytalocrinid: Kesling, Robert V. 06942

Mississippian

- Illinois, Iowa, Burlington Limestone: Good, Donald L. 01846

Morphology

- Allagecrinus*, Mississippian, growth stages, phylogeny: Gutschick, Raymond C. 05674

- Larval-adult orientation, living cf. fossil forms: Lane, N. Gary. 08776

- Proctothylacocrinus*, Devonian, Ohio, ontogeny: Kesling, Robert V. 06940

- Regression analysis, growth series, *Euclyptocrinites*: Macurda, Donald B., Jr. 05740

Ordovician

- Camerate, growth patterns: Brower, James C. 08627

Paracromyocrinus marquisi

- Pennsylvanian, Oklahoma, Savanna Formation, description: Strimple, Harrell L. 00042

Pennsylvanian

- Illinois, LaSalle Formation, colony: Earth Science. 01844

- Utah, Oquirrh Formation, Utah County, Morrowan fauna: Washburn, Alan T. 06141

Permian

- Nevada, Arrow Canyon Range, Battlefield Wash: Webster, G. D. 10127

Plummericrinus, n.spp.

- Pennsylvanian, Ohio-Pa.-W. Va., Conemaugh Group: Burke, J. J. 04331

Porocrinidae

- Ordovician, morphology, taxonomy: Kesling, Robert V. 00807

Crinoidea—Continued

Porocrinus

Ordovician, Middle and Upper, North America, n.spp.: Kesling, Robert V. 00807

Proctothylacocrinus esseri

Devonian, Ohio, Silica Formation, ontogeny: Kesling, Robert V. 06940

Synbathocrinus melba

Pennsylvanian, Oklahoma, Wann Formation: Strimple, Harrell L. 04341

Triboloporus, n.gen.

Ordovician, Middle and Upper, North America, n.spp.: Kesling, Robert V. 00807

Crust

Alberta

Structure, magnetic, seismic, gravity data: Kanasewich, E. R. 05063

Atlantic Ocean

Mid-Atlantic ridge, petrologic model: Melson, William G. 10782

Puerto Rico Trench, north slope: Chase, R. L. 09502

British Columbia

Elastic-wave velocities, interpretation: White, W. R. H. 04670

California

Sierran highland region, velocity-density relations: Thompson, George A. 08337

Structure, Diablo and Gabilan Ranges, San Andreas fault area, seismic surveys: Stewart, Samuel W. 04055

Canada

Evolution, Canadian Shield: Goodwin, A. M. 05066

Thickness, physical properties, Hudson's Bay area: Weber, J. R. 05476

Colorado

Electrical prospecting: Mines Magazine. 07762

Composition

Continental, method, evaluation: Turekian, Karl K. 08037

Continental, relation to andesite: Taylor, S. R. 08031

Exploration, clues, textbook: Phillips, O. M. 00561

Gold: Jones, Robert S. 04502

Isotopic, strontium, lead, evolution, recycling in mantle: Armstrong, Richard Lee. 01102

Layer 3, basaltic: Oxburgh, E. R. 00515

Precambrian shields, worldwide uniformity: Anhaeusser, C. R. 07331

Velocity layers, basalt data: Manghnani, Murli. 04664

Costa Rica

Nicoya complex, oceanic: Henningsen, Dierk. 09583

Deformation

Asteroid impact: Cohenour, Robert E. 00371

Cause, mantle rotation: MacNeil, F. Stearns. 02845

Continental, oceanward spreading, North America: Bostrom, R. C. 01523

Convection, transfer from large to small cells: Menard, H. W. 05869

Geodetic measurement, model: Whitten, Charles A. 10855

Glacial bending, North America, Greenland: McGinnis, Lyle D. 01906

Glacial loadings, unloading, shifting Moho: Wolfe, C. W. 09954

Paleozoic lithofacies and faunal evidence: Boucot, Arthur J. 05894

Crust—Continued

Deformation—Continued

Recent, symposium, 1968, Leningrad: Markowitz, William. 03882

United States, Cordilleran orogen, shortening: Burchfiel, B. C. 06113

Evolution

Canadian Shield: Fahrig, W. F. 05447

Canadian Shield, history: Goodwin, A. M. 04715

Implications from lunar highland composition: Lowman, Paul D., Jr. 00041

K-Rb fractionation in igneous rocks, covariance analysis: Shaw, D. M. 02355

Magmatic differentiation, variable factors, checklist: Middlemost, Eric A. K. 05647

Oceanic, transformation from continental: Belousov, V. V. 04662

Oceanic vs. continental, elastic wave data: Drake, Charles L. 04665

Paleozoic lithofacies and faunal evidence: Boucot, Arthur J. 05894

Precambrian, chelogenic cycles, North America-Europe: Sutton, John. 02571

Rate, relation to Rb, K, Sr abundance: Hurley, P. M. 03927

Symposium, 1966, Goddard Inst. Space Studies: Phinney, Robert A. 05884

Symposium, 1966, Goddard Inst. Space Studies, closing review: Bullard, E. C. 05887

Theories, history and premises: Phinney, Robert A. 05885

Washington, Okanogan Range, compositional trends: Hawkins, James W., Jr. 08724

Experimental studies

Dynamic metamorphism, energy conversion to heat: Reitan, Paul H. 05644

Love waves, excitation functions: Chang, Andre Chichao. 05498

Magma generation, limits: Boettcher, A. L. 00463

General

Precambrian, early, characteristics: Clifford, Paul M. 09761

Upper Mantle Project symposium, 1966, Pacific area: Knopoff, Leon. 04674

Hawaii

Ridge, trench, and rise, geophysical studies: Woollard, George P. 07975

Structure, relation to volcanic processes: Ryall, Alan. 02360

Thickness, composition, Hawaiian Ridge: Jackson, E. D. 05064

Minnesota

Keweenaw province, structure, seismic study: Farnham, Paul Rex. 02630

Montana

LASA, structural variations: Glover, Peter. 10544

Structure, lateral variation, geophysical data: Glover, Peter. 00042

North America

Electrical conductivity, water saturation effect: Hyndman, R. D. 02984

North Carolina

Thickness: Nation, J. B. 10543

Pacific Ocean

Middle America trench: Heacock, John G. 08463

North-central, model: Helmberger, Donald V. 10561

Physical properties

Electrical conductivity, continental areas, water effect: Hyndman, R. D. 02984

Crust—Continued*Physical properties—Continued*

Electromagnetic propagation, mathematical model: Schwering, Felix K. 01679

Exploration, clues, textbook: Phillips, O. M. 00561

Seismic data interpretation, CaO content effect: Soga, Naohiro. 09471

Shear strength, relation to stress drop in faulting: Berg, C. A. 00656

Short-period P-waves, Alberta: Ellis, R. M. 04829

Processes

Magmatic differentiation, variable factors, checklist: Middlemost, Eric A. K. 05647

Puerto Rico

Evolution, Las Palmas basal complex: Tobisch, Othmar T. 01657

Structure

Alaska, central interior, seismic profile: Hanson, Kenneth. 04827

Atlantic Ocean, northern: Orlenok, V. V. 09443

Bering Sea, transition to mantle: Helmberger, Donald V. 00378

Elastic waves, oceanic model, seismic response: Helmberger, Donald V. 08279

Lake Superior region, 1963 seismic experiment, reinterpretation: O'Brien, P. N. S. 00516

Lateral variation, Montana: Glover, Peter. 00042

Love waves, excitation functions: Chang, Andre Chichao. 05498

Mantle convection: Keith, M. L. 04117

Midoceanic ridge system: Talwani, Manik. 07997

Missouri, Bowling Green area to Tennessee, Memphis area: Phelan, Michael. 08363

Missouri, northern and southern, refraction profiles: Stewart, S. W. 00480

North America, Mould Bay to Tucson, seismic profile: Wickens, A. J. 05455

Ocean-continent transition, seismic velocity data: Drake, Charles L. 04665

Ocean-continent transition zone, seismic data: Kosminskaya, I. P. 04668

Ontario, magnetic anomalies: Hall, Donald H. 05475

Pacific Ocean, Hawaiian Islands area: Helmberger, Donald V. 00040

Precambrian shields, worldwide uniformity: Anhaeusser, C. R. 07331

Sedimentary rock deformation, relation to basement rocks: Prucha, John James. 05995

Static or mobile, general theory: Wilson, J. Tuzo. 05087

United States, central: Green, R. W. E. 00476

United States, relation to mantle, gravity effect: Woollard, George P. 04657

Virginia, Narrows area, Eastern Tennessee model: Bollinger, G. A. 06731

Virginia-North Carolina, continental shelf: Hales, A. L. 02015

Temperature

Mechanical energy, conversion to heat, models: Reitan, Paul H. 10635

Theoretical studies

Time-dependent vertical loading: Campbell, David L. 10632

Thickness

Determination, elastic waves: Ibrahim, Abou-Bakr K. 08288

Hawaiian arch, trench, ridge: Furumoto, Augustine S. 04666

Crust—Continued*Thickness—Continued*

Pacific Ocean, off Oregon, California: Shor, G. G., Jr. 00653

United States

Idaho-Oregon-Tufts Abyssal Plain, thickness: Dehlinger, P. 03623

Plutons, mineral belts, western: Landwehr, W. R. 07687

Structure and thickness, middle-Atlantic States: James, David E. 00650

Thickness, central: Fernandez, Luis M. 00954

Wisconsin

Keweenaw province, structure, seismic study: Farnham, Paul Rex. 02630

Crustacea*Pennsylvanian*

Illinois, Mazon Creek area: Schram, Frederick R. 11004

Quaternary

Florida, Bahamas, burrows in marine sediments: Shinn, Eugene A. 05767

Cryptoexplosion structures*Arizona*

Garnet Ridge: Gavasci, Anna T. 07634

General

Deformational microstructures, cf. meteor craters: Bunch, T. E. 07457

Kentucky

Jeptha Knob, origin: Seeger, C. Ronald. 04500

Labrador

Mistastin Lake depression, volcanic: Currie, K. L. 04997

Tennessee

Flynn Creek, genesis, meteoritic impact: Roddy, David J. 08504

Wells Creek Basin structure, meteor impact model: Wilson, Charles W., Jr. 07995

Wells Creek structure: Wilson, Charles W., Jr. 11374

Texas

Sierra Madera, central uplift, shatter cones: Howard, Keith A. 11306

Sierra Madera, structural pattern in central uplift: Wilshire, H. G. 04305

Sierra Madera, structure: Wilshire, H. G. 11129

United States

Central, structural controls: Heyl, Allen V. 09395

Midcontinent region: Snyder, Frank G. 02478

Crystal chemistry*Adularia*

Bond lengths and angles, atomic parameters: Colville, Alan A. 02208

Amphibole

Cation site disorder: Gibbs, G. V. 07426

Ferro-magnesian: Finger, Larry Wayne. 02619

Summary: Ernst, W. G. 01771

Annealing

Sulfides: Stanton, R. L. 07637

Apatite: McClellan, Guerry H. 08797

Carbonate substitution: LeGeros, Racquel Z. 09420

Carbonate substitution: LeGeros, Racquel Z. 04449

Carbonate substitution: Simpson, Dale R. 08048

Commercial deposits, concentrates, table: Lehr, J. R. 06379

Structure in fossil bone cf. modern: Brophy, Gerald P. 05970

Substitution: Simpson, Dale R. 07517

Synthetic: Kreidler, Eric Russell. 01764

Crystal chemistry—Continued

- Augelite*
Basic aluminum phosphate: Araki, T. 06788
- Axinite*
Nomenclature, basis: Sanero, E. 06752
- Barite-celestite*
Solid solution series, frequency distribution of composition: Hanor, Jeffrey S. 06772
- Beryl*
Absorption measurements, visible, infrared, ultraviolet: Wood, D. L. 06456
Cesium: Evans, Howard T., Jr. 07713
Solid solution substitution: Frondel, Clifford. 06585
- Bonding*
Anion polarization: Pollard, C. O., Jr. 10333
- Cation distribution*
Binary solid solutions: Muan, Arnulf. 08028
- Chloritoid*
Absorption spectra, cause of pleochroism: Faye, G. H. 06769
- Clinoamphibole*
Exsolution, recrystallization textures: Ross, Malcolm. 10718
Pigeonite: Papike, J. J. 10719
- Clinopyroxene*
Bonding, isostructural with diopside: Clark, Joan R. 07078
Octahedral chains, rigidity: Clark, Joan R. 10720
- Cordierite*
Absorption spectra, cause of pleochroism: Faye, G. H. 06769
- Crocidolite*
Fe cations, distribution in structure: Burns, Roger G. 06581
- Europium*
Mafic rocks and meteorites: Philpotts, John A. 02603
- Eveite*
Isotopy with andalusite, olivinite: Moore, Paul B. 11330
- Faujasite*
Hydrated, Ca-exchanged: Bennett, J. M. 06307
La-exchanged: Bennett, J. M. 04789
- Ferroaxinite*
Nomenclature, basis: Sanero, E. 06752
- Fluorapatite*
Experimental: Mazelsky, R. 07581
- Fuchsite*
Transition metal ion sites, optical absorption spectra: Faye, G. H. 02168
- Gageite*
New Jersey, Franklin cf harstgite: Moore, Paul B. 09850
- Glaucophane*
Refinement: Papike, J. J. 06768
- Graftonite*
Compared with other divalent metal ion phosphates: Calvo, Crispin. 06374
- Harstgite*
Relation to gageite: Moore, Paul B. 09850
- Hedenbergite-ferrosillite series*
Synthetic, Mossbauer study: Dundon, Robert. 01542
- Heulandite*
Al substitution for Si: Merkle, A. B. 06766
- Hornblende*
Potassium and aluminum, crystal-chemical roles: Papike, J. J. 08834

Crystal chemistry—Continued

- Humite minerals*
Cation and anion substitutions: Ribbe, P. H. 09059
- K-Na solutions*
Two-phase region, analysis: Thompson, James B., Jr. 10721
- Kornerupine*
Crystallochemical formula: Moore, Paul B. 00086
- Lattice defects*
Replacement, susceptibility: McDougall, David J. 09430
- Lepidolite*
Transition metal ion sites, optical absorption spectra: Faye, G. H. 02168
- Leucite group*
Thermal expansion effect on tetrahedra: Taylor, D. 07571
- Magnetite*
Omission solid solution: Kullerud, G. 01578
- Manganaxinite*
Nomenclature, basis: Sanero, E. 06752
- Manganese minerals*
Optical absorption spectra, bonding: Keester, Kenneth L. 07423
- Manganese-bearing chain silicates*
Absorption spectroscopy: Manning, P. G. 03461
- Martitization*
Fabric and structural characteristics: Davis, B. L. 02447
- Metamorphic minerals*
Crystal-field stabilization energy, trace element distributions: Schwarcz, Henry P. 08071
- Muscovite*
Transition metal ion sites, optical absorption spectra: Faye, G. H. 02168
- Olivine*
Stability with spinel, structural basis: Kamb, Barclay. 07569
- Orthoclase*
Bond lengths and angles, atomic parameters: Colville, Alan A. 02208
- Phosphate minerals*
Divalent metal ion type: Calvo, Crispin. 06374
- Polarizability*
Rutile-type minerals, correlation with bond nature: Pollard, Charles Oscar, Jr. 00859
- Pyromorphite*
 XO_4^{3-} group symmetry and substitutions: Bhatnagar, Vijay Mohan. 07675
- Pyroxene*
Diopside, isotype, experimental study: Peacor, Donald R. 09558
Spodumene-type: Appleman, D. E. 07750
- Rhodizite*
General: Buerger, M. J. 07425
- Safflorite-loellingite series*
Solid solution substitution: Radcliffe, Dennis. 11243
- Scandium*
Trace element, diadochic relation to 6-coordinated (Fe, Al): Frondel, Clifford. 09649
- Serpentine*
Crystal structure analysis: Jahanbagloo, I. Cyrus. 02211
- Silicates*
Analysis, structure theory: Huggins, Maurice L. 04348
Sheet, iron position in lattice, pleochroism: Faye, G. H. 03448

Crystal chemistry—Continued

Skutterudite

General: Nickel, Ernest H. 03598

Sphalerite

Iron-bearing: Keys, J. D. 03753

Mixed-ion doping, absorption studies: Manning, P. G. 03457

Spinel

Order-disorder: Datta, R. K. 07570

Stability with olivine, structural basis: Kamb, Barclay. 07569

Staurolite

Refinement: Smith, J. V. 06767

Sulfospinel

Physical properties: Tressler, Richard Ernest. 03033

Techniques

Nuclear magnetic resonance: Proctor, Warren G. 09008

Tinzenite

Nomenclature, basis: Sanero, E. 06752

Tourmaline

Absorption spectra, cause of pleochroism: Faye, G. H. 06769

Valleriite

Brucite-like, sulfide layers: Evans, Howard T., Jr. 09647

Vivianite

Absorption spectra, cause of pleochroism: Faye, G. H. 06769

Walstromite

Si_2O_6 rings, bond distances and angles: Dent Glasser, L. S. 02201

Wollastonite

High-pressure polymorph, synthetic: Trojer, Felix J. 03519

Zeolites

Faujasite, Ca-exchanged: Bennett, J. M. 03715

Faujasite-type framework: Bennett, J. M. 04789

Zinnwaldite

Ferric, ferrous ion substitution for Al: Herzenberg, C. L. 03160

Crystal structure

Adularia

Unit-cell parameters: Colville, Alan A. 02208

Alamosite: Boucher, M. L. 09555*Alkaline-earth silicate*

Pseudowollastonite structure: Prewitt, C. T. 08093

Allactite

Basic manganese arsenate: Moore, Paul B. 06466

Amarantite: Susse, P. 09652*Amphibole*

Ferro-magnesian: Finger, Larry Wayne. 02619

Analysis

Absolute structure amplitudes, Patterson function: Goldak, George Robert. 00852

Clinographic outline by means of matrices: Fabregat, Francisco J. 09529

History of development: Ryba, Earle. 01661

Ion bombardment, camera and ancillary equipment: Cunningham, R. L. 09116

Lattice parameter refinement, capabilities, limitations: Burnham, Charles W. 08633

Models, microwave diffraction, teaching analog for X-ray diffraction: Connelly, John J. 10816

Nuclear magnetic resonance, quadrupole effects: Brinkmann, Detlef. 09011

Unit-cell refinement, powder pattern indexing, computer techniques: Appleman, D. E. 08605

Crystal structure—Continued

Analysis—Continued

X-ray diffraction, lattice spacings, particle-size effect: Reynolds, Robert C., Jr. 00939

X-ray diffraction methods, textbook: Nuffield, E. W. 11204

Anorthite

Out-of-step domains, boundary orientations: Ribbe, Paul H. 09052

Anorthoclase

Heating effects, reverse changes at room temperature: Bahat, Dov. 03652

Apatite

Maryland, ultramafic body: Southwick, David L. 02716

Ardennite

Relation to epidote: Donnay, Gabrielle. 01574

Si_3O_{10} groups: Donnay, Gabrielle. 02559

Arsenides

Stability, ligand field theory: Nickel, Ernest H. 03447

Augelite

California, Mono County: Araki, T. 06788

 β spodumene

Tetragonal: Li, Chi-Tang. 09553

Bannisterite: Smith, Marie Lindberg. 09057*Beryl*

Cesium: Evans, Howard T., Jr. 07713

Synthetic, refinement, anhydrous and hydrous: Gibbs, G. V. 05645

Bikitaite

North Carolina, King's Mtn.: Leavens, Peter B. 06770

Borax

Refinement: Giese, Rossman F., Jr. 03588

Brazilianite: Finney, J. J. 08687*Chlorophoenicite*: Moore, Paul B. 06740*Chrysotile*

Cylindrical lattice defects: Frueh, Alfred J., Jr. 08698

Cylindrical lattice, X-ray diffraction profile: Toman, K. 02061

Clinoamphiboles

Exsolution, metamorphic rocks: Ross, Malcolm. 00177

Clinopyroxene

Bonding, isostructural with diopside: Clark, Joan R. 07078

Clinozoisite

Refinement, cf. zoisite: Dollase, W. A. 07545

Coal

X-ray diffraction patterns: Ergun, Sabri. 07012

Cordierite

Polymorphism: Meagher, Edward Patrick. 01706

Tetrahedral magnesium: Meagher, E. P. 08802

Diaboleite

Synthetic: Winchell, R. E. 09058

Emerald

Synthetic, refinement, anhydrous and hydrous: Gibbs, G. V. 05645

Enargite

Refinement: McLean, Willis John. 06517

Eucryptite

North Carolina, King's Mtn.: Leavens, Peter B. 06770

Eveite

Isotopy with andalusite, olivinite: Moore, Paul B. 11330

Feldspar

Alkali, unit-cell parameters, computer refinement: Wright, Thomas L. 02224

Crystal structure—Continued

Feldspar—Continued

Alkali, unit-cell parameters, computer refinement: Wright, Thomas L. 02225

Ferrosilite

Synthetic: Burnham, Charles W. 07776

Fluorophlogopite

Synthetic: McCauley, J. W. 08796

Framework structures

Four-, eight-membered rings: Smith, J. V. 09050

Ganophyllite: Smith, Marie Lindberg. 09057

Germanate

Pseudowollastonite structure: Prewitt, C. T. 08093

Gersdorffite

Temperature effects: Bayliss, P. 03611

Glaucophane

Refinement: Papike, J. J. 06768

Graftonite

Compared with other divalent metal ion phosphates: Calvo, Crispin. 06374

New Hampshire, Grafton area: Calvo, C. 06463

Grossularite-spessartite

Solid solution series, synthesis: Ito, Jun. 06449

Halite

Defects, origin: Shlichta, Paul J. 01115

Hemihedrite

Arizona: Anthony, John W. 10200

Cell dimensions: McLean, Willis John. 06517

Heulandite

Refinement: Merkle, A. B. 06766

Statistical analysis: Merkle, Arthur Beiser. 01707

Ice

Hexagonal and cubic forms at low temperatures: Kumai, Motoi. 00349

Joessmithite: Moore, P. B. 09053

Kaersutite

Unit cell dimensions, Arizona: Mason, Brian. 09062

Kobellite

Unit cell: Harris, D. C. 11295

Kornerupine

Analysis, three-dimensional: Moore, Paul B. 00086

Leucite

High temperature diffractometer study: Peacor, Donald R. 09651

Lizardite

Single layer: Krstanovic, Ilija. 09557

Magnesium silicate

Olivine, spinel forms, stability, structural reasons: Kamb, Barclay. 08758

Magnetite

Omission solid solution: Kullerud, G. 01578

Manganese layer silicates

Comparison: Wuensch, Bernhard J. 09625

Martite

X-ray diffraction analysis: Davis, B. L. 02447

Melanostibite: Moore, Paul B. 06775

Mica

Basal spacing, potassium uptake, effects: Weed, S. B. 02270

Diocahedral, stacking sequences, mechanism: Guven, N. 01576

Models

Tetrahedra, construction: Gibbs, G. V. 07558

Muscovite

Compared with phengite: Guven, N. 01575

Refinement: Birle, John D. 09055

Nissonite

California, Franciscan Formation: Mrose, Mary E. 07831

Crystal structure—Continued

Oligoclase

Refinement, North Carolina: Colville, A. A. 11234

Olivine

Cell dimensions, regression analysis: Louisnathan, S. J. 09063

Forsterite, hyalosiderite, hortonolite, fayalite: Birle, J. D. 06460

Omphacite

Refinement, cation ordering: Clark, Joan R. 06462

Organic materials

X-ray diffraction patterns: Ergun, Sabri. 07012

Orthoclase

Refinement: Colville, Alan A. 02208

Parahopeite: Kumbasar, Isik. 09049

Parawollastonite: Trojer, Felix J. 09653

Pharmacosiderite

Zeolitic characteristics: Buerger, M. J. 07755

Phengite

Compared with muscovite: Guven, N. 01575

Phosphate minerals

Divalent metal ion type: Calvo, Crispin. 06374

Physical properties, differences: Young, R. A. 06375

Pigeonite

Refinement: Morimoto, N. 01577

Prehnite

Tetrahedral Al ordering: Papike, J. J. 07859

Pyrochlore

Quebec, Oka area, relation to composition: Perault, Guy. 03459

Pyroxene

Diopsidic, isotype, experimental study: Peacor, Donald R. 09558

Jadeite-acmite, synthetic, cell parameters: Gilbert, M. C. 01545

Spodumene-type: Appleman, D. E. 07750

Pyrrhotite

Synthetic, lattice parameters: Fleet, M. E. 07544

Synthetic, superstructures: Fleet, M. E. 05480

Quartz

Chert aggregates, cell parameters, physical-chemical relations: Kneller, William A. 08766

Deformation, meteorite impact: Carter, Neville L. 01090

Senaite

Relation to magnetoplumbite, davidite: Rouse, Roland C. 07005

Serendibite

Space group and cell dimensions, New York: Susse, P. 01596

Shattuckite

Pyroxenelike silicate chain: Evans, Howard T., Jr. 07714

Silicates

Sheet, iron position in lattices, pleochroism: Faye, G. H. 03448

Sphalerite

Colloform texture, interpretation: Roedder, Edwin. 04230

Sphene

Synthetic, cf. natural: Robbins, C. R. 03714

Spinel

Ferromagnesian, lattice parameters, pressure dependence: Mao, Ho-kwang. 02973

Spodumene

High-quartz solid solution: Li, Chi-Tang. 09654

Staurolite

Refinement: Smith, J. V. 06767

Crystal structure—Continued

- Stilpnomelane*: Smith, Marie Lindberg. 09057
- Sulfides*
Stability, ligand field theory: Nickel, Ernest H. 03447
- Sulfoborite*: Giese, R. F., Jr. 10899
- Tamarugite*: Robinson, Paul D. 08856
- Tellurite*
Zeolite-type, Mexico, Sonora, Moctezuma area: Matzat, Eckhart. 10909
- Tetrahydrates*
Fluoride, sulfate, cell dimensions: McLean, Willis John. 06517
- Tintinaite*
Unit cell: Harris, D. C. 11295
- Titanium dioxide polymorphs*
Pressure-temperature relations: Simons, Philip Y. 08047
- Titanium-oxide minerals*
Polymorphism: Simons, Philip Yale. 01708
- Tridymite*
Meteoritic: Dollase, Wayne A. 07763
- Triplite*
Colorado, Fremont County, pegmatite: Waldrop, L. 01675
- Triploidite*
Measurements: Waldrop, L. 02512
- Vallerite*
Brucite-like, sulfide layers: Evans, Howard T., Jr. 09647
- Vauxite*
Relation to composition: Baur, W. H. 06447
- Veatchite*: Clark, Joan R. 07322
- Walstromite*
Unit-cell parameters: Dent Glasser, L. S. 02201
- Wavellite*: Araki, Takaharu. 08226
- Wickenburgite*
New mineral, Arizona: Williams, Sidney A. 07568
- Wollastonite*
High-pressure polymorph, synthetic: Trojer, Felix J. 03519
- Zinnwaldite*
Octahedral ordering: Rieder, Milan. 01930
- Zircon*
Computer analysis: Greenwood, William R. 00425
- Zoisite*
Refinement, cf. clinozoisite: Dollase, W. A. 07545

Crystallography*History*

- Research, contributions of M. J. Buerger: Azaroff, Leonid V. 09644

Instruments

- Lapping machine attachment, oriented crystals: Johnson, Donald E. 09233

Methods

- Computer analysis: Greenwood, William R. 00425
- History of development: Ryba, Earle. 01661
- Interfacial angles, matricial calculation, computer program: Fabregat, Francisco J. 09222
- Ion bombardment, equipment, projection: Cunningham, R. L. 09116
- Kossel and divergent X-ray beam techniques, tetragonal and hexagonal systems: Lutts, A. 04754
- Lattice distortions, X-ray double-crystal technique: Chikawa, Jun-ichi. 04757
- Model construction, framework tetrahedra: Gibbs, G. V. 07558

Crystallography—Continued*Methods—Continued*

- Single-crystal alinement, polaroid adapter for Weissenberg goniometer: Rudman, Reuben. 04574
- Space group models, stereoviews: Frank, Albert J. 07728
- Triclinic crystals, precession methods: Barnes, W. H. 09646
- X-ray diffraction analysis, textbook: Nuffield, E. W. 11204
- X-ray diffraction, powder data file, proposed universal intensity scale: Scott, R. K. 09122
- Symmetry*
Kink bands, genesis: Starkey, John. 05268
- Textbooks*
X-ray, college level: Azaroff, Leonid V. 01822
- Twinning*
Cleavelandite, albite: Fisher, D. Jerome. 07562
- Cross, marcasite transition to pyrite, mechanism: Kullerud, G. 01580
- Dauphine, quartz, microtwinning, light scattering: Shapiro, S. M. 04783
- Deformation twins, wedge dislocation model: Armstrong, R. W. 04074
- Growth factors: Carstens, Harald. 02227
- Growth factors: Donnelly, Thomas W. 02226

Cuba*Areal geology*

- Oriente Province, northwestern: Kozary, Myron T. 05749

Economic geology

- Kaolin, Isle of Pines: Pokryshkin, V. I. 04703

Geomorphology

- Grand Cavern of Saint Thomas, hollow stalagmites, genesis: Nemec, Frantisek. 02823
- Karst, mogotes, development: Gerstenhauer, A. 03676
- Karst, mogotes, development: Lehmann, H. 03677
- Karst, mogotes, development, control: Panos, Vladimir. 03747
- Limestone landscapes, exposed and covered, vertical differences: Panos, Vladimir. 02827

Maps, geologic

- Sierra de Nipe, southern: Kumpera, Otakar. 07896

Maps, geomorphologic

- Karst, extent and types: Panos, Vladimir. 03747
- Madrugá-Limonar Highlands, eastern: Panos, Vladimir. 03747
- Sierra de los Organos Mountains, western: Panos, Vladimir. 03747

Maps, tectonic

- Sierra de Nipe, southern: Kumpera, Otakar. 07896

Paleontology

- Aves, Pleistocene, Habana province, owl: Brodkorb, Pierce. 08052

Stratigraphy

- Cretaceous-Eocene, Sierra de Nipe, southern: Kumpera, Otakar. 07896
- Tertiary, correlation, presence of Oligocene: Iturralde-Vinent, Manuel A. 00559

Structural geology

- Central, diapirs, evaporites, genesis: Meyerhoff, A. A. 03356
- Sierra de Nipe, southern, tectonic history: Kumpera, Otakar. 07896

Weathering

- Limestone areas, crust and coating formation: Panos, Vladimir. 02827

Cystoidea

- Adocetocystis williamsi*, n.gen., n.sp.
Devonian, Iowa, Shell Rock Formation: Koch,
Donald L. 09847

Caryocrinites

- Silurian, ambulacra, brachioles, arrangement:
Sprinkle, James. 10935

Deformation*Experimental studies*

- Annealing, sulfides: Stanton, R. L. 07637
Brittle-ductile transition in rocks: Byerlee,
James D. 02364
Compression, dynamic, clays, flow law: Yong, R.
N. 07722
Compression, dynamic, clays, shearing properties:
Olson, R. E. 07707
Compression, rocks, microfracturing and in-
elasticity: Scholz, C. H. 00282
Compression, sand, theoretical model vs. natu-
ral: Parkin, Alan K. 00128
Creep, brittle rock: Scholz, C. H. 01061
Elasticity, model, borehole probe test, instru-
ment: Nichols, Thomas C., Jr. 04005
Elasticity, shock-wave research: Duvall, George
E. 07410
Energy dissipation in soft clay: Krizek, Raymond
J. 07717
Failure, granodiorite, shocked and normal: Giar-
dini, A. A. 11285
Failure, model, granite, dolomite, salt: Cherry, J.
T. 11414
Fracture, brittle, photoelastic study: Bom-
bolakis, E. G. 07063
Fracture, hydraulic pressure induced, azimuth,
orientation: Pegler, A. V. 11169
Fracture strength, fluorescent dye penetrant
method: Gardner, R. D. 01620
Fracturing, explosive action, mechanism: Saluja,
Sunder S. 11167
General, dynamic behavior of rock masses: Am-
braseys, N. N. 11006
Granular soil, mathematical model: Stoll, Robert
D. 07724
Intergranular flow, quartz and quartzite: Heard,
Hugh C. 00274
Limestone, syenite, pressure effect on thermolu-
minescence: Morency, Maurice. 03966
Mechanism, creep, mantle: McKenzie, Dan P.
05896
Mechanism, creep, rate, process theory, soils:
Mitchell, James K. 00133
Mechanism, creep, soils: Singh, Awtar. 00131
Mechanism, creep, websterite: Eaton, Jerome F.
10612
Mechanism, enstatite, shear strengths: Riecker,
Robert E. 08054
Mechanism, faulting, differential compaction of
sediments: Carver, Robert E. 00913
Mechanism, halite: Heard, H. C. 10611
Mechanism, halite, slip, polygonization: Carter,
N. L. 10610
Mechanism, itacolumite, flexibility, loose-grain
model: DeVries, R. C. 09251
Mechanism, limestone shear strength, jacket-
cell tests: Ladanyi, B. 09417
Mechanism, microfracturing in brittle rock:
Scholz, C. H. 02298
Mechanism, microfracturing, similarity to
earthquakes: Scholz, C. H. 00482
Mechanism, phyllite, quartz-rich layers, folds,
boudinage: Paterson, M. S. 01891

Deformation—Continued*Experimental studies—Continued*

- Mechanism, plastic flow, olivine: Raleigh, C. B.
03216
Mechanism, quartz, slip lamellas: Christie, J. M.
10618
Mechanism, rock failure, microscopic, calcite
cleavage surface energy: Santhanam, A. T.
02353
Mechanism, steady-state flow, Yule marble:
Heard, H. C. 10613
Meteorite craters, structures: Quaide, William
L. 08095
Moduli, compressibility, calcite: Meyer, H. O. A.
10722
Moduli, compressibility, synthetic aggregates:
Brace, W. F. 10644
Moduli, shock compressibility, olivine in
meteorites: Carter, N. L. 03211
Quartz, shock pressures to 150 kb: Horz,
Friedrich. 11305
Rock salt, thermal effects: Lomenick, T. F.
07946
Shear modulus, sand, vibration amplitude effect:
Drnevich, V. P. 07723
Shear strain, repeated triangulation: Cabaniss,
G. H. 10389
Shock loading, destructive stresses: Rinehart,
John S. 07411
Shock loading, quartz, deformation, mechanism:
Horz, Friedrich. 07496
Shock loading, rocks, minerals, micro-effects:
Short, Nicholas M. 07495
Static P-V curves, to 40 kb, basalt: Stephens, D.
R. 07413
Statistical methods, factor analysis, correlation
of properties: Mutmansky, Jan M. 11163
Strain, secular recording, seismograph: Bostrom,
R. C. 05104
Strain, transformation constants, determination:
Howard, J. H. 02448
Strength, basalt in vacuum: Krokosky, Edward
M. 00504
Strength, brittle material, point load testing:
Reichmuth, Donald R. 11162
Strength, compressive, diabase, water effect:
Simpson, Dale R. 09466
Strength, failure, salt, Louisiana: Short, N. M.
01117
Strength, granite, basalt, temperature and stress
rate effect: Kumar, A. 01503
Strength, granodiorite, triaxial stresses: Giardini,
A. A. 00894
Strength, mechanism, peridotite, quartzite: Lal-
lemant, H. G. Ave. 10617
Strength, polycrystalline rock, loading rate ef-
fect: Shoua, Ezra D. 07721
Strength, rock powders: Byerlee, James D.
10619
Strength, rocks, strain rates to 1000:sec: Green,
S. 10490
Strength, sand, new test method: Ko, Hon-Yim.
01836
Strength, shear, marine sediments, Gulf of Mex-
ico: Bryant, William R. 09340
Strength, strain measurement, borehole:
Hoskins, E. R. 05726
Strength, stress, crystalline rocks, low porosity:
Martin, R. J., 3d. 08792
Strength, stress near faults, model: Haycocks,
Christopher. 00844
Strength, time effects, variations: Donath, Fred
A. 07766

Deformation—Continued*Experimental studies—Continued*

- Stress, law of effective, crystalline rocks: Brace, W. F. 03804
- Stress, measurement in place, techniques: Agarwal, Ramkrishna. 11159
- Stress state, nonlinear rock, around vertical wellbore: Mahtab, M. A. 04800
- Stress, transmission, Cordilleran foreland: Sales, John K. 04513
- Stress, ultramafic tectonites: Raleigh, C. B. 10586
- Stress-strain-strength-consistency behavior, soils: Kondner, Robert L. 07726
- Techniques, barodynamic photostress: Wang, Chi-shing. 11404
- Translation gliding, rock salt: Schwerdtner, W. M. 03913
- Viscosity, saturated sand: Yen, Bing C. 07704
- Young's modulus, creep: Avedissian, Yeghishe Murad. 07151

Field studies

- Creep, California, San Benito County, San Andreas fault: Tocher, Don. 08339
- Dynamic loading, quartz alteration, characteristics: Carter, Neville L. 07490
- Elastic strain recovery, outcrops, measuring method: Preston, D. A. 10583
- Fracture, Colorado, Front Range, metamorphic rocks: Snow, David T. 03868
- Fracture, olivine surrounded by magnetite, Wyoming: DeVore, George W. 10894
- Instruments, laser extensometer, strain, Earth's surface: Vali, V. 07055
- Measurement technique, pack ice, Arctic drifting station: Senior, C. Ward. 09875
- Mechanism, creep, glacial till, Iowa: Lohnes, R. A. 08782
- Mechanism, flow lines, triclinic folded rocks: Howard, Keith A. 05209
- Mechanism, garnet, Ontario, Sudbury area: Dalziel, I. W. D. 02451
- Mechanism, salt, dolomite, Firtree Point anticline, New York: Prucha, John James. 06012
- Microfracture, Colorado, Pikes Peak granite: Norman, Carl Edgar. 02636
- Moduli, viscosity, tholeiitic lava: Shaw, H. R. 01039
- Recrystallization, quartzite, cross-girdle orientations: Sylvester, A. G. 04434
- Shock loading, quartz microstructures, Ontario, Brent Crater: Gold, D. P. 07459
- Shock loading, strain patterns, minerals, Canada: Robertson, P. B. 07489
- Shock loading vs. tectonic processes, microstructures: Bunch, T. E. 07457
- Strain, 3-dimensional homogeneous, Greenland: Watterson, Juan. 07646
- Strain, Kern River fault, California: Vali, V. 04364
- Strain, regional, determination, seismic method: Emery, C. L. 04859
- Strain, vertical and horizontal, vicinity of pumping wells: Peterson, Frank L. 07839
- Strength, ice, bubble coalescence: Weertman, J. 11369
- Strength, limestone in mine, California: Heuze, Francois E. 11164
- Strength, plasticity, salt, temperature effect: Heroy, William B. 01116
- Strength, sea ice, Arctic Ocean research: Peyton, H. R. 09873
- Stress, accumulation at depth, seismic method: Eisler, Joseph D. 04052

Deformation—Continued*Field studies—Continued*

- Stress, transmission, Cordilleran foreland: Sales, John K. 04513

Instruments

- Strain-meter transducer: Romig, Phillip. 08320
- Strain seismometer: Romig, Phillip R., Jr. 10258

Theoretical studies

- Compression curves, bulk modulus and pressure derivative compared: Chung, D. H. 11105
- Deformation diagram, fracture and fold analysis: Kupfer, Donald H. 05617
- Elastic shear compliances, hornblende, pyroxene: DeVore, George W. 08522
- Elasticity, residual body stresses: Voight, Barry. 08018
- Energy, conversion to heat, spatial: Reitan, Paul H. 05644
- Friction, attenuation in dry brittle rock: Brady, B. T. 11168
- Joint breakage indexes: McMahon, Barry K. 11161
- Loaded viscoelastic sphere: Campbell, David L. 10478
- Plasticity, low strain rates: Gordon, R. B. 10609
- Shear, diffusion law, dispersion of particles in ice: Weertman, J. 11370
- Shear strain, volume changes, quartz: DeVore, George W. 10295
- Shear stress, second-order parallel to tectonic B: DeVore, George W. 08523
- Strain analysis, analytical method: Howard, J. H. 05076
- Strain, analysis in rocks, brachiopod deformation: Chapple, William M. 03901
- Strain, analysis in rocks, brachiopod deformation: Hobbs, B. E. 11302
- Strength, effective stress, sediments, rocks: Hirschfeld, Ronald C. 11301
- Strength, elasticity, borehole stress-relief method: Barla, G. 01619
- Strength, fracture spacing as measure: Voight, Barry. 09726
- Stress, in situ, determination methods, analysis: Fairhurst, Charles. 10582
- Stress, measurement in boreholes: Barla, G. B. 11158
- Stress, measurement in boreholes: Gray, W. M. 11157
- Temperatures, frictional generation, mathematical models: Reitan, Paul H. 08087
- Twinning dislocations, wedge dislocation model: Armstrong, R. W. 04074
- Uniaxial compression, volume changes, quartz: DeVore, George W. 10296
- Young's modulus, creep: Avedissian, Yeghishe Murad. 07151

Delaware*Geomorphology*

- Bethany Beach, continental shelf, Coastal Plain, sand ridges: Moody, David W. 08204
- Lewes-Rehoboth Beach area, depositional environments, field trip: Kraft, John C. 03738

Hydrogeology

- Aquifer distribution, cross section: Kraft, John C. 08990
- Kent County, ground-water resources: Sundstrom, R. W. 09002
- New Castle County, Potomac Formation, aquifers, correlation: Jordan, Robert R. 02529

Paleontology

- Foraminifera, Holocene, Indian River Bay, distribution: Kraft, John C. 10810

Delaware—Continued*Paleontology—Continued*

Foraminifera, Holocene, Rehoboth Bay, sediment, distribution: Buzas, Martin A. 10994

Sedimentary petrology

Coastal area, Holocene sediments: Kraft, John C. 09415

Indian River Bay, Holocene, foraminiferal distribution: Kraft, John C. 10810

New Castle County, Potomac Formation, sand-clay variations: Jordan, Robert R. 02529

Stratigraphy

Cretaceous-Quaternary, cross section: Kraft, John C. 08990

Quaternary, Holocene sediments, coastal, transgressive facies: Kraft, John C. 09415

Deltas*California*

Klamath River delta, seismic profiles: Moore, George W. 02719

Construction

Simulation, automatic data processing: Bonham-Carter, Graeme. 06170

Cretaceous

Alabama-Georgia, Cusseta Sand, facies: Hester, Norman Curtis. 05518

Gulf Coastal Plain

Eocene system: Fisher, W. L. 09315

Gulf of California

Colorado River, tidal flat sedimentation: Thompson, Robert Wayne. 07021

Massachusetts

Concord, kame delta, ripple-drift cross-laminations: Jopling, Alan V. 06733

Sedimentation

Mathematical model, computer program: Bonham-Carter, G. F. 06789

Special features

Louisiana, Mississippi River, South Pass mouth, mudlumps: Morgan, James P. 09199

Mudlumps, Louisiana, Mississippi delta, genesis: Morgan, James P. 03244

Stratigraphy

Cyclothem: Westoll, T. S. 05870

New Jersey, Cretaceous: Owens, James P. 01403

Devonian*Alabama*

Elkmont quadrangle, Chattanooga Shale, stratigraphy: Kelley, James C. 08161

Limestone County, Chattanooga Shale: Daniel, Thomas W., Jr. 07645

Alaska

Boundary with Silurian, location: Churkin, M. 02831

Brooks Range, western, stratigraphy: Tailleur, I. L. 02971

Stratigraphy, paleogeography: Gryc, George. 03792

Yukon-Porcupine Rivers area, stratigraphy, paleontology: Churkin, Michael, Jr. 02888

Alberta

Carson Creek North oil field, Swan Hills Formation, reef complex: Leavitt, E. M. 05506

Conodonts, biostratigraphy: Pollock, C. A. 02195

Correlation, Elk Point Group, saline deposits: Gorrell, H. A. 01028

Correlation, Swan Hills Fm.: Fischbuch, N. R. 07343

Elk Point Group, Prairie Evaporites: DeMille, George. 01016

Goose River oil field, Beaverhill Lake Formation: Jenik, A. J. 00063

Devonian—Continued*Alberta—Continued*

Miette and Ancient Wall reef complexes:

Mountjoy, Eric W. 09435

Mount MacKenzie-Cardinal Mtn. area, stratigraphy: MacKenzie, W. S. 02892

Mountain Park area, Upper, stratigraphy: MacKenzie, W. S. 09677

Nipisi area, Watt Mountain Formation, Gilwood Member: Thachuk, Norman M. 06009

Nomenclature, correlation, Swan Hills area: Leavitt, E. M. 05525

Northern, stratigraphy, sedimentation: Richmond, William Oliver. 00862

Northwestern, Keg River Formation, Rainbow Member: Langton, J. Roger. 11314

Rainbow area, Middle, reef facies: Barss, D. L. 01324

Rocky Mountains, allochthonous carbonate debris flows: Pray, L. C. 01185

South-central, conodonts, Upper: Mound, Michael C. 02196

Stromatoporoidea, Ancient Wall carbonate complex: Stearn, Colin W. 02885

Swan Hills area, Beaverhill Lake Formation, elevation to Group: Leavitt, E. M. 05525

Swan Hills area, Swan Hills Fm., fauna: Fischbuch, N. R. 07343

West-central, conodonts, Upper, biostratigraphic zones: Mound, Michael C. 02896

West-central, Swan Hills Formation: Hemphill, Charles R. 01216

West-central, Swan Hills Reef, Beaverhill Lake Formation: Cameron, E. M. 01961

Anthozoa

Rugosa, individuals of colonies, variation controls: Oliver, William A., Jr. 05755

Appalachians

Basin, stratigraphy: Oliver, William A., Jr. 03162

Canadian, stratigraphy, paleontology: Cumming, L. M. 03163

Central, Helderberg Group: Head, James W., 3d. 09787

Northern, paleogeography: Boucot, A. J. 07139

Oriskany Sandstone, origin, diagenesis, fossil indicators: Seilacher, Adolf. 09611

Sedimentation, Catskill Formation: Allen, J. R. L. 03441

Arizona

East-central, stratigraphy, paleogeography: Pine, Gordon Leroy. 04542

Flora: Canright, James E. 04386

Nomenclature, central: Teichert, Curt. 06037

Arkansas

Brachiopoda, *Dicoelosia*, value changes: Am-sden, Thomas W. 07746

Scranton-New Blaine quadrangles, stratigraphy: Haley, Boyd R. 05972

Brachiopoda

Appalachian Province, zonation, Early: Boucot, A. J. 02968

Chonetacea, taxonomy, phylogeny: Boucot, A. J. 00491

Famennian, biostratigraphic zoning: Sartenaer, P. J. M. J. 02878

Lower and Middle, faunal provinces: Boucot, A. J. 02915

British Columbia

Northeastern, stratigraphy: Bamber, E. W. 05743

Northeastern, stratigraphy: Griffin, D. L. 11014

Devonian—Continued

British Columbia—Continued

Pisces, Nahanni Formation, new osteolepidid:
Jessen, H. 06691

California

Klamath Mountains, metamorphism, absolute
age: Lanphere, Marvin A. 02688

Canada

Nomenclature, Hudson Bay Lowlands, new for-
mations: Sanford, B. V. 04265

Northwestern, Anthozoa: Crickmay, C. H.
04157

Northwestern, mainland, Graptolithina, bio-
stratigraphy: Lenz, A. C. 02832

Plains, west of Shield, stratigraphy: Bassett, H.
G. 03179

Western, Brachiopoda, new and redescribed,
sections: Crickmay, C. H. 01699

Western, Muskeg Formation, carbonate-
evaporite facies: Klingspor, A. M. 01172

Colorado

Correlation: Baars, D. L. 00181

West-central, Parting Formation: Campbell,
John A. 02871

Western, biostratigraphy: Pampe, William Riley.
04541

Colorado Plateau

Correlation: Baars, D. L. 00181

General

Symposium, 1967: Oswald, D. H. 09444

Georgia

Floyd County, Frog Mountain Sandstone, Inver-
tebrata: Nunan, Walter Edward. 00890

Graptolithina

Evolution, stratigraphy and paleogeography:
Boucek, Bedrich. 02969

Idaho

Lemhi Range, Pisces, Jefferson Fm.: Denison,
Robert H. 07168

Tectonics, overthrusting: Mapel, William J.
05184

Illinois

Southern, stratigraphy, Middle shales: Grimmer,
John C. 06723

Western, Devonian-Mississippian boundary:
Conkin, James E. 08649

Indiana

Bunker Hill, gastropod operculum: Solem, Alan.
05676

Conodonts, Middle-Upper boundary, correla-
tion, n.spp.: Orr, R. William. 05772

Michigan basin, Conodonts, Middle: Orr, Robert
William. 01737

New Albany Shale: Lineback, Jerry A. 03779

Northern, Detroit River Formation: Doheny,
Edward John. 01727

Southern, North Vernon Limestone, Beechwood
Member: Orr, R. William. 05761

Iowa

Cystoidea, Shell Rock Formation, new: Koch,
Donald L. 09847

East-central, Wapsipinicon Formation, Bertram
Member: Church, Norman K. 06645

Echinoidea, Lime Creek Shale, cidarid: Kier,
Porter M. 05711

Franklin County, conodont, Sheffield Forma-
tion: Anderson, Wayne I. 03627

Southeastern, fossils, problematic, Maple Hill
Shale: Davis, Richard Arnold. 10893

Springville quarry, Lime Creek Shale, cavern
fill: Dorheim, Fred H. 06642

Winneshiek County, palynomorphs, Cedar Val-
ley Formation: Urban, James B. 05017

Devonian—Continued

Kentucky

Louisville area, Silurian-Devonian contact, ero-
sion: Freeman, Tom. 10103

Northern, North Vernon Limestone,
Beechwood Member: Orr, R. William. 05761

Pulaski County, stratigraphy: Helton, Walter L.
04182

Maine

Merrimack synclinorium, stratigraphy: Osberg,
P. H. 07245

Northern, pteridophytes: Andrews, Henry.
02346

Northern, pteridophytes: Andrews, Henry N.
00362

Piscataquis volcanic belt: Rankin, Douglas W.
07254

Waterville-Vassalboro area, stratigraphy:
Osberg, Philip H. 05444

Manitoba

Correlation, Elk Point Group, saline deposits:
Gorrell, H. A. 01028

Hudson Bay, Kaskattama well, faunal assem-
blages, correlation: Nelson, Samuel J. 07320

Southwestern, stratigraphy: Kent, D. M. 03181

Michigan

Alpena area, Trilobita, Alpena Limestone:
Stumm, Erwin C. 04201

Alpena County, Crinoidea, Bell Shale: Kesling,
Robert V. 06942

Brachiopoda, Traverse Group: Cowen, R. 01009

Michigan basin, Conodonts, Middle: Orr, Robert
William. 01737

Michigan basin, stratigraphy: Sanford, B. V.
03177

Southeastern, Anthozoa, Silica Formation:
Stumm, Erwin C. 06902

Southeastern, Crinoidea, Silica Formation, n.sp.:
Kesling, Robert V. 06939

Southeastern, Gastropoda, Anderdon
Limestone: Linsley, Robert M. 03053

Missouri

Central and northeastern, Middle, biofacies:
Fraunfelter, George H. 02872

Northeastern, Devonian-Mississippian bounda-
ry: Conkin, James E. 08649

Mollusca

Tentaculitidae, evolution, stratigraphy,
paleogeography: Boucek, Bedrich. 02969

Montana

Tectonics, overthrusting: Mapel, William J.
05184

Nevada

Carlin-Pinon Range area, Roberts Mts. thrust
age: Smith, J. Fred, Jr. 07869

Central, Brachiopoda, new atrypid, Eifelian-age
beds, cf. Asia: Johnson, J. G. 05706

Central, Brachiopoda, Telegraph Canyon For-
mation: Johnson, J. G. 02194

Central, conodonts, correlation with western
Utah: Clark, David L. 02897

Central, Lower, faunal succession: Johnson, J.
G. 02898

Central, stratigraphy, correlation: Gronberg,
Eric C. 09999

Graptolithina, biostratigraphy: Berry, W. B. N.
02830

Graptolithina, occurrences: Berry, William B. N.
02875

Lincoln County, Dutch John Mtn., stratigraphy,
biostratigraphy: Gordon, Joan E. 04413

Roberts Mountain Formation, Brachiopoda,
shelly faunal units: Boucot, A. J. 08616

Devonian—Continued

New Brunswick

Batholithic belts, contrasting petrology: Martin, Robert F. 03593

Charlo map-area, stratigraphy and paleontology, Silurian boundary: Greiner, Hugo. 03799

Paleomagnetism, Perry Formation: Robertson, W. A. 05468

Pteridophytes, lycopods: Grierson, J. D. 02880

New Brunswick-Maine

Passamaquoddy Bay area: Ruitenberg, A. A. 07696

New England

Appalachians, stratigraphy: Cumming, L. M. 03163

Paleogeography: Boucot, A. J. 07139

Plutonic rocks, emplacement: Page, Lincoln R. 07255

New Mexico

Correlation: Baars, D. L. 00181

Southeastern, Tobosa basin, stratigraphy: McGlasson, E. H. 11324

New York

Alden area, Hamilton Shale, Trilobita: Esker, George C., 3d. 05137

Becraft Mountain, stratigraphy, revision: Johnson, John H. 08182

Brachiopoda, Bois Blanc Formation: Boucot, A. J. 04114

Buffalo, Onondaga Limestone, algae: Baschnagel, Raymond A. 02407

Cairo area, progymnosperm, new: Matten, Lawrence C. 02429

Cairo area, pteridophytes, Hamilton Group: Matten, L. C. 02345

Central, Annelida, Cardiff Shale, serpulids: Cameron, Barry. 03209

Cephalopoda, ammonoids, succession, trans-Arctic links: House, M. R. 02876

Coeymans Formation, paleoenvironments: Anderson, Edwin Joseph. 01339

Conodonts, Middle-Upper boundary, correlation, n.spp.: Orr, R. William. 05772

East Bethany area, Trilobita: Cisne, John L. 00484

East-central, Catskill deltaic complex, sedimentation: Johnson, Kenneth G. 08751

East-central, Tully Limestone, sedimentation: Johnson, Kenneth G. 08209

Eastern, Moscow Formation, Portland Point Member: McCave, I. N. 03442

Erie-Niagara basin, lithologic units, groundwater resources: LaSala, A. M., Jr. 09113

Greene County, Pteridophytes, lycopod, Upper: Banks, H. P. 05114

Morrisville area, Skaneateles Formation, Mollusca: Rollins, H. B. 00623

Morrisville, worms, Cardiff Shale: Cameron, Barry. 09758

Onondaga Limestone, lithofacies: Lindholm, Roy Charles. 02036

Sonyea Formation, Cashaqua Shale Member: Kirchgasser, William Thomas. 01748

Sonyea Group, sedimentation: Sutton, Robert G. 08037

Southeastern, Genesee Group: Buttner, Peter J. R. 03432

Southeastern, Marcellus and Skaneateles Formations, sedimentation: Wolff, Manfred P. 09955

Southeastern, Moscow Formation, Portland Point Member: McCave, Ian Nicholas. 01735

Devonian—Continued

New York—Continued

Southeastern, sedimentation, computer model: Buttner, Peter J. R. 07977

Southwestern, stratigraphy, paleontology: Tesmer, Irving H. 02889

Tompkins County, flora, Lodi Limestone: Wilcox, Margret Schnaitman. 00829

Tully Formation, correlation, conodonts: Mayr, U. 05505

Tully Valley, Anthozoa, Case Hill Coral Bed: Grasso, Thomas X. 00498

Western, Appalachian geosyncline, sedimentation: Manspeizer, Warren. 09799

North America

Boundary with Silurian, location: Berdan, J. M. 02829

Cephalopoda, ammonoids, zonation, correlation, Europe: House, M. R. 02876

Cordilleran geosyncline, Graptolithina, succession, cf. Europe: Berry, William B. N. 02875

Eastern, Anthozoa, Lower and Middle, succession: Oliver, William A., Jr. 02884

Eastern, paleogeography, Bois Blanc-Schoharie time: Boucot, A. J. 04114

Northeastern, absolute age, volcanics: Fullagar, Paul D. 06054

Paleolatitudes: Creer, K. M. 05258

Northwest Territories

Arctic, western, stratigraphy: Gallup, W. B. 00109

Axel Heiberg and Ellesmere Islands, stratigraphy: Trettin, H. P. 03176

Bathurst Island, Brachiopoda, rhynchonellid: Boucot, A. J. 05707

Carcajou Ridge, Ostracoda, Kee Scarp Formation, cf. Europe: McGill, Peter. 02870

Cornwallis Island area, stratigraphy: Thorsteinsson, R. 06570

Ellesmere Island, Ostracoda, Blue Fiord Fm.: Weyant, Marcel. 07293

Ellesmere Island, Pisces, acanthodians: Spjeldnaes, Nils. 02874

Great Slave Lake area, Ostracoda, Hay River Formation: Braun, Willi Karl. 02895

Great Slave Lake area, palynology, Buffalo River Shales: Audretsch, A. P. 02881

Mackenzie District, northwestern, stratigraphy: Norris, A. W. 03180

Mackenzie River basin, Brachiopoda, stratigraphy: Caldwell, W. G. E. 02894

McKenzie District, northwestern, stratigraphy, faunal assemblages: Norris, A. W. 05744

Norman Wells area, Beavertail Formation: Crickmay, C. H. 01699

Prince of Wales Island area, Peel Sound Formation, Pisces: Broad, D. S. 03134

Queen Elizabeth Islands, stratigraphy: Kerr, J. William. 03188

Somerset Island, Pisces, Lower, osteostracans: Dineley, D. L. 06690

Southern, stratigraphy, sedimentation: Richmond, William Oliver. 00862

Ohio

Lucas County, Anthozoa, Tenmile Creek Dolomite: Stumm, Erwin C. 04202

Northern, Chagrin-Cleveland Formations, paleocurrents: Lewis, Thomas L. 08780

Northwestern, Anthozoa, Silica Formation: Stumm, Erwin C. 06902

Northwestern, Crinoidea, Silica Formation: Kesling, Robert V. 06940

Devonian—Continued

Ohio—Continued

- Northwestern, Crinoidea, Silica Formation: Kesling, Robert V. 06941
 Northwestern, Gastropoda, Anderdon Limestone: Linsley, Robert M. 03053
 South Birmingham Pool area, stratigraphy, pre-Olentangy rocks: Janssens, A. 05649
 Sylvania area, Trilobita, Silica Shale: Stumm, Erwin C. 04201

Oklahoma

- Brachiopoda, *Dicoelosia*, value changes: Amsden, Thomas W. 07746
 Brachiopoda, Lower, fauna: Amsden, Thomas W. 00424
 Marshall County, Turkey Creek limestone, inlier: Amsden, Thomas W. 00044
 Protista, Haragan Formation, acritarchs, new: Loeblich, Alfred R., Jr. 06347
 South-central, Ostracoda, Haragan Formation, correlation: Lundin, Robert F. 06322
 Stratigraphy, relation to Silurian: Amsden, Thomas W. 02883
 Trilobita, Turkey Creek limestone, cf. Europe: Ormiston, Allen R. 05705
 West Campbell field, Hunton Group: Harvey, Ralph L. 09844

Ontario

- Michigan basin, Conodonts, Middle: Orr, Robert William. 01737
 Michigan basin, stratigraphy: Sanford, B. V. 03177
 Southern, micropaleontology: Winder, C. G. 02887
 Southwestern, Gastropoda, Anderdon Limestone: Linsley, Robert M. 03053

Oregon

- East-central, stratigraphy: Danner, Wilbert R. 03182

Paleobotany

- Land plants, early taxa increase: Banks, Harlan P. 02873

Paleogeography

- Early, Appalachian Province, faunal: Boucot, A. J. 02968
 Old Red Sandstone basins: Allen, J. R. L. 03187

Pennsylvania

- Bradford County, Upper, stratigraphy: Woodrow, Donald L. 09499
 Lehigh Gap-Catskill Formation: Glaeser, J. Douglas. 09781
 Northeastern, sedimentation: Woodrow, Donald L. 08192
 Pisces, Oswego Formation, new rhipidistian: Thomson, Keith Stewart. 04798
 Port Allegany area, gymnosperms, cupulate seeds: Pettitt, John M. 08999
 Tully Formation, correlation, conodonts: Mayr, U. 05505
 Western, Appalachian geosyncline, sedimentation: Manspeizer, Warren. 09799

Pisces

- Arthrodira, spinal plate morphology, taxonomy: Heintz, Anatol. 08937
 Arthrodira, spinal plate morphology, taxonomy: Stensio, E. A. 08938
 Dipnoi, Lower, Wyoming, Idaho, Utah: Denison, Robert H. 02833

Pteridophytes

- Psilophyton*, redescribed: Hueber, Francis M. 09405

Devonian—Continued

Quebec

- Escuminac Bay, Escuminac Formation, related strata: Dineley, D. L. 03433
 Escuminac Bay, Escuminac Formation, sedimentation: Williams, B. P. J. 10794
 Gaspé Peninsula, Gaspé Sandstones, Pisces: Pageau, Yvon. 06906
 Lake Megantic range area, stratigraphy, revision: Marleau, R.-A. 03173
 Lake Memphremagog map-area, stratigraphy, correlation: Boucot, Arthur J. 07861
 Restigouche River area, lower, continental beds, stratigraphy: Dineley, D. L. 02731

Saskatchewan

- Correlation, Elk Point Group, saline deposits: Gorrell, H. A. 01028
 Elk Point Group, Prairie Evaporites: DeMille, George. 01016
 Prairie Evaporite Formation: Wardlaw, Norman C. 03864
 South half, stratigraphy: Kent, D. M. 03181
 Western, Wymark Member of Duperow Formation: Kent, D. M. 04785

Stratigraphy

- Old Red Sandstone and equivalents: Allen, J. R. L. 03187
 Silurian boundary, graptolite marker: Berry, William B. N. 02875

Texas

- Western, Tobosa basin, stratigraphy: McGlasson, E. H. 11324

United States

- Central, Brachiopoda, Early fauna: Amsden, T. W. 02828
 Cratonic margin, Mississippian boundary: Gutschick, R. C. 02877
 Eastern, conodonts, Upper: Huddle, John W. 00209
 Great Basin, biostratigraphy, diachronism: Clark, David L. 02897
 Midcontinent, southern, stratigraphy: Amsden, T. W. 11013
 New York-Pennsylvania, Tully Formation, correlation, Cedar Valley Formation: Cooper, G. Arthur. 02886
 North-central, stratigraphy, Illinois and central Iowa basins: Collinson, Charles. 03185
 Northeastern, Tioga Bentonite: Dennison, John M. 07759
 Rocky Mountains and Plains, northern, stratigraphy: Sandberg, Charles A. 03183
 Southwestern, stratigraphy: Poole, F. G. 03184

Utah

- Western, conodonts, correlation with central Nevada: Clark, David L. 02897

Vertebrata

- Old Red Sandstone and equivalents, distribution: Allen, J. R. L. 03187

Virginia

- Millboro Shale, correlation, Romney Group: Hasson, Kenneth O. 10303

Washington

- Northern, stratigraphy: Danner, Wilbert R. 03182

West Virginia

- Romney Group, correlation, Millboro Shale: Hasson, Kenneth O. 10303
 Valley Head area, pteridophytes, Hampshire shale: Andrews, Henry N. 09348

Devonian—Continued*Worldwide*

Famennian, correlation, Brachiopoda: Sartenaer, P. J. M. J. 02878

Wyoming

Northern, Pisces, Beartooth Butte Fm.: Denison, Robert H. 02833

Northwestern, Beartooth Butte Formation, paleontology: Brush, Grace S. 07807

Yukon

Northern, stratigraphy: Norris, A. W. 03180

Northern, stratigraphy, faunal assemblages: Norris, A. W. 05744

Royal Creek area, Lower, biostratigraphy: Lenz, A. C. 02893

Royal Creek, Brachiopoda: Lenz, A. C. 00555

Diagenesis*Amino acids*

Fossil shells, potential geochronometer: Mitterer, Richard M. 08809

Argillaceous sediments

Chemical reduction, effect on clay minerals: Velde, B. 01434

Carbonate rocks

Birdseye structure: Shinn, E. A. 01439

Blackjack Creek Formation, Missouri: Neal, William Joseph. 07155

Dolomitization of aragonite: Thrailkill, John. 02083

Dolomitization texture, experimental: Bubb, J. N. 01459

Environmental factors: Purdy, Edward G. 07912
Geochemistry, relation of trace elements: Mogharabi, Ataolah. 00158

Carbonate sediments

Alteration with sea-level change: Rucker, James B. 02082

Aragonitic, subaerial, Barbados: Harris, William H. 08722

Bahamas, Walker Cay-Grand Cays area: Ellis, Charles W. 01207

Calcite-aragonite stabilization, Barbados Island: Matthews, R. K. 06724

Cementation, Bahamas: Taft, William H. 06319

Cementation, Ste. Genevieve Formation, Illinois basin: Choquette, Philip W. 03167

Marine phosphorites, in situ, genesis: d'Anglejan, Bruno F. 02173

Micrite envelopes, role of high Mg calcite: Winland, H. D. 06598

Role of burrowing organisms: Winder, C. Gordon. 05630

Cementation

Beach rock, sabellariid worm: Kirtley, David W. 01476

Carbonate rocks, Barbados: Matthews, R. K. 07873

Carbonate sediments, Barbados, off west coast: Macintyre, I. G. 03559

Copper, Michigan: Ohle, Ernest L. 01898

Quartz sand, experimental: Larese, Richard E. 05583

Clay minerals

Arkansas, Atoka sandstone, Crawford County: Triplehorn, Don M. 00414

Marine, Sr-isotope variations: Dasch, E. Julius. 08654

Cone-in-cone

Concretions, associated kink bands, New York: Gilman, Richard A. 05680

Diagenesis—Continued*Experimental studies*

Dolomitization, mechanism, kinetics: Gaines, Alan M. 08701

Mud, consolidation: Chilingarian, George V. 03539

Protodolomite, Mg calcite, formation under atmospheric conditions: Arntson, R. H. 10886

Quartz sand, carbonate rocks: Sharma, Ghanshyam D. 04427

Flint clay

Paludal deposition, crystallization, geochemical reactions: Keller, W. D. 11239

Iron formation

Mineral stabilities: Curtis, C. D. 01916

Proterozoic ironstones, Sokoman Formation, Quebec: Dimroth, Erich. 06662

Jet

Marine conditions: Traverse, Alfred. 09719

Limestone

Alberta, Carson Creek North reef complex: Leavitt, E. M. 05506

Kansas, Dennis Limestone, algal banks: Frost, Jack Glenn. 06549

Oolitic, Morrow age, Arkansas and Oklahoma: Henbest, Lloyd G. 01148

Surface textures, quartz grains, electron microscopy: Krinsley, David. 03544

Nodules

Manganese, iron-poor: Cheney, E. S. 06615

Phosphate minerals

Atlantic Coastal Plain, northern: Adams, John K. 08595

Sandstone

Appalachians, Oriskany Sandstone: Seilacher, Adolf. 09611

Petrography: Nash, J. Thomas. 06991

Turbidites, influence on matrix, Quebec: Lajoie, Jean. 06928

Sediments

Consolidation, cementation, Louisiana: Coleman, James M. 08647

Florida, Choctawhatchee Bay, organic materials: Palacas, James G. 02718

Marine, organic material: Degens, E. T. 04440

West Indies, Bonaire, southern: Lucia, F. J. 03543

Stylolites

Carbonate rocks, classification: Park, Won-Choon. 09609

Classification and origin: Park, Won C. 01472

Pressure-solution contacts: Trurnit, Peter. 09610

Virginia, Rockbridge County, Antietam Sandstone: Lowry, W. D. 08543

Tuff

Silicate mineral facies, chemical zonation of pore water: Sheppard, Richard A. 02592

Diamonds*Experimental studies*

Synthesis: Dickinson, S. K. 07584

Exploration

Techniques: Gold, David P. 01863

Genesis

Carbon phase relations: Gold, David P. 01863

Environment, CO₂ role: Kennedy, George C. 04229

Inclusions, pressure limit: Meyer, Henry O. A. 01565

Review: Dawson, J. B. 04228

Diamonds—Continued*Great Lakes region*

- Drift, kimberlite source, exploration: Gunn, Christopher B. 11150
 Drift occurrences, catalog: Gunn, Christopher B. 08108

North America

- Properties, occurrence, exploration: Gold, David P. 01863

Diapirs*Clay*

- Georgia, Stewart County: Harrison, Robert Alan. 00885

Cuba

- Central, evaporite, genesis: Meyerhoff, A. A. 03356

General

- Bibliography: Braunstein, Jules. 03247

Gulf of Mexico

- Sigsbee Deep to Bay of Campeche: Worzel, J. Lamar. 04465

Materials

- Mexico: Salas, Guillermo P. 04147
 North America, general: O'Brien, G. D. 03376

Mechanism

- Energy source, temperature role: Gussow, William Carruthers. 03378
 Experimental studies, models: Tanner, W. F. 03377
 Gulf coast salt domes, cf. Netherland peat diapirs: Paine, William R. 03355
 North America, general: O'Brien, G. D. 03376

North America

- Symposium: Braunstein, Jules. 09358

Northwest Territories

- Sverdrup basin: Gould, Don B. 11410

Peat

- Gulf coast salt domes, cf. Netherlands: Paine, William R. 03355

Salt

- Gulf of Mexico, Jurassic basin structure, tectonics: Stafford, Charles F. 00567
 Marine halite, associated potash, habitats, paleolatitudes: Hite, Robert J. 09111
 Structure, internal vs. external: Kupfer, Donald H. 03380

Serpentine

- California, Diablo Range: Oakeshott, Gordon B. 03246

Shale

- Exploration, geophysical methods, Louisiana: Musgrave, A. W. 03357
 Gulf Coast, electrical logging, interpretation: Gilreath, J. A. 03375

Texas

- Southern, mud diapirs, related features: Freeman, P. S. 03352

Diatoms*Aulacodiscus*

- Cretaceous-Holocene, taxonomic review: Burke, Joseph F. 10987

Catalogs

- Fossil and Recent, Mills' index revision: VanLandingham, Sam L. 07918

Morphology

- Opaline gems, diatomite, microscopic methods, California: Hanna, G. Dallas. 10963

Nomenclature

- Mills' index revision, new names, synonyms: VanLandingham, Sam L. 07918
 Pleistocene, Wisconsin, new names: Andrews, George W. 00560

Diatoms—Continued*Quaternary*

- Iowa, Lake West Okoboji, modern and subfossil: Stoermer, E. F. 02408
 Lake Huron, assemblage in core, distribution: Stoermer, E. F. 07085
 Nevada, Gabbs area, mine-tailings assemblage: VanLandingham, S. L. 06080
 New York, Pleistocene clay, Massena area, electron micrographs: O'Brien, Neal R. 04401
 Oklahoma, Fisher Canyon deposit, Caddo County: Bond, T. A. 05020
 Wisconsin, Trempealeau Valley, Pleistocene, nomenclature: Andrews, George W. 00560

Strangulonema barbadensis

- Eocene, stereoscan electron microscopy: Hanna, G. Dallas. 10964

Taxonomy

- Aulacodiscus*, Cretaceous-Holocene, review: Burke, Joseph F. 10987

Tertiary

- California, Barstow Formation, Black Canyon area, correlation: Lohman, Kenneth E. 01843
 California, floras, cf. circum-Pacific: Wornardt, Walter William, Jr. 10802
 California, Miocene-Pliocene, differentiation: Wornardt, W. W., Jr. 10057
 Mexico, Baja California, Miocene: Hertlein, Leo G. 04300
 Oklahoma, Ogallala Formation, Beaver County: Wilson, L. R. 05270
 Wyoming, Wagon Bed Formation, Eocene, fresh-water: Lohman, Kenneth E. 02435

Differential thermal analysis*Data*

- Cacoxenite, beraunite, Florida: Blanchard, Frank N. 07527
 Carbonate rocks, deterioration, ice, ordered water: Dunn, James R. 08176
 Chlorite, Arkansas, Anderson talc deposit: Wu, Dah-cheng. 09303
 Clinoclhorite, acid-extracted and untreated: Ross, G. J. 03651
 Covellite, melting relations, high-pressure: Kullerud, G. 01563
 Ilvaite, Mexico: Pablo-Galan, Libertio de. 10699
 Magadiite, California, Trinity County: McAtee, J. L., Jr. 07528
 Serpentine, Manitoba, Setting Lake-Moak Lake area: Coats, Colin J. A. 03460
 Soils, clay fractions, Texas: Goss, D. W. 02256
 System Au-Ag-S: Graph, R. B. 05932
 Wavellite: Blanchard, Frank N. 04200

Methods

- Rock magnetic parameters: Vollstadt, H. 03912
 Wavellite, pattern variations, cf. other methods: Blanchard, Frank N. 04200

Dikes*Alabama*

- Lee-Chambers Counties, diabase: Deininger, Robert W. 08521

Alkalic-gabbroic

- Flow differentiation vs. multiple injection, Greenland: Bhattacharji, Somdev. 04437
 Flow differentiation vs. multiple injection, Greenland: Bridgwater, D. 04883

Appalachians

- Paleomagnetic-tectonic study: DeBoer, Jelle. 11235

California

- Sacramento Valley, sandstone, flow structures: Peterson, Gary L. 05554

Dikes—Continued

California—Continued

Shadow Mountains, Mesozoic complex, mechanism, geometry: Troxel, Bennie W. 10050

Clastic

California, Kern County: Peterson, Gary L. 02858

Michigan, Marquette County, Siamo Slate: Powell, C. McA. 11341

Colorado

Spanish Peaks region: Johnson, Ross B. 01702

Feldspar

Hydrothermal: Randall, John A. 04197

Georgia

Cobb County, ultramafic, weathering: Grant, Willard H. 08532

Greenland

Frederikshaabs Isblink area, metamorphism:

Dawes, Peter R. 01866

Godthaab area, Ameralik swarm, age: McGregor, V. R. 01865

Ilimaussaq Peninsula, northern, microsyenitic: Scharbert, Heinz G. 05667

Ilordleq area, basic, petrology: Watterson, Juan. 01862

Qaersuarsuk, Precambrian Gardar dikes, petrology: Watt, W. Stuart. 03139

Southern, Gardar, emplacement, petrology: Bridgwater, D. 05026

Southern, Lilianmine area: Ghisler, Martin. 07700

Idaho

Idaho porphyry belt, structural controls: Olson, Harry J. 07199

Kimberlite

Ontario, Gauthier township, Dobie area: Lee, Hulbert A. 02059

Mechanism

Miarolitic: Frye, Keith. 08527

North Carolina

Dan River, Davie County Triassic basins: Thayer, Paul Arthur. 02044

Deep River basin, diabase, petrology: Justus, Philip S. 08537

Deep River basin, diabase, textures: Justus, Philip S. 08756

Ontario

Northern, Precambrian, uranium deposits: Robertson, James A. 07916

Peridotite

Pennsylvania, Dixonville, C and O isotopes: Deines, P. 02357

Pennsylvania, Fayette-Greene Counties, emplacement: Brownfield, James. 11265

Petrology

Connecticut-Rhode Island, Westerly Granite: Feininger, Tomas. 05192

Ring

Colorado-Wyoming, Virginia Dale complex: Egler, D. H. 04295

Tectonic setting, lunar analogs: Elston, Wolfgang E. 07712

South Carolina

Columbia area, fault relations, magnetic study: Thompson, George M. 08380

Swarm

California, Yosemite Nat'l. Park, mechanism: Fournier, Reba Benedict. 06354

Flood basalt feeders, mantle, convective cell indicators: Clifford, Paul M. 02213

Greenland, Ubekendt Ejland: Drever, H. I. 03113

Dikes—Continued

Utah

Juab County, Desert Mountain intrusives: Kattelman, Donald F. 06139

Washington

Pasayten River area, granitic: Tabor, R. W. 02713

*District of Columbia**Engineering geology*

Applications, rapid transit system, planning: Heflin, Larry H. 09283

Mineralogy

Northwestern, chlorite-talc schist: Broughton, Paul L. 04098

*Dolomite**Appalachians*

Resources, review: Ericksen, George E. 01386

Kentucky

Ford quadrangle, occurrence: Black, Douglas F. B. 06482

New Brunswick

Kings County, occurrence, reserves: Hamilton, J. B. 07403

Pennsylvania

Franklin County, composition, resources: Root, Samuel I. 06744

*Dominican Republic**Geomorphology*

Yague del Sur basin, photogeologic reconnaissance: Redonnet, J. 08911

Hydrogeology

Yague del Sur basin, photogeologic reconnaissance: Redonnet, J. 08911

Paleontology

Ostracoda, Miocene, Yague Group, northwestern: Bold, W. A. van den. 00916

Sedimentary petrology

North-central, Eocene, gravity slide sediments: Nagle, Frederick, Jr. 09807

Stratigraphy

Miocene, Yague Group, northwestern: Bold, W. A. van den. 00916

*Earth**Age*

Interpretation, new, oceanic basalt leads: Oversby, V. M. 07303

Interpretation, new, oceanic basalt leads: Ulrich, T. J. 07304

Model lead ages: Tilton, G. R. 10741

Paleontological records, early explorers, methods, conflicts: Wendt, Herbert. 03138

Radioactivity methods, history, Rutherford and Boltwood: Badash, Lawrence. 01823

Composition

Chemical differentiation, extent: Gast, Paul W. 05886

Chemical processes in early solar system: Anders, Edward. 04345

Model, achondritic parent: Shaw, D. M. 08026

Rb, K, and Sr, abundance and distribution: Hurley, Patrick M. 11308

Rb, K, Sr absolute abundance: Hurley, P. M. 03927

Surface, chemical effects of solar wind and cosmic protons: Zeller, Edward J. 08030

Elasticity

Free oscillations, core rigidity, modes: Derr, John S. 08508

Free oscillations, long period, Alaska earthquake: Wiggins, Ralph A. 10522

Free oscillations, model analysis, computer program: Wiggins, R. A. 10056

Earth—Continued

Elasticity—Continued

Free oscillations, normal mode problem, solutions: Gilbert, Freeman. 11288

Free oscillations, oceanic, continental models compared: Derr, John S. 09988

Free oscillations, periods, derivation: Anderson, Don L. 06647

Free oscillations, variational tables for model determination: Wiggins, Ralph A. 02290

Normal mode eigen-frequencies: Dahlen, F. A. 05859

Tidal response: Clancy, Edward P. 06187

Evolution

Thermal, models: Fricker, P. E. 08697

General

Moon capture, nearest approach, evidence: Cloud, Preston E., Jr. 02684

Moon capture, nearest approach, evidence: Olson, Walter S. 02683

Origin time of atmosphere, oceans, relation to Moon: Singer, S. F. 03904

Popular account: Hyde, Margaret O. 11202

Popular and elementary account: Matthews, William H., 3d. 00728

Popular and elementary geology: Beiser, Arthur. 01873

Structure, composition, form, genesis: Cailleux, Andre. 06018

Textbook, introductory: Shimer, A. 00562

Geomorphology

Orbital photography, Gemini flight experiments: Lowman, Paul D., Jr. 06022

History

Metallogenetic periodicity: Pierce, Arthur P. 07842

Popular account, flood theory: Clark, Harold W. 11203

Sand waves as evidence of early Earth-Moon history: Merifield, P. M. 11420

Interior

Chemical potentials: Schock, Robert N. 10487

Composition, effect of pressure variation, experimental: Amoros, J. L. 09841

Core-mantle boundary, properties from PcP phases: Buchbinder, Goetz G. R. 04366

Core-mantle interface, topography: Hide, R. 04493

Density distribution, models: Press, Frank. 01929

Equation of state: Anderson, Orson L. 10623

Experimental studies, Fe-Ni alloys, isothermal compression: Takahashi, Taro. 02352

General, relation to planetary physics: Kaula, William M. 09412

General, sources of information: Phillips, O. M. 00561

High-pressure, studies, equipment, results: Simons, Gene. 00617

Model study, body waves, traveltimes, velocities, amplitudes: Julian, Bruce R. 00474

Models, determination, free oscillations, tables: Wiggins, Ralph A. 02290

Monte Carlo models: Press, Frank. 03226

Physical parameters, changes, vs. partial derivatives of free-oscillation period: Takeuchi, Hitoshi. 01942

Shear velocity, density structure from compressional velocity: Anderson, Don L. 06647

Structure, elastic-wave equation solution, method: Alsop, L. E. 06649

Theoretical studies, isostasy, processes: Danes, Z. F. 03006

Earth—Continued

Interior—Continued

Theoretical studies, isostasy, processes: Danes, Z. F. 03007

Thermal expansion coefficient: Birch, Francis. 00083

Tidal dissipation, seismic and tidal Q values: Lagus, Peter L. 07400

Velocity structure, Monte Carlo inversion of body waves: Wiggins, Ralph A. 06638

Velocity-density relation, pericase equation of state: Wang, Chi-Yuen. 00640

Motions

Physical geography: Rothwell, Stuart C. 09181

Nutation

Earthquake induced: Mansinha, L. 03048

Origin

Chemical processes in early solar system: Anders, Edward. 04345

Meteoritic evidence: Wood, John A. 02904

Thermal history, role of water: Condie, Kent C. 03212

Physical properties

Density distribution, lateral variations: Arkani-Hamed, Jafar. 10839

Elasticity, seismic wave attenuation, model: Jackson, David D. 10523

Electrical conductivity models: Anderssen, R. S. 03933

Electromagnetic impedance, method: Eckhardt, Donald H. 03229

Gross Earth data: Anderson, Don L. 11093

Gross Earth data, resolving power: Backus, George. 04288

High-pressure, studies, equipment, results: Simons, Gene. 00617

Q for upper 125 km: DeBremacker, J. -Cl. 04187

Q for upper 125 km: Dorman, LeRoy M. 01945

Solid matter, application to interior and planets: Haag, Robert M. 07311

Thermal conductivity, silicates: Aronson, James R. 10633

Rotation

Acceleration, seismic, volcanic energy releases, correlation: Shneiderov, Anatol James. 10525

Coral ring geochronology, hypothesis confirmation: Henry, Thomas W. 09299

General, symposium, Internat. Astron. Union: Markowitz, William. 03624

Length of day, earthquakes, relations: Mansinha, L. 10524

Length of month, deceleration rate, since Cambrian: Pannella, Giorgio. 07325

Observations, astronomical: Markowitz, William. 03633

Pole, secular shift, earthquake excitation: Smylie, D. E. 05005

Primary global seismic driving force: Lieber, Paul. 10479

Rate, Cretaceous, Late: Berry, William B. N. 00354

Rate, relations to geomagnetic variations: Ball, R. H. 08401

Speed, changes, relation to paleomagnetism and continental drift: Runcorn, S. K. 03634

Shape

Astrogeodetic geoid map, revision: Fischer, Irene. 07077

Discovery, history: Jones, Tom B. 10518

General: Rothwell, Stuart C. 09181

Hutton's theory, 1788: Gerstner, Patsy A. 08169

Earth—Continued*Size*

Volume, changes with time, possibilities: Birch, Francis. 01615

Surface features

Continents, ocean basins, mobility concept: Wilson, J. Tuzo. 07870

Craters, impact and volcanic, cf. Moon, Mars: Hartmann, William K. 03148

Observation from space: Fischer, William A. 00352

Temperature

Hutton's theory, 1788: Gerstner, Patsy A. 08169

Earth currents*Observations*

Arctic Ocean, drifting stations: Hessler, V. P. 09878

California, coast and off coast, tide induced: Larsen, J. C. 03911

Earth tides*Effects*

Microearthquake trigger, Truckee, Calif., 1966: Ryall, Alan. 00478

General

Phenomena: Clancy, Edward P. 06187

Instruments

Interferometer: Smookler, Stanley. 10264

Interferometer, 30 meter-vacuum, evaluation as strain gage: Boyne, H. S. 10531

Tiltmeter: Hansen, Siegfried. 10392

Tiltmeter, diamagnetic suspension: Simon, Ivan. 11436

Observations

California, northern, offshore, ocean tide effects: Nowroozi, A. A. 08459

California, San Francisco Bay area: Wood, M. Darroll. 10838

Colorado, midcontinent tides: Homuth, E. F. 10577

Pacific Ocean, off northern California: Nowroozi, A. A. 00002

Station needs, instruments, calculation: Slichter, L. B. 10194

Washington, Stevens Pass, laser interferometer: Vali, V. 02982

Earth-current methods*Experimental studies*

Coastal effects, electromagnetic variations, model study, upwelling in mantle: Dosso, H. W. 02167

Interpretation

Micropulsations, propagation characteristics, computer method: Bloomquist, Marvin Gaines. 02238

Earthquakes*Aftershocks*

Focal depth: Page, Robert. 01947

Mechanism, creep rupture, microfracturing experiments: Scholz, C. H. 02298

Properties of sequences: Page, Robert. 02245

Relation to main shock and stress: Berg, Eduard. 03128

Alaska

1957-66, relation to sea-floor spreading, Aleutian Islands: Stauder, William. 05264

1788, tsunami: Solov'yev, S. E. 07054

February 4, 1965, Aleutian Islands, aftershock sequence: Korkman, K. 02433

February 4, 1965, mechanism, Rat Island: Stauder, William. 01944

February 4, 1965, Rat Island, T-phase source: Johnson, Rockne H. 00505

Earthquakes—Continued*Alaska—Continued*

June 21, 1967, Fairbanks area: Cloud, William K. 00167

June 21, 1967, Fairbanks area, aftershocks: Berg, Eduard. 09196

June 21, 1967, Fairbanks area, aftershocks: Matumoto, T. 10553

June-July 1967, Fairbanks area, preliminary report: Jordan, James N. 00201

March 28, 1964, aftershocks and microaftershocks: Page, Robert. 02245

March 28, 1964, atmospheric pressure waves, tectonic deformation: Mikumo, Takeshi. 00642

March 28, 1964, damage to highway system: Kachadoorian, Reuben. 02437

March 28, 1964, effect on shore features: Stanley, Kirk W. 07515

March 28, 1964, effects, Allen II slide: Johnson, Noye M. 06477

March 28, 1964, effects, avalanching: Tuthill, Samuel J. 06476

March 28, 1964, effects, glacier-dammed lakes: Marcus, Melvin G. 06474

March 28, 1964, effects, glaciers: Post, Austin S. 07003

March 28, 1964, effects on ground-water levels, Alberta: Gabert, Gordon M. 06469

March 28, 1964, effects, Sherman and Sheridan Glaciers: Tuthill, Samuel J. 06473

March 28, 1964, effects, Sherman Glacier, debris slide: Bull, Colin. 06472

March 28, 1964, effects, Sherman Glacier, landslide: Marangunic, Cedimir. 06479

March 28, 1964, effects, Sherman Glacier, landslides: Plafker, George. 06478

March 28, 1964, effects, Sherman landslide: Shreve, Ronald L. 06480

March 28, 1964, effects, snow avalanching, Chugach Mts.: LaChapelle, Edward R. 06475

March 28, 1964, effects, water-sediment ejections: Waller, Roger M. 06492

March 28, 1964, geomagnetic field effects: Hirschberg, Joan. 00203

March 28, 1964, hydrologic effects: National Research Council. 06488

March 28, 1964, hydrologic effects, Anchorage area: Waller, Roger M. 07038

March 28, 1964, hydrologic effects, outside Alaska: Vorhis, Robert C. 06468

March 28, 1964, hydrologic effects, south-central: Waller, Roger M. 06489

March 28, 1964, Kenai Lake area, effects: McCulloch, David S. 06491

March 28, 1964, mechanism: Wyss, Max. 10058

March 28, 1964, Montague Island, fault scarp: Whitten, Charles A. 02384

March 28, 1964, preshock, aftershock, focal mechanism: Stauder, William. 08332

March 28, 1964, Prince William Sound, effects, photointerpretation: Hackman, Robert J. 06490

March 28, 1964, seismic seiches in North America: McGarr, Arthur. 10959

March 28, 1964, strain analysis: Pope, Allen J. 08358

March 28, 1964, tsunami, engineering evaluation: Wilson, Basil W. 07332

March 1964, February 1965, free oscillations and Q values: Nowroozi, A. A. 00273

Microearthquakes, Denali fault zone: Boucher, Gary. 02359

Earthquakes—Continued*Alaska—Continued*

Rat Islands sequence, stress analysis: Ranken, R. E. 11224

Seismicity: U.S. Bureau of Reclamation. 04180

Arctic Ocean

Seismicity, regionalization: Santo, Tetsuo. 03721

California

1960-1966, Hollister area: Cloud, William K. 09981

1962-65, mechanism, seismicity, central and northern: Bolt, B. A. 05458

1966, Parkfield area, San Andreas fault displacement: Smith, Stewart W. 05454

1966, Parkfield sequence, mechanism, Love-wave spectra: Filson, John R. 04044

1906, San Francisco, focus, location: Bolt, Bruce A. 00481

1957, San Francisco, ground motion: Idriss, I. M. 05459

April 9, 1968, Borrego Mountain, fault trace: Allen, C. R. 02580

Fault movements, geodimeter monitoring, San Francisco-San Bernardino area: California Dept. Water Resources. 09028

June 27, 1966, Parkfield: Cloud, William K. 09980

June 28, 1966, Parkfield area: Bakun, W. H. 09967

June 27, 1966, Parkfield area, seismoscope data: Hudson, D. E. 10007

June 28, 1966, Parkfield, displacements near fault: Aki, Keiiti. 03210

June 28, 1966, Parkfield, magnitude and mechanism: Wu, Francis T. 00966

June 27, 1966, Parkfield-Cholame, aftershocks: Eaton, J. P. 09992

June 1966, Parkfield, mechanism: Aki, Keiiti. 04042

June 1966, Parkfield-Cholame, aftershocks, spatial distribution: Eaton, Jerry P. 04043

March 4, 1966, Imperial fault: Brune, James N. 09973

May 24, 1966, Chico area, cf. Chase V explosion: Lomnitz, C. 10016

Northern, offshore: Auld, B. 09964

Parkfield area, accelerograms: Cloud, William K. 09982

Parkfield area, ground motion: Housner, G. W. 10006

Prediction, San Andreas fault, local magnetic events: Breiner, Sheldon. 04476

San Andreas fault system, microearthquakes: Brune, James N. 08244

San Francisco Bay area, hazard, public policy development: Steinbrugge, Karl V. 07658

San Francisco Bay area, microearthquakes: Pfluke, John H. 10035

Seismicity, Lake Tahoe area, 1769-1966: Wolfe, John. 03722

September 12, 1966, Truckee area, aftershocks, nodal planes: Greensfelder, Roger. 04822

September 1966, Truckee area sequence: Ryall, Alan. 00478

Source mechanism: Wyss, Max. 02335

Caribbean region

October 24, 1965, T-phase, submarine eruption: Northrop, John. 00964

Colorado

1962, 1966, Rangely area: Munson, Robert C. 02787

Earthquakes—Continued*Colorado—Continued*

1962, Denver area, relation to Rocky Mtn. Arsenal well: Hollister, John C. 04310

1962-67, Denver area, relation to Rocky Mtn. Arsenal well: Major, Maurice W. 09427

1967, Denver area, strains, tilts: Romig, Phillip R. 10549

1962-1967, Denver-Derby area, data summary: Simon, Ruth B. 02785

1962-67, relation to Rocky Mtn. Arsenal well properties: Pickett, G. R. 11339

April 10, August 9, 1967, Denver area, strain, tilt measurements: Romig, Phillip R. 02786

April-November 1967, Denver area, earth-tilt correlations: Marshall, G. E. 02909

Denver area, microearthquakes: Healy, John H. 08277

Denver area, self-triggered or man-made: Hughes, Richard F. 09120

Denver area, trigger mechanism, waste-fluid injection: Healy, J. H. 02741

Denver basin, structural setting: Haun, John D. 11297

Rocky Mountain Arsenal well, microearthquakes: Healy, J. H. 10229

Seismicity, Denver area, relation to Rocky Mtn. Arsenal well: Hollister, John C. 03814

Seismicity, historical review: Hadsell, F. A. 11293

Deep focus

Hypocentral patterns, island arcs: Dennis, John G. 00284

Hypocentral patterns, island arcs: Sykes, Lynn R. 00283

Detection

Computer method, Yellowknife array data: Manchee, E. B. 05131

Discrimination from nuclear events, method: Davies, John B. 04825

Large-aperture array, Alaska: Berg, Eduard. 09195

Microearthquakes, volcanoes, event counter for seismometer: Decker, R. W. 04823

Distribution

Global tectonics, hypothesis: Isacks, Bryan. 04365

Implications for conditions of generation: Scholz, Christopher H. 00050

Effects

Dams, earth: Brown, R. L. 00198

Earth banks, response, finite-element analysis: Idriss, I. M. 01004

Earth's wobble, secular polar shift: Mansinha, L. 03048

Engineering sites, seismic risk analysis: Cornell, C. Allin. 04826

Engineering structures, slope stability: Harlan, Richard C. 00197

Free oscillations, measurement of Q: Nowroozi, A. A. 00273

Free oscillations, period, partial derivatives: Takeuchi, Hitoshi. 01942

Free oscillations, Rat Island earthquake, February 4, 1965: Nowroozi, Ali A. 08308

Geomagnetic field, torsional eigenmodes: Hirschberg, Joan. 00203

Glaciers, Alaska, pre-1964: Field, William O. 07039

Gravity, response of yielding structures: Husid, Raul. 00877

Hydrologic, Alaska, 1964: National Research Council. 06488

Earthquakes—Continued*Effects—Continued*

- Hydrologic hazards: Goldthwait, Richard P. 06481
 Landslides, Alaska, Anchorage area, quick-clay underflow: Kerr, Paul F. 04194
 Landslides due to soil liquefaction: Seed, H. Bolton. 04582
 Landslides, ground fracturing, seiching, Alaska, 1964: McCulloch, David S. 06491
 Polar shift, secular, evidence: Smylie, D. E. 05005
 Seiches, cause of excitation: McGarr, Arthur. 06467
 Seismic seiches, potential uses: Vorhis, Robert C. 09727
 Soil liquefaction, prediction, cyclic shear tests: Peacock, William H. 00987
 Soil liquefaction, experiments: Schroeder, W. L. 04844
 Soils, pore pressures: Seed, H. Bolton. 08874
 Well-aquifer systems, response to seismic waves: Cooper, Hilton H., Jr. 06580

Elastic waves

- Atlantic Ocean, sediment properties: Anderson, Rockne S. 10572
 Body, amplitude curves, $\Delta = 5^\circ$ to 25° : Vanek, Jiri. 02293
 Body, mantle, traveltimes, observed vs. models: Walker, Daniel A. 02294
 Body waves, observations, Monte Carlo inversion: Wiggins, Ralph A. 06638
 Body waves, traveltimes, apparent velocities, amplitudes, Earth models: Julian, Bruce R. 00474
 Compressional velocity, structure of Earth: Anderson, Don L. 06647
 Discrimination, strain seismographs, application: Shopland, Robert C. 11098
 Frequency-wave-number spectra, determination method: Iyer, H. M. 04289
 Head, theory, mechanism studies: Chandra, Umesh. 02299
 High-resolution frequency wave number spectra: McCowan, D. W. 10535
 Love waves, dispersion tables: Anderson, Don L. 04824
 Multiple reflection, outer core, radius: Engdahl, Eric R. 01923
 Normal modes, rotating elliptical Earth, model: Dahlen, F. A. 05859
 P traveltimes, computational methods: Engdahl, Eric R. 03111
 P traveltimes, regional variations: Herrin, Eugene. 03110
 P traveltimes, surface focus estimation: Herrin, Eugene. 03115
 P traveltimes, tables, new: Herrin, Eugene. 03116
 PcP, P amplitude spectrums: Buchbinder, Goetz G. R. 05450
 PcP phases, core-mantle boundary properties: Buchbinder, Goetz G. R. 04366
 PcP traveltimes, depth to core: Taggart, James. 03108
 PKP traveltimes: Bolt, Bruce A. 03109
 PKP traveltimes, 115° to 140° : Kovach, R. L. 03908
 PKPPKP, upper mantle reflection: Engdahl, E. R. 06636
 P'P', upper mantle structure from early reflections: Adams, R. D. 05453
 P-wave parameters, Montana, LASA: Farnham, P. R. 10534

Earthquakes—Continued*Elastic waves—Continued*

- P-waves, amplitudes, regional variation: Mizoue, Megumi. 03734
 P-waves, long-period, determination of fault parameters: Bollinger, G. A. 00082
 P-waves, near 110° : Bolt, Bruce. 06327
 P-waves, nodal solutions: Stevens, Anne E. 02295
 P-waves, station anomalies, mantle structure: Hales, A. L. 01946
 P-waves, velocity distribution, lower mantle: Hales, A. L. 05461
 Rayleigh group velocities, California: Sutton, D. J. 01996
 Rayleigh waves, atmosphere: Cook, Richard K. 10564
 Rayleigh waves, horizontal refraction: McGarr, Arthur. 06639
 Rayleigh waves, Pacific Ocean, group velocities: Savage, J. C. 06653
 S phase, properties: Filson, J. R. 08270
 Seismic coda, analysis: Aki, Keiiti. 10571
 Seismic moment, surface wave attenuation, simultaneous determination: Tsai, Yi-Ben. 11102
 SH motion, near distances, California: Filson, J. R. 10573
 Shear-coupled PL, observed cf. synthetic: Chander, Ramesh. 11118
 Surface, motion pattern, relation to focal mechanism: Leet, L. Don. 00598
 Surface, phase velocities, determination techniques: Bloch, S. 02244
 Surface, seismic seiches, North America, March 1964: McGarr, Arthur. 10959
 SV and SH, diffracted, amplitude contrast, cause: Teng, Ta-Liang. 02016
 T phase, submarine eruption: Northrop, John. 00964
 T-phase, Aleutians: Johnson, Rockne H. 00505
 T-phase, classic and abyssal: Johnson, Rockne H. 04673
 T-phases, source characteristics, relations, Pacific Ocean: Northrop, John. 06556
 Traveltime estimation, statistical aspects: Tucker, William. 03117
 Traveltime tables, smoothing: Arnold, E. P. 03112
 Traveltimes, change with stress at depth: Sawyers, Kenneth N. 04828
 Traveltimes, measurement and error: Freedman, Helen W. 03118
 Velocity, attenuation, dissipation mechanism: Gordon, R. B. 00017
 Velocity, attenuation, dissipation mechanism: Savage, J. C. 00018
- Energy*
 Relations to magnitude: Major, M. W. 10242
- Engineering geology*
 Major structure design: Fischer, Joseph A. 06632
- Epcenters*
 Determination, group analysis of variance: Bolt, Bruce A. 00635
 Determination, P-wave traveltimes differences: Pararas-Carayannis, George. 10529
 Determination, separation of overlapping events: Anglin, F. M. 01686
- Experimental studies*
 Model seismicity, rupture parameters, stress, energy: King, Chi-Yu. 00289
 Shear wave propagation, photoelastic studies: Papirno, Ralph. 08310

Earthquakes—Continued

Foreshocks

Relation to main shock and stress: Berg, Eduard. 03128

General

Human reactions, building design, relations: Steinbrugge, Karl V. 08333

Genesis

Conditions necessary, implication of distribution: Scholz, Christopher H. 00050

Dilatant rocks, shear stress deformation: Dix, C. H. 10453

Earth tides as trigger, microearthquakes: Ryall, Alan. 00478

Glacial rebound: Wilson, James T. 06654

Microearthquakes, formation of columnar joints in lava lakes: Peck, Dallas L. 02976

Solar activity as trigger: Simpson, John F. 00202

Hawaii

1965, graphic summary: Koyanagi, Robert Y. 00794

1962-65, Kilauea, Mauna Loa, common sources: Koyanagi, Robert Y. 02703

Seismicity: U.S. Bureau of Reclamation. 04180

Hypocenters

Determination, relative location, traveltime differences: Spence, W. J. 06630

Location, problems, solution: James, David E. 02788

Illinois

November 9, 1968, Harrisburg area, New Madrid Zone: Miller, D. N., Jr. 06971

November 9, 1968, southern: Heigold, Paul C. 06317

Interpretation

Model studies, granodiorite, triaxial stresses: Giardini, A. A. 00894

Seismograms: Simon, Ruth B. 07173

Island arcs

Seismicity, relation to tectonics: Miyamura, Setumi. 04672

Magnitude

Determination, group analysis of variance: Bolt, Bruce A. 00635

Energy relations: King, Chi-Yu. 10581

Estimation: Freedman, Helen. 09996

Estimation, from water-level fluctuation in wells: Vorhis, Robert C. 06470

Relation to regional variation of P-wave amplitude: Mizoue, Megumi. 03734

Relations to energy: Major, M. W. 10242

Source parameters, relation: Chinnery, Michael A. 06631

Statistical estimation: Simon, Ruth B. 00965

Mechanism

Alaska, Rat Islands, island arcs, sea-floor spreading: Stauder, William. 01944

Body force equivalents from deformation field, computer calculation: Nyland, Edo. 11190

California, central, northern, and offshore: Bolt, B. A. 05458

California, Parkfield, June 1966: Aki, Keiiti. 04042

California, Parkfield sequence, Love-wave spectra: Filson, John R. 04044

California-Nevada region: Wyss, Max. 02335

Colorado, Rocky Mountain Arsenal well: Colburn, William A. 06836

Elastodynamic source fields, theory: Archambeau, Charles B. 04094

Enstatite, polymorphism, shear strengths, experimental: Riecker, Robert E. 08054

Earthquakes—Continued

Mechanism—Continued

Evidence, surface waves, motion pattern: Leet, L. Don. 00598

Experimental studies, similarity to microfracturing in rocks: Scholz, C. H. 00482

Extension failure: Robson, Geoffrey R. 00722

Fault slip rate, computation, sum of moments: Brune, James N. 00081

Island arcs, deep focus, phase changes: Sykes, Lynn R. 00283

Local earthquakes, analysis of coda: Aki, Keiiti. 00021

Midoceanic ridges: Sykes, Lynn R. 08011

Multipolar components, relative sizes: Randall, M. J. 04363

P nodal solutions, computer-determined vs. visual: Stevens, Anne E. 02295

Propagating phase boundary, elastic radiation: Holstrom, Geoffrey B. 08282

Relation to sea-floor spreading, Aleutian trench: Stauder, William. 05264

Reservoir loading: Carder, Dean S. 04851

Source parameters: Davies, John B. 04825

Stick slip, stable sliding, and rock properties: Byerlee, James D. 04373

Stress drop, relation to magnitude: King, Chi-Yu. 00477

Strike-slip fault, stressed zone: Chinnery, Michael A. 10575

Mexico

Seismicity, Mexico City area, magnitude-frequency relation: Ferraes, Sergio G. 00204

Midoceanic ridges

Seismicity, distribution, relation to sea-floor spreading: Sykes, Lynn R. 05889

Montana

1965, Yellowstone-Hebgen Lake region: Eaton, J. P. 08263

Nevada

1954, Dixie Valley-Fairview Peak, surface strain, energy release: Meister, Laurent J. 04370

August 16, 1966, Lincoln County: Cook, Kenneth L. 10547

Central, micro-distribution, mechanism: Stauder, William. 10044

Seismicity, Lake Tahoe area, 1769-1966: Wolfe, John. 03722

Source mechanism: Wyss, Max. 02335

Time distribution, tidal forces influence: Tamrazyan, Gurgen P. 04484

Western, traveltimes, measurements: Greensfelder, R. 08275

New England

November 18, 1755, possible tsunami: Rothman, Robert L. 04809

New Jersey

Ramapo fault area: Molnar, Peter H. 02805

Seismicity, Ramapo fault: Page, Robert A. 00963

New Mexico

Seismicity, short term, Socorro area: Sanford, Allan R. 00953

New York

Ramapo fault area: Molnar, Peter H. 02805

Seismicity, Ramapo fault: Page, Robert A. 00963

North America

Seismicity, regionalization: Santo, Tetsuo. 03721

Strain release data: Milne, W. G. 08304

Earthquakes—Continued

Northwest Territories

1965, Mould Bay area, swarm: Smith, W. E. T. 05460

Oregon

January 27, 1968, Portland area, cf. 1962 shock: Heinrichs, Donald F. 09191
January–September, 1968, offshore areas: Couch, Richard W. 09267
May 13, 1968, Portland area, energy: Couch, Richard. 09269
May–June, 1968, Warner Valley: Couch, Richard. 09268

Pacific Ocean

Circumferential belt, popular account: Heintze, Carl. 06017
Gorda Ridge, swarms: Northrop, J. 03060
Location Sofar speed and axis depths by T-phase, charts: Johnson, Rockne H. 02292
Seismicity, tectonic, northeastern: Tobin, Don G. 01943

Prediction

California, geodimeter fault movement investigations: California Dept. Water Resources. 09028
Data processing for stress patterns: Ben-Menahem, Ari. 05452
Fault monitoring procedures, California: Hofmann, R. B. 10386
Foreshock sequences: Berg, Eduard. 03128
Geodetic Laser Survey System: Fowler, R. A. 04792
Laboratory studies, current: Brace, W. F. 04477
Local magnetic events, California, San Andreas fault: Brainer, Sheldon. 04476
Microearthquake relation to large, source mechanism importance: Aki, K. 04475
Microfractures, experimental studies: Scholz, C. H. 00280
Monitoring, needs: Kovach, Robert L. 02843
Probabilistic models for seismic force design: Benjamin, Jack R. 01137
Research program, planning, requirements: Press, Frank. 04474
Solar-flare activity, graphs: Simpson, John F. 00202
Statistical: Isacks, Bryan. 01126
Statistical: Lomnitz, C. 00629
Stress accumulation at depth, measurement, seismic method: Eisler, Joseph D. 04052

Rhode Island

December 7, 1965, Narragansett Bay, structural implications: Fisher, John J. 09774

Seismicity

Short-term, microearthquake data, minimum recording time: Sanford, Allan R. 00953

Source regions

Identification, seismic spectra: Sokolowski, Thomas J. 10555

Theoretical studies

California, Nevada, strain energy release calculations: Burford, Robert O. 08246
Strain steps: Wideman, C. J. 11372

United States

1965, summary: vonHake, Carl A. 04336
1966, summary: vonHake, Carl A. 09480
1960, western, microtremors, observations: Tanaka, Teiji. 07049
Prior to 1925, tables: Woollard, George P. 08997
Seismicity, western: U.S. Bureau of Reclamation. 04180

Earthquakes—Continued

United States—Continued

Western, seismic zones: Ryall, Alan. 08321

Utah

1950–July 1964: Cook, Kenneth L. 08255

Virginia

March 8, 1968, Narrows area, Eastern Tennessee crustal model: Bollinger, G. A. 06731

Washington

Puget Sound area, changes of level, observation program: Bostrom, R. C. 01522
Seismicity, Pasco basin, low: Brown, Randall E. 00813

Worldwide

Seismicity, maps, compilation from epicenter data: Barazangi, Muawia. 06634
Seismicity, relation to global tectonics: Oliver, Jack. 09442

Wyoming

1965, Yellowstone–Hebgen Lake region: Eaton, J. P. 08263

Echinodermata

Discocystis priesti, n.sp.

Mississippian, Iowa, Pella beds, edrioasteroid: Strimple, H. L. 03632

Enoploura

Ordovician, aulacophore, morphology, function: Parsley, Ronald L. 08837

Permian

Nevada, Pequop Formation, ophiuroids: Mayou, Taylor V. 07874

Echinoidea

Catalogs

Mesozoic–Cenozoic, Mexico: Buitron, Blanca Estela. 09180

Cidaroida

Paleozoic, evolution, origin from echinocyttoids: Kier, Porter M. 05711

Collyritidae and Disasteridae

Jurassic–Cretaceous, taxonomy, evolution of eocyclic forms: Mintz, Leigh W. 05694

Disasteroida, new order

Mesozoic, taxonomic revision, phylogeny: Mintz, Leigh W. 05694

Echinocyamus bisexus, n.sp.

Eocene, Georgia, Lake City Formation: Kier, Porter M. 04127

Geochemistry

Skeletal calcite, C–O isotope ratios, Devonian–Recent: Weber, Jon N. 00493

Skeleton, composition, crystallography: Schroeder, Johannes H. 08472

Leniechinus herricki, n.sp.

Eocene, Georgia, Lake City Formation: Kier, Porter M. 04127

Lenticularis utahensis, n.gen., n.sp.

Triassic, Utah, southwestern, miocidarid: Kier, Porter M. 05675

Morphology

Plate growth, rate, mathematical model, computer simulation: Raup, David M. 05738
Soft, hard parts, form and function, relations: Wolleben, James A. 11130

Nortonechinus

Devonian, Iowa, Lime Creek Shale, morphology, origin: Kier, Porter M. 05711

Pentidium curator

Eocene, Georgia, Lake City Formation: Kier, Porter M. 04127

Taxonomy

Atelostomata, revision, new orders: Mintz, Leigh W. 05694

Echinoidea—Continued

Tertiary

- Georgia, Eocene-Oligocene, biostratigraphic significance: Pickering, Sam M., Jr. 00880
- Georgia, Lake City Formation, Eocene, new fauna: Kier, Porter M. 04127

Triassic

- North America, cidaroid species: Kier, Porter M. 05675

Ecology

Alaska

- Glacial, Mollusca: Tuthill, Samuel J. 10803
- Lacustrine, Tanana and Yukon River drainage areas: Likens, Gene E. 05332

Alberta

- Terrestrial, man: Bryan, Alan. 10927

Algae

- Marine, Florida reef tract, cf. Permian, Texas: Klement, Karl W. 08902

Analysis

- Arctic and alpine environments, symposium: Wright, H. E., Jr. 02079
- Arctic and alpine tundra ecosystems, vertebrate faunas: Hoffman, R. S. 02080
- Arctic environments, remote-sensing methods: Simonett, David S. 02092
- Color aerial photography, Florida, Everglades: Schneider, William J. 02375
- Evaporites: Kinsman, D. J. J. 01171
- Lacustrine, eutrophication, mathematical models: Brezonik, Patrick Lee. 07007
- Marine, large-diameter undisturbed benthos sampler: Menzies, Robert J. 06132
- Mg-Ca ratio, factors: Moberly, Ralph, Jr. 08983
- Palynology, type spectrum for forest climax domain, Quebec: Richard, Pierre. 02050
- Plankton concentration, relation to hydroxyapatite, Lake Erie: Snow, Phillip D. 07008
- Species abundances, covariance patterns, alternate model types: Imbrie, John. 01213

Annelida

- Marine, Texas, serpulid reef: Behrens, E. William. 06308

Bahamas

- Marine, turbidites, source area: Cameron, Barry. 08639

Branchiopoda

- Lacustrine, Indiana, cladoceran remains in sediments: Harmsworth, Rodney V. 06125
- Lacustrine, Mississippi Valley, chydorids, diversity: deCosta, John. 06511

Bryozoa

- Marine, geographic and depth distribution, sampling bias: Schopf, Thomas J. M. 11392

Changes

- Forest to bog, Alaska, interior, P and cations availability: Heilman, Paul E. 03103
- Summer and winter, marine sediments, biochemical decomposition: Seki, H. 04471
- Unit evolution, above population level: Valentine, James W. 02966

Delaware

- Estuarine, Indian River Bay, foraminiferal distribution: Kraft, John C. 10810

Evolution

- Species, climatic regulation: Valentine, James W. 00521

Foraminifera

- Littoral, California, Tomales Bay, benthonic: Maurer, Don. 04407
- Marine, Delaware, Rehoboth Bay, sediment, distribution: Buzas, Martin A. 10994

Ecology—Continued

Foraminifera—Continued

- Marine, Gulf of Mexico, biofacies, cluster analysis: Mello, James F. 03230
- Marine, Gulf of Saint Lawrence, Magdalen Shallows: Vilks, G. 04403
- Marine, harbors: Buzas, Martin A. 00169
- Marine, marginal environments, Oregon: Fowler, Gerald A. 07727
- Marine, shelf assemblages, British Honduras: Wantland, Kenneth F. 09730
- Relation to carbon content of sediments: Seiglie, George A. 05712

Gastropoda

- Fresh-water, Ohio, Pleistocene, Holocene: LaRocque, Aurele. 05642

Hawaii

- Marine, Kauai, western: Eppert, Herbert Charles, Jr. 00850

Kentucky

- Terrestrial, Pleistocene drift region: Keith, John R. 07988

Massachusetts

- Buzzards Bay, attached epifauna: Driscoll, Egbert G. 10101

Methods

- Collecting, sampling of benthonic communities, binomial theory: Dennison, John M. 08142

Minnesota

- Prairie, pimple mounds: Ross, B. A. 00818

Mollusca

- Glacial, Alaska: Tuthill, Samuel J. 10803

New York

- Marine, Long Island Sound, animal-sediment relations: Rhoads, Donald C. 06048

North America

- Terrestrial, soils, plant communities: Eyre, S. R. 04129

North Dakota

- Terrestrial, prairie potholes, vegetation: Eisenlohr, William S. 02820

Northwest Territories

- Arctic, Prince Patrick Island: Tedrow, J. C. F. 09007

Nova Scotia

- Marine, Minas Basin, sediment grain-size cf. clam distribution: Clebnik, Sherman M. 06628

Ocean basins

- Climatic regulation of species: Valentine, James W. 00521

Oklahoma

- Lacustrine, pond-vegetation, relation to lithology: Collins, Vernes E. 05143

Oregon

- Desert, Crater Lake Natl. Park, Pumice Desert: Horn, Elizabeth Mueller. 05648

Ostracoda

- Lagoonal, Mexico, Campeche: Morales, Gustavo A. 07867
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- Pennsylvania, Holtwood area, Muddy Run project: Wilson, Stanley D. 01835
- Pore pressures, control: Taylor, Karl V. 09715
- Postglacial rebound fissures: Charalambakis, S. 10492
- River-bed degradation below, prediction: deVries, M. 00303
- River-bed degradation below, prediction: Egiazaroff, Ivan. 00304
- River-bed degradation below, prediction: Gill, Mohammad Akram. 00302
- River-bed degradation below, prediction: Herbertson, John G. 00300
- Rockfill materials, strength and compressibility tests: Hillis, Sydney F. 09398
- Tennessee, Chattanooga area, Nickajack project: Parker, Robert L. 10331
- Virginia, John W. Flannagan Dam: Ern, Ernest H. 08223
- Washington, Cascade border: Cary, Allen S. 07221
- Washington, Chief Joseph dam, foundation rock: Twelker, Neil H. 07215
- Washington, Columbia River, Howard A. Hanson dam: Ward, T. E. 07222
- Washington, George Culmback (Sultan) dam: Coombs, Howard. 07223
- Washington, Grand Coulee dam, areal geology: Vehrs, Robert. 07216
- Washington, Upper Skagit River sites: Coombs, Howard. 07228
- Earthquakes*
- Alaska, Fairbanks area, June 21, 1967: Cloud, William K. 00167
- Alaska, March 28, 1964, tsunami: Wilson, Basil W. 07332
- Alaska, Prince William Sound area, effects, photointerpretation: Hackman, Robert J. 06490
- Buildings, nonsymmetrical, dynamic response: Zayed, Mostafa Mahmoud. 02613
- California, San Francisco Bay area, pre-earthquake planning: Steinbrugge, Karl V. 07658

Engineering geology—Continued*Earthquakes—Continued*

- California, San Francisco Bay area, urban development of fault zones: Cluff, Lloyd S. 04051
 Dam design, earth: Brown, R. L. 00198
 Dams, effects on incidence: Bostrom, R. C. 10455
 Dams, foundations, interactions: Perumalswami, P. R. 06537
 Earth banks, response, finite-element analysis: Idriss, I. M. 01004
 Effects, tall buildings with setbacks: Jhaveri, Dilip Purshottamdas. 01761
 Foundation-structure interaction, experimental study: Scavuzzo, R. J. 10039
 Geodimeter fault movement investigations, California: California Dept. Water Resources. 09028
 Gravity effects, yielding structures: Husid, Raul. 00877
 Human reactions, building design, relations: Steinbrugge, Karl V. 08333
 Major structure design: Fischer, Joseph A. 06632
 Multistory building frames, inelasticity: Goel, Subhash Chandra. 07166
 Multi-story structures, maximum response: Giberson, Melbourne F. 05134
 Nonlinear structures, effects, analysis, digital method: Liu, Shih-Chi. 01762
 Occurrence, forecasting, probabilistic models: Benjamin, Jack R. 01137
 Reactors, safety: Lomenick, T. F. 08783
 Reservoir loading effect: Carder, Dean S. 04851
 Saturated sand, liquefaction, experimental: Schroeder, Warren Lee. 04459
 Seismic risk analysis: Cornell, C. Allin. 04826
 Slope stability, earth dam: Harlan, Richard C. 00197
 Soil liquefaction, landslides: Seed, H. Bolton. 04582
 Soil liquefaction, prediction, cyclic shear tests: Peacock, William H. 00987
 United States, microtremors, aseismic design: Tanaka, Teiji. 07049
 Vertical component, response spectra, buildings: Chopra, Anil K. 08251

Education

- Curriculum changes, Colorado School of Mines: Weimer, Robert J. 09486
 Formation evaluation, Houston University: Overton, Harold L. 06527

Environmental

- Infrared aerial surveys, applications: Matalucci, Rudolph V. 04860

Excavations

- Ground-water controls, entrapped air: Roberts, George D. 08855
 Maryland, Baltimore-Aberdeen area, aqueduct: Cleaves, Emery T. 11233

Experimental studies

- Air-induced ground shock, theory: Batdorf, S. B. 07729
 Basalt, dense and vesicular, strength comparisons: Lutton, R. J. 05039
 Clays, response to loads: Fletcher, E. B. 07715
 Clays, swell pressure, mathematical analysis: Baker, R. 06059
 Concrete building, eight-story reinforced, forced vibration: Englekirk, R. E. 08264
 Cylindrical openings, stress distributions, models: Bohidar, Naikananda K. 04461

Engineering geology—Continued*Experimental studies—Continued*

- Dynamic elastic properties, Green River shale under stress: Podio-L., A. 09451
 Elastic wave velocities, soil, effect of clay: Nacci, Vito A. 07733
 Elastic waves, spherical, explosive generated, model: Hornsey, Edward Eugene. 00845
 Granular media, inelastic response: Lenoe, E. M. 07719
 Granular media, shear strength, effect of vibration: Youd, T. Leslie. 07711
 Granular media, vibration compaction, theory: Bazant, Zdenek J., Jr. 07712
 Ground motion in far field, surface energy source: Heller, Lyman W. 07739
 Ice, frozen soil mixtures, equation of state, 60 to 500 kb: Anderson, Gordon D. 05331
 Layered media, wave-propagation test: Zaccor, J. V. 07710
 Mechanical properties, rocks and soils, method: Krech, Warren Willard. 01765
 Multistory building, source of damping, dynamic tests: Rea, Dixon. 02300
 Porous materials, permeability, model study: Hancox, N. L. 00590
 River erosion, bed material, coarse, uniform, initial movement: Neill, C. R. 03114
 Rock salt, thermal effects on deformation: Lomenick, T. F. 07946
 Salt failure by explosions: Short, N. M. 01117
 Sand deformation, high stresses: Vesic, Aleksandar S. 00973
 Sand, vibration effects: Youd, Thomas Leslie. 02023
 Sand, viscosity of saturated: Yen, Bing C. 07704
 Saturated sand, liquefaction, seismic loading: Schroeder, Warren Lee. 04459
 Sediment diffusion, nonuniform flow field: Apmann, Robert Proctor. 04460
 Sediment transport, conveyance system: Acaroglu, Ertan Riza. 03017
 Shear strength, natural soft clays, review: Kenney, T. C. 05287
 Soils, frost susceptibility, highway use, tests: Kaplar, Chester W. 09098
 Steel frame structure, dynamic response: Bouwkamp, J. G. 10828
 Stress-wave propagation, cohesive soil: Kondner, Robert L. 07732
 Stress-wave propagation, confined soils: Hampton, Delon. 07730
 Surface vibration of viscoelastic medium: Lee, T. M. 07740
 Thermal conductivity, Ottawa sand and ice mixtures, compaction effects: McGaw, Richard. 09099
- Flood control structures*
 Louisiana, Atchafalaya basin floodway: Hebert, Kermit L. 09888
- Foundations*
 Bedrock fracture porosities, calculation for grout: Snow, David T. 00132
 California, Aqueduct Project, exploration, oriented-core: Voloshin, V. 05041
 California, Bolsa Island nuclear plant, geophysical studies: Campbell, David G. 04849
 California, Central Valley, Dos Amigos Pumping Plant, rebound: Stoll, Ulrich W. 00200
 California, Livermore and Amador Valleys: Gibson, W. M. 01125
 Hawaii, Mauna Kea volcano, observatory site: Furumoto, Augustine S. 04667

Engineering geology—Continued*Foundations—Continued*

- Iowa, loess-mantled areas: Williams, Wayne W. 09738
- Kentucky, Calvert City quadrangle: Finch, Warren I. 06081
- Louisiana, Mississippi delta clays: McClelland, Bramlette. 08798
- Louisiana, New Orleans: Eustis, J. Bres. 08680
- Missouri, Buckhorn area, Highway 66, cavernous dolomite: Vineyard, Jerry D. 06696
- Missouri, Independence quadrangle: Parizek, Eldon J. 02917
- Montana, Helena reservoir, fractures: Elliott, Harold C. 04854
- New York, Flushing Meadows, roads: Baskerville, Charles A. 07506
- Pore pressures, control: Taylor, Karl V. 09715
- Quebec, Sorel area, smelter furnace, Leda clay consolidation: Golder, H. Q. 06071
- Soil surveys, high intensity: Olson, Gerald W. 01058
- Textbook, soil mechanics: Parcher, James V. 09446

Gas storage

- California, McDonald Island field: Lee, Charles A. 02101
- California, Playa del Rey oil field: Barnds, Ray M. 02107
- General: Katz, Donald LaVerne. 07290
- Michigan, Michigan basin: Vary, J. A. 03409
- Ohio, Cincinnati arch, northern: Lockett, Robert. 03405
- Oil and gas reservoirs, factors: Goodman, J. V. 04309
- Water sands, storage technique: Ball, Douglas. 03393

General

- Arizona, Tucson-Benson area, field trip, road log: Lacy, W. C. 02648
- Borehole cameras: Lundgren, Raymond. 04319
- Man as geologic agent: Legget, Robert F. 11315

Geologic hazards

- California, San Francisco Bay area, need for urban geologists: Pstrong, Raymond. 04248
- California-Nevada, Lake Tahoe area: Matthews, Robert A. 03674
- Ice avalanches: Mellor, Malcolm. 03152
- Kentucky, Paducah East quadrangle: Nichols, Thomas C., Jr. 06013

Gullying

- Restoration, valley floors, arid, semiarid regions: King, Norman J. 06066

Harbors

- New York, Hudson River, shoaling, model study: Panuzio, Frank L. 06367

Highways

- Aerial photography, interpretation, Colorado, McClure Pass: Pryor, William T. 02378
- Base courses, frost susceptibility, crushed limestone: Kalcheff, I. V. 10868
- Base courses, frost susceptibility, granular materials: Leary, Robert M. 10869
- British Columbia, Trans-Canada Highway, Burnaby Freeway, sensitive clay: Hoy, E. M. 04251
- Connecticut, field trip: Siebert, Harry L. 05936
- Design problems, Saskatchewan: Sauer, Emil Karl. 00842
- Geophysical techniques, subsurface geology: Mitchell, Robert E. 04144
- Illinois, stability, ground water, effects: Williams, Roy E. 10198

Engineering geology—Continued*Highways—Continued*

- Iowa, design, effect of peat deposits: Blattert, Robert E. 04146
- Kansas, applications, review: Burgat, Virgil A. 04143
- Kansas, north-central, Peoria loess subgrade, gleying: Crumpton, Carl F. 10981
- Louisiana, southern: Kemahlioglu, Ali S. 08761
- Mountain valleys, ground-water flow systems, frost heave: Williams, Roy E. 01939
- Nebraska, application, procedures: Eversoll, Duane A. 04149
- North Dakota, Fargo area, foundation soils, stabilization: Bell, Gordon L. 07510
- Remote-sensing methods, application: Rib, Harold T. 11244
- Saskatchewan, southern, glacial till subgrade, moisture, soil suction: Sauer, E. K. 09097
- Soils testing, frost susceptibility: Kaplar, Chester W. 09098
- Symposium, 17th annual: Lemish, John. 04142
- United States, eastern, symposium: Erwin, Robert B. 08011
- Virginia, Scott Run basin, stream erosion during construction: Vice, Raymond B. 00056
- Washington, Seattle freeway, landslide problems: Anderson, Roy. 07224
- West Virginia, Bentons Ferry-Fairmount highway: Thompson, Berke L. 07999

Hydraulic studies

- Stream geometry, modeling: Bruun, Per. 01080
- Stream geometry, modeling: Hooke, Roger LeB. 01079

Instruments

- Piezometer probe, pore pressures, marine clays: Lai, John Y. 08477
- Seismograph, multiple station, automatic recording: Schwarz, Sigmund D. 10040

Irrigation

- Washington, Columbia basin project: Neff, George. 07217

Land subsidence

- Arizona, San Manuel mine, mechanics: Hatheway, Allen W. 11296
- Buried karst, detection by electrical methods: Kennedy, J. M. 01889
- California, central, sediment compaction, causes: Meade, Robert H. 00811
- California, Delta-Mendota Canal: Prokopovich, N. P. 10870
- California, Fresno County, ground-water withdrawal: Prokopovich, Nikola P. 09040
- California, Livermore and Amador Valleys: Gibson, W. M. 01125
- California, Los Angeles area, Wilmington oil field: Albright, M. B., Jr. 06666
- California, Los Banos-Kettleman City area: Bull, William B. 07772
- California, Pixley area, aquifer compaction: Riley, F. S. 08085
- California, relations to water-level decline: Lofgren, Ben E. 07945
- California, San Joaquin Valley, cracks, filled: Prokopovich, Nikola P. 10251
- California, San Joaquin Valley, stress analysis: Lofgren, Ben E. 00733
- California, Santa Clara Valley, 1960-65: Poland, J. F. 08089
- Carbonate areas, ground-water withdrawal: Foose, Richard M. 06051
- Ground-water withdrawal, pore pressures, role: Poland, Joseph F. 08845

Engineering geology—Continued

Land subsidence—Continued

- Louisiana, Baton Rouge area: Davis, George H. 08519
 Louisiana, New Orleans area, ground-water off-take: Kazmann, Raphael G. 09322
 Mining activity, model analysis: Pariseau, William G. 06350
 Nevada, Las Vegas Valley: Domenico, Patrick A. 07764
 Ontario, Cornwall to Quebec border, Leda clays: Stermac, A. G. 04258
 West Virginia, Bentons Ferry-Fairmount highway: Thompson, Berke L. 07999

Land use

- Illinois, Hennepin region: McComas, Murray R. 04318
 Planning, photo interpretation, panel discussion: Vink, A. 11247
 Soils, interpretive maps for planning: Wohletz, L. R. 07439
 Strip mined areas, glaciated vs. nonglaciated, Indiana: Guernsey, Lee. 06918

Landslides

- Aerial photography, color and color infrared interpretation: Mintzer, Olin W. 02542
 Alaska, Anchorage area, quick-clay slides: Kerr, Paul F. 04194
 Alaska, Kenai Lake area, 1964 earthquake effects: McCulloch, David S. 06491
 Alberta-Manitoba-Saskatchewan, Cretaceous shales: Scott, J. S. 02057
 California, Alameda, Contra Costa Counties, classification: Waltz, James Patterson, 2d. 02045
 California, Mendocino National Forest, Elk Creek: Danehy, Edward A. 04855
 California, San Clemente area, analysis: Blanc, Robert P. 07693
 California, San Diego County, Mount Soledad slide: Mann, Richard L. 08301
 Colorado, Fryingpan-Arkansas Rivers project: Hall, Charles E. 04856
 Colorado, Loveland Basin, seismic study: Carroll, Roderick D. 00792
 Colorado, Mesa Verde National Park, analysis: Everitt, Martin C. 04847
 Experimental studies, sliding mechanism, air-layer lubrication: Shreve, Ronald L. 01164
 Kentucky, Lovelaceville quadrangle: Finch, Warren I. 05751
 Ohio, southeastern, shales, stability tests: Fisher, Stanley P. 09084
 Ontario, Toronto area, Don Valley Parkway: Matich, M. A. J. 06962
 Quebec, Toulousteuc River, soil properties: Quigley, R. M. 04253
 Soil liquefaction due to earthquakes: Seed, H. Bolton. 04582
 South Dakota, Pierre Shale: Bruce, Richard L. 04150
 Utah, slide-prone formations: Shroder, John Ford, Jr. 00864
 Washington, Lower Baker River slide: Olmsted, Terry. 07227
 Washington, Seattle-Tacoma freeway, Military Road slide: Cary, Allen S. 07225
 Washington, Wenatchee area, Stemilt Creek basin: Pilz, Hugo A. 07214
 West Virginia, highway cuts: Leach, Richard C. 07968

Liquid storage

- General: Katz, Donald LaVerne. 07290

Engineering geology—Continued

Materials, properties

- Aggregate, foliated rocks, flecking, slate recommended: Ozol, Michael A. 06160
 Alberta, Edmonton area, bedrock and surficial deposits: Bayrock, L. A. 09492
 California, central, subsiding areas, sediments: Johnson, A. I. 00312
 Chert, morphology: Kneller, William A. 04151
 Clay, dynamic shearing properties: Olson, R. E. 07707
 Clay-quartz mixtures, drying shrinkage, differential: Kilgore, R. V. 09250
 Clays, flow under dynamic compression: Yong, R. N. 07722
 Coring, orientation method: Kempe, Walter F. 04837
 Dynamic elasticity, Green River shale under stress: Podio-L., A. 09451
 Elasticity, isotropic and anisotropic rocks, basalt, shale: Kaarsberg, Ernest A. 06764
 Evaporites, GNOME project: Gard, Leonard M., Jr. 04059
 Foliated rocks, coarse cement aggregates: Ozol, Michael A. 07858
 Frost susceptibility, crushed limestone, road base courses: Kalcheff, I. V. 10868
 Frost susceptibility, granular aggregates, base courses: Leary, Robert M. 10869
 Granular, behavior under high stresses: Vesic, Aleksandar S. 00973
 Grout absorption characteristics, determination: Grant, Leland F. 08708
 Highway concrete, carbonate-aggregate reaction rim behavior: Elwell, James H. 08676
 Igneous and metamorphic rocks, thermal conductivity, Canada: Mirkovich, V. V. 02354
 Illinois, McHenry County, surficial deposits: Smith, W. Calhoun. 00072
 Iowa, Harrison County, loess: Fox, N. S. 03636
 Iowa-Nebraska, Omaha-Council Bluffs area, loess: Benak, Joseph Vincent. 01337
 Kentucky, Calvert City quadrangle: Amos, Dewey H. 02948
 Kentucky, Calvert City quadrangle: Finch, Warren I. 06081
 Kentucky, Paducah East quadrangle: Nichols, Thomas C., Jr. 06013
 Kentucky, Paducah West and Metropolis quadrangles: Finch, Warren I. 04004
 Limestone, void ratio-shear strength relations: Tinoco, Fernando H. 11011
 Magnetite, quartzite, elasticity, compressibility: Coates, D. F. 05725
 Mechanical, rocks: Hendron, A. J., Jr. 09145
 Mississippi, gravel, Citronelle Fm.: Gilliland, William E. 08529
 Missouri, Maxville quadrangle: Lutzen, Edwin E. 11176
 Natural earth materials, projectile penetration depths: Colp, John L. 08648
 Nevada, Pahute Nesa, volcanic rocks: Snyder, R. P. 07145
 Oceanic sediments: Monney, Neil Thomas. 01766
 Peat, shear strength, vane tests: Wilson, N. E. 05371
 Pennsylvania, Delaware Valley, Pleistocene deposits: Depman, A. J. 10808
 Polycrystalline rock, strength, loading rate effect: Shoua, Ezra D. 07721

Engineering geology—Continued*Materials, properties—Continued*

Remote-sensing methods: Parker, Dana C. 00163

Rock cores, evaluation techniques: Michael, Robert D. 04145

Rockfill, laboratory tests, Mexico: Marsal, Raul J. 01837

Rockfill, strength and compressibility tests: Hillis, Sydney F. 09398

Rocks, sensitivity to frost action, factors: Winkler, Erhard M. 04807

Sand, effects of strain history: Drnevich, Vincent Paul. 00887

Sand, Ottawa, deformation at failure, new test method: Ko, Hon-Yim. 01836

Sand, shear modulus, effect of vibration amplitude: Drnevich, V. P. 07723

Saskatchewan, Province Highway, glacial till subgrade, soil suction: Sauer, E. K. 09097

Sedimentary rocks, Alabama, Cahaba coal field: Cox, Robert M., Jr. 09893

Sediments, ocean floor, in-place measurement, accelerometer: Scott, Ronald F. 05235

Sediments, ocean floor, shear strength, other properties: Keller, George H. 05208

Sewer-project studies: Greer, David M. 00210

Sewer-project studies: Keim, Paul F. 02589

Shale, fine aggregate in concrete, alkali reactions: Elwell, James H. 06640

Snow, strength, measurement, resistograph vs. direct loading: Bradley, Charles C. 04880

Soil, rock, inelastic wave propagation, solution: Abbott, Phillip A. 07728

Soil, rock, wave propagation and dynamic properties: Newmark, Nathan M. 07735

Soils, frost susceptibility, highway use, tests: Kaplar, Chester W. 09098

Strength, silty soils, field vane testing: Blight, G. E. 04250

Symposium, soil, rock, dynamic properties: New Mexico Univ. Dept. Civil Eng. 07811

Tensile strength: Hardy, H. Reginald, Jr. 10597

Terrestrial, extraterrestrial surfaces, penetrometer technique: McCarty, John L. 07810

Thermal conductivity, Ottawa sand and ice mixtures, compaction effects: McGaw, Richard. 09099

Tuff, use as aggregates for soil-cement subgrades, New Mexico: Pettitt, Roland A. 05656

Volcanic rocks, Nevada Test Site: Carroll, Roderick D. 06819

Waste effluents, effects: White, W. Arthur. 08125

Welded tuff, vibration, New Mexico: Keller, M. Dean. 07731

Mines

Faults, stress analysis, model study: Haycocks, Christopher. 00844

Nuclear explosions

Constructive use: Teller, Edward. 07863

Craters, surface explosions, scaling laws: Vortman, L. J. 02362

Effects, buildings, cracking: Wiggins, John H., Jr. 08351

Evaluation, industrial applications: Knutson, Carroll F. 07916

Excavation research: Kurtz, Maurice K., Jr. 09578

GNOME, effects: Gard, Leonard M., Jr. 04059

Mississippi, Tatum salt dome: Summers, George E. 06888

Engineering geology—Continued*Nuclear explosions—Continued*

Nevada, ground-water contamination: Essington, Edward H. 06797

Nevada, southern, test site, geologic results, general: Eckel, Edwin B. 06821

SALMON, shock-related damage: Power, Dean V. 08314

Shock propagation, soil or rock, hand solution: Abbott, Phillip A. 07728

Underground testing, site appraisal, Nevada: Houser, F. N. 06823

Wave propagation, layered media, computer solution: Costantino, C. J. 07738

Permafrost

Research, distribution, features, map, problems: Brown, R. J. E. 09618

Rotary drilling and coring problems, Manitoba: Lange, G. Robert. 06726

Petroleum technology

Reservoir analysis, use of dynamic basic data: Havlena, D. 05333

Photogrammetric studies

Applications, panel discussion: Gamble, S. G. 09656

Canada, scope, applications: Mollard, J. D. 09655

Environmental geology, planning: Tomlinson, R. F. 09663

General, methods, interpretation: Avery, T. Eugene. 00810

Highway planning, Canada: Higgs, R. W. 09658

Orbital satellites: McEwen, Robert Barlow. 06536

Permafrost areas: Pihlainen, J. A. 09657

Rural planning, photo interpretation: Fraser, I. S. 09661

Soil surveys, Ontario: Mathur, B. Sen. 09659

Terrain analysis: Colwell, Robert N. 08885

Underdeveloped areas: Vink, A. P. A. 10932

Urban development, planning tool: Erb, D. K. 09662

Power plant

Underground, aseismic design, Colorado, Morrow Point: Campbell, R. B. 11160

Practice

1966, geophysical projects, world: Tucker, L. R. 00185

Environmental, responsibilities: Flawn, Peter T. 09380

Geologist in public health: Emrich, Grover H. 08222

Geophysical activity, 1967, world statistics: Melickian, G. E. 06143

Geophysics, use and abuse: Fritz, Axel M. 04152

Mine surveyors, professional status: Vaca Alatorre, Alfonso. 06790

Subterranean studies, sewer projects: Keim, Paul F. 02589

Urban waste disposal, need for geologists: LeGrand, H. E. 08148

Remote-sensing studies

Applications: Feder, Allen M. 09579

Reservoirs

California, Baldwin Hills, failure: James, Laurence B. 07507

Colorado, Jefferson County, Mt. Carbon site: Smith, Joseph B. 03999

Mississippi-Alabama, Pascagoula River basin, comprehensive studies: U.S. Army Corps Engineers. 02457

Nebraska, Omaha area, Papillion Creek: Smith, Joseph B. 04001

Engineering geology—Continued*Reservoirs—Continued*

Wyoming, Anchor Reservoir area, sink development, seismic survey: Godson, Richard H. 05038

Rock mechanics

Application, civil engineering, summary: McClure, C. R. 11156

Application, mining: Black, R. A. L. 11155

Applications, 1967, review: Grosvenor, N. E. 03840

Applications, longwall roof control problems: Holland, C. T. 09399

Basalt, dense and vesicular, strength comparisons: Lutton, R. J. 05039

Borehole probe, stress change measurements: Fitzhugh, T. Lee. 10584

Breakage indexes, jointed rocks: McMahon, Barry K. 11161

British Columbia, Sullivan mine: Royea, M. J. 07756

Brittle fracture, relation to mechanical properties: Cheatham, J. B., Jr. 05153

Brittle material, strength, point load testing: Reichmuth, Donald R. 11162

Canada, application to bedded deposits: Ignatieff, A. 07755

Coal mining, electric log applications: Bond, L. O. 06829

Compressive strength studies, rock pillars: Babcock, C. O. 06827

Cratering, effect of physical properties of rocks: Gnirk, P. F. 11403

Current research, Ontario, Sudbury nickel mines: Moruzi, G. A. 09601

Cylindrical openings, stress distributions, models: Bohidar, Naikananda K. 04461

Factor analysis, rock properties, interrelations: Mutmanský, Jan M. 11163

Finite-element method, rock stability analysis: Lundgren, R. 05284

Fracturing, around rock bolts: Culver, Richard S. 11165

Fracturing, explosive action, mechanism: Saluja, Sunder S. 11167

Fracturing, hydraulic pressure induced, azimuth, orientation: Pegler, A. V. 11169

Fracturing, waveform generation, longitudinal impact: Lyons, Charles Gene. 04457

Fragmentation research, mining technology: U.S. Bureau of Mines. 10922

Geologic factors: Deere, D. U. 08933

In situ stresses, hydraulic fracturing: Haimson, Bezalel. 10585

Instruments, borehole probe, stress changes: Nichols, Thomas C., Jr. 04005

Instruments, tiltmeter, in situ stress measurement: McConnell, R. K., Jr. 05031

Jointed rock, model: Goodman, Richard E. 01005

Layered rock, wedge failures: Pipkin, Bernard W. 04831

Mine excavations, composite models, photoelastic analysis: Agarwal, R. K. 06763

Mine operations, photoelastic models, Ontario, Sudbury nickel mines: Wilson, J. C. 09604

Mine roof stability, effect of shale: Scott, James J. 06857

Mine slope closures, Ontario, Sudbury nickel mines: Notley, K. R. 09603

Mine subsidence, prediction, model: Brown, Ralph Edward. 06541

Mining excavations, in situ stress determinations: Roberts, A. 09892

Engineering geology—Continued*Rock mechanics—Continued*

Mississippi, Tatum salt dome, stability: Nair, Keshavan. 06886

Nevada, Ely area, Kimbely pit, slope design: Halstead, Perry N. 00046

Nevada, Ely area, Kimbely pit slope design: Wisecarver, David W. 00050

Nevada, Ely area, Kimbely pit: Merrill, Robert H. 06761

Nevada, Ely area, Kimbely pit, model study: Blake, Wilson. 07010

Nevada Test Site, granodiorite, failure: Giardini, A. A. 11285

Oil recovery, applications: Komar, C. A. 10972

Ontario, Sudbury district, Falconbridge mine: Slade, A. G. 07759

Ontario, Sudbury nickel mines: MacMillan, P. W. 09602

Open-pit mines, slope stability: Merrill, Robert H. 02391

Petrofabric-photoelastic analysis: Rana, M. H. 00034

Photoelastic coating model technique: Goode, Claude E. 09894

Quarries, problem areas, geophysical detection: Lutzen, E. E. 06847

Quebec, Schefferville area, open-pit mine, joints, stress: Bullock, W. D. 11151

Rock cavities, stability: Cording, Edward James. 01338

Rock classification system: Patching, T. H. 07757

Rock masses, dynamic behavior: Ambraseys, N. N. 11006

Rock masses, properties of intact and jointed: Hendron, A. J., Jr. 09145

Shear strength, limestones, jacket-cell compression tests: Ladanyi, B. 09417

Static loading, layered media: Kuo, John T. 00032

Strain, measurement in hemispherically ended boreholes: Hoskins, E. R. 05726

Strain, regional, determination, seismic method: Emery, C. L. 04859

Strain, vertical and horizontal, vicinity of pumping wells: Peterson, Frank L. 07839

Strength, coal pillar, interfacial friction with rock: Holland, Charles T. 05032

Strength, limestone, California, Crestmore mine: Heuze, Francois E. 11164

Stress, measurement in boreholes: Barla, G. B. 11158

Stress, measurement in boreholes, strain cell: Gray, W. M. 11157

Stress, measurement in place: Agarwal, Ramkrishna. 11159

Stress measurement technique, deep holes: Hoskins, Earl R. 10491

Stresses around wellbores, nonlinear rock: Mahatab, M. A. 04800

Stress-relief studies, boreholes: Barla, G. B. 06828

Symposium, 9th, 1967: Grosvenor, Niles E. 11431

Technique, barodynamic photostress, rock beams: Wang, Chi-shing. 11404

Textbook: Stagg, K. G. 08932

Time-dependent behavior, method, mine design application: Serata, S. 03092

Sanitary landfills

Ground-water alteration, test surveys, Illinois: Cartwright, Keros. 04269

Engineering geology—Continued*Shorelines*

- Beaches, experimental study, effect of waves of low phase difference: Kemp, Patrick H. 04577
 California, Santa Barbara area, sea cliff, retreat rate: Norris, Robert M. 02052
 Florida, beach maintenance, sand fill: Duane, David B. 09205
 Hawaii, coastal segments, changes, development: Moberly, Ralph, Jr. 09883
 Hawaii, conservation, development, urbanization problems: Hawaii Dept. Plan. and Econ. Devel. 09884
 Littoral drift, quantitative research: Bruun, Per. 09540
 Oceanographic techniques: Mecarini, Gino. 09576
 Ontario, Lake Erie, Port Bruce area, bluff erosion: Quigley, R. M. 07090
 Pennsylvania, Lake Erie, stabilization: Berg, Dennis W. 07009
 Restoration, sand deposits for beach fill, continental shelf: Duane, David B. 07347
 Sediment transport and diffusion problems: Einstein, H. A. 10915

Slope stability

- Alaska, Prince of Wales Island, Maybeso Valley: Swanston, Douglas N. 02609
 Analysis, computer use: Starr, Michael Reginald. 00988
 Analysis, evaluation of procedures: Parcher, James Vernon. 03019
 California, Alameda, Contra Costa Counties, indicators: Waltz, James Patterson, 2d. 02045
 Canada, open-pit mines: Brawner, Carroll O. 06867
 Controlling factors, monitoring instrumentation: Hartmann, Burt. 11166
 Earth banks, seismic response, finite-element analysis: Idriss, I. M. 01004
 Earthquake effects: Harlan, Richard C. 00197
 Elastic, viscoelastic embankments, stresses, displacements: Baladi, George Youssef. 07164
 Inelastic analysis, finite element method: Gates, Richard Holt. 04455
 Iowa, Tennessee, loess, test methods, in situ: Lohnes, R. A. 09577
 Layered rock, wedge failures: Pipkin, Bernard W. 04831
 Loess deposits, slope angles, Iowa: Lohnes, R. A. 03458
 Loess, shearing strength relations: Handy, R. L. 07955
 Microseismic technique: Wisecarver, D. W. 06862
 Nevada, Ely area, Kimbley pit: Merrill, Robert H. 06761
 Nevada, Ely area, Kimbley pit, model study: Blake, Wilson. 07010
 Ontario, Ottawa area, clay: Kenney, T. Cameron. 04583
 Open-pit mines: Merrill, Robert H. 02391
 Open-pit mines, dams, canals, review: Lutton, Richard. 06878
 Overconsolidated shales, Canada, western: Scott, J. S. 02057
 Pore pressures, effects: Deere, D. U. 08658
 Prediction, San Clemente area, California: Blanc, Robert P. 07693
 Quebec, Lac Jeannine, open-pit mine: Gagnon, J. M. Rejean. 07753
 Simple cuts, clays: Hunter, John Henry. 04456

Engineering geology—Continued*Slope stability—Continued*

- Special problems: Satyanarayana, B. 00199
 Wisconsin, Milwaukee, lake bluff: Murphy, W. G. 07860
 Wyoming, Bighorn Mountains, Shell Canyon: Schuster, R. L. 10260

Soils

- Aerial photography, color and color infrared interpretation: Mintzer, Olin W. 02542
 Automatic data processing, retrieval systems, descriptors and abstracts: Chari, Tuppal Ramanuja. 00974
 Bulk density, determination technique: Abrol, I. P. 07566
 California, Coast Ranges, creep rates: Kojan, Eugene. 07918
 Clay aggregates, compaction, volume change: Chang, R. K. 00508
 Clay mineralogy: Winterkorn, Hans F. 09614
 Clay mineralogy, effect on properties: Low, Philip F. 09615
 Clay type, general, textbook: Gillott, Jack E. 06316
 Clay-water system: Yasutomi, Rokyro. 02198
 Cohesive, energy dissipation: Ho, Michael Man-Kai. 01760
 Cohesive, erosive behavior, experimental: Dash, Umakant. 07165
 Consolidation, strain-rate effects: Smith, Ronald Ellis. 02622
 Creep tests, rate process theory: Mitchell, James K. 00133
 Damping capacity, testing technique: deGraft-Johnson, J. W. S. 07714
 Density and moisture, sampling techniques: McIntyre, D. S. 01066
 Density, gamma-ray measurement: Pirie, E. 07563
 Dynamic properties, behavior: Kondner, Robert L. 07726
 Dynamic properties, exploding wire technique: Fyfe, Ian M. 09384
 Dynamic properties, field determination: Bamert, E. 09070
 Dynamic properties, testing method: Chae, Yong Suk. 07713
 Dynamic properties, testing methods, developments: Lenoe, Edward Mark. 07718
 Elastic moduli, in situ determination: Maxwell, A. A. 07703
 Erosion control: Heede, Burchard H. 09899
 Foundation analysis: Bowles, Joseph E. 06185
 Foundation problems, introductory textbook: Parcher, James V. 09446
 Frozen, shear strength: Groughnour, Roy Robert. 02621
 Frozen, strength tests, apparatus: Black, Thomas John. 02021
 Hawaii, shear strength, laterites: Lohnes, R. A. 04846
 Hydraulic conductivity: Frazee, C. J. 02237
 Illinois, Livingston County: Thornburn, Thomas H. 09501
 Instruments, spiral-ft settlement gage, Canada: Bozozuk, M. 04261
 Iowa, Pleistocene, Holocene, properties: Handy, R. L. 07591
 Land-use planning, interpretive maps: Wohletz, L. R. 07439
 Lateral stresses, overconsolidation effect, measurement methods: Sherif, M. A. 04845

Engineering geology—Continued*Soils—Continued*

- Liquifaction, earthquake effects: Schroeder, W. L. 04844
- Mississippi Valley, Yazoo Basin: Kaufman, R. I. 08759
- Moisture movement from unfrozen to frozen: Hoekstra, Pieter. 07359
- Nevada, Las Vegas Valley, compressibility, land subsidence relations: Mindling, Anthony. 10988
- One-dimensional compression testing: Schindler, L. 07720
- Partially frozen, unfrozen water, temperature and pressure effects: Low, Philip F. 01848
- Permeability, mechanics, continuum theory, balance of mass: Raats, P. A. C. 01840
- Physical properties, pore pressure, blast over-pressure effect: True, Daniel G. 07708
- Physical properties, response to airplane loading: Theisen, J. G. 07727
- Pile-soil system, loading response: Airhart, Tom Patterson. 01759
- Pore pressures during earthquakes: Seed, H. Bolton. 08874
- Preconsolidation pressures: Kenney, T. Cameron. 04249
- Properties: Holtz, W. G. 06079
- Properties, data sheet: VanHorn, Richard. 04830
- Properties, determination, instrumented projectile: Caudle, W. N. 07809
- Properties, effect on airblast-induced motion: Hendron, Alfred J., Jr. 08880
- Quebec, Outardes 2 project, properties: Sainani, U. R. 04252
- Recognition of presampling deformation: Philbrick, Shailer S. 07845
- Remote-sensing methods: Parker, Dana C. 00163
- Response to repeated loading: Sangrey, Dwight Abram. 02022
- Sand, hydrostatic compression, stress-strain relations: Parkin, Alan K. 00128
- Sewer-project studies: Greer, David M. 00210
- Sodium saturation tests, volume and conductivity changes: Waldron, L. J. 01853
- Stability, long term: Soydemir, Cetin. 03020
- Strain measurement, gage instrumentation: Truesdale, William B. 07808
- Strain-rate dependence, effects of load history, model study: Stoll, Robert D. 07724
- Strength, determination method: DeRoock, Bernard. 07706
- Strength, silty, field vane testing: Blight, G. E. 04250
- Stress-strain-time function, creep curves: Singh, Awtar. 00131
- Temperate and tropical, comparison: Meyer, Marvin P. 08806
- Textbook: Scott, Ronald F. 04344
- Vibration settlement, Ottawa sand, tests: Greenfield, B. James. 07716

Strip mining

- Hydrologic effects: Cederstrom, D. J. 06835

Submarine installations

- Acoustical surveying systems, advantages: Palmer, H. D. 06882

Techniques

- Data analysis, graphical statistics: Mavis, Frederic T. 04579
- Infrared sensing, terrain studies: Parker, D. C. 06393

Engineering geology—Continued*Techniques—Continued*

- Remote imagery, potentials: Leighty, R. D. 06663
- Remote sensing, multispectral photography: Mintzer, O. W. 06392
- Scales for determining slope from topographic maps: Thrower, Norman J. W. 02508
- Terrain analysis*
- Function of user requirements: Benn, Bob O. 08881
- Mathematical models of relations: Grabau, Warren E. 08884
- Ontario, Camp Petawawa training area, vehicles, mobility studies: Parry, J. T. 08882
- United States, history, cf. England, South Africa, Australia: Aitchison, G. D. 11005

Textbooks

- Foundation analysis, soil mechanics: Bowles, Joseph E. 06185
- Soil mechanics and foundations: Parcher, James V. 09446

Tunnels

- Colorado, Leadville, Divide Tunnel: Brown, Lynn A. 08578
- Colorado, Roberts tunnel, rock swelling in faults: Wahlstrom, E. E. 07512
- Colorado, Straight Creek pilot bore, construction parameters: Scott, J. H. 00376
- Illinois, Chicago area, deep-tunnel system: Koelzer, Victor A. 06667
- Massachusetts, Boston area, City Tunnel: Tierney, F. Lyle. 07390
- Montana, Libby project, Flathead Tunnel: Galster, Richard W. 04858
- Ontario, Sudbury area, sewage tunnel: Card, K. D. 09518
- Virginia, Big Walker Mtn.: Cooper, Byron N. 08001
- West Virginia, East River Mtn., problems: Smith, James D. 08000

Underground excavation

- Granitic rock, stability index, Nevada Test Site: Ege, John R. 06812

Urban development

- Alabama, northwestern: Moser, Paul H. 09548
- Alaska, Anchorage area, planning: Dobrovolsky, Ernest. 06064
- Arid land, physical capacity, limitations: Aschmann, Homer. 09176
- California, hillside areas, planning, techniques: Slosson, James E. 10873
- Florida, Cape Kennedy area: Anderson, James R. 09175
- Kansas, Lawrence area, pilot study: Kansas Geological Survey. 09203
- Land-use planning: Hilpman, Paul L. 08731
- Nevada, Lake Tahoe area: Danehy, Edward A. 08260
- Planning, environmental aspects, Ontario, Toronto-Hamilton area: Hewitt, D. F. 02569
- Planning needs: Radbruch, Dorothy H. 06065
- Rapid excavation, development, needs: National Research Council. 09839
- Remote-sensing methods: Alexander, Robert H. 06382
- Training, need, history: Kaye, Clifford A. 08170
- Waste disposal*
- Appalachian Plateau, coal waste bank stability: Davies, William E. 09574
- Benthic sediments, gravity dewatering: Adrian, Donald Dean. 08433
- Coal mine waters, Pennsylvania: Stefanko, Robert. 06858

Engineering geology—Continued*Waste disposal—Continued*

- Colorado, Denver basin, potential reservoirs: Garbarini, George S. 05605
- Colorado, Rocky Mountain Arsenal well: Colburn, William A. 06836
- Colorado, Rocky Mountain Arsenal well, reservoir properties: Pickett, G. R. 11339
- Colorado-New Mexico, San Juan basin, potential reservoirs: Peterson, James A. 05606
- Deep-well injection, liquid industrial wastes: Warner, Don L. 05599
- Deep-well method: Walker, William R. 04585
- Earth materials, plasticity, effects: White, W. Arthur. 08125
- Ground-water contamination: Bergstrom, Robert E. 00071
- Ground-water recharge, Pennsylvania: Parizek, Richard R. 09551
- Ground-water systems, dissolved chemicals, transport: Holly, Donald E. 06811
- Illinois, Chicago area, deep-tunnel system: Koelzer, Victor A. 06667
- Illinois, Chicago area, sewer-overflow, Deep Tunnel Plan: Papadopoulos, I. S. 01631
- Illinois, criteria for wells: Bergstrom, Robert E. 04267
- Illinois, Sheffield area, proposed site: Baltz, Elmer H. 10514
- Illinois, subsurface, feasibility: Bergstrom, Robert E. 02534
- Industrial, subsurface: Ives, Robert E. 11193
- Kansas, Lawrence area, pilot study: Kansas Geological Survey. 09203
- Kansas, Salina basin, potential reservoirs: Edmund, R. W. 05604
- Kentucky, Calvert City quadrangle: Finch, Warren I. 06081
- Michigan, Detroit area, Michigan basin, Mt. Simon sandstones: Briggs, Louis I., Jr. 05603
- Michigan, Midland area, activated sludge, underground: Shannon, E. S. 10771
- Missouri, Springfield area, hydrology: Harvey, E. J. 02694
- Nevada, Beatty area, proposed site: Clebsch, Alfred, Jr. 11089
- New York, Appalachian basin, industrial waste, potential reservoirs: McCann, Thomas P. 05601
- New York, Hudson River, Na-absorption of muds: McCrone, Alistair W. 06366
- New York, Long Island, western: Perlmutter, N. M. 01818
- New York, Nassau County, waste-water injection: Rose, John L. 04730
- Pennsylvania, Bedford area, Tuscarora Sandstone: Hardaway, John E. 05602
- Radioactive, high-level, in salt, experimental study: Lomenick, Thomas Fletcher. 05521
- Radioactive, hydraulic fracturing method: deLaguna, Wallace. 06837
- Radioactive, in salt, properties: Bradshaw, R. L. 01118
- Radioactive, low-level, deep permeable formations: deLaguna, Wallace. 05600
- Radioactive, solid, land burial: Morton, Roy J. 10513
- Radioactive, solidified material, salt mines: McClain, William C. 06850
- Rocky Mountain Arsenal well, permeability, changes with pressure: Snow, David T. 03868
- Rocky Mountain Arsenal well, relation to Denver earthquakes: Hollister, John C. 03814

Engineering geology—Continued*Waste disposal—Continued*

- Rocky Mountain Arsenal well, relation to Denver earthquakes: Hollister, John C. 04310
- Rocky Mountain Arsenal well, rock permeability: Snow, David T. 03821
- Salt water, underground formations, development: Rice, Ivan M. 09275
- Soils, ridge and furrow method, Wisconsin: Bendixen, Thomas W. 00092
- South Carolina, Savannah River Plant, geologic factors: Reichert, S. O. 09456
- South Carolina, Savannah River Plant, radioactive: Fenimore, J. W. 11429
- Structural basins, reservoir strata: Galley, John E. 05598
- Subsurface, geologic basins, collected papers: Galley, John E. 05597
- Subsurface, oil-field technology, applications: Stanonis, Frank L. 03238
- Urban areas, problems, need for geologists: LeGrand, H. E. 08148
- Washington, Spokane Valley, sewage field, test-drilling: Crosby, James W., 3d. 04570
- Water-quality management: McGauhey, P. H. 05731
- Water wells*
 - Coastal areas, construction, factors: Oliver, P., Jr. 09260
- Epeirogenesis**
- Periodicity*
 - Transgressive and regressive phases, effects on climate: Damon, Paul E. 04167

Erosion*Alaska*

- Colville River, bank erosion: Walker, H. J. 07968

Alberta

- Rocky Mountain Forest Preserve, soil, prediction: Rutter, N. W. 05334

Beaches

- Delaware, sand ridges, evolution: Moody, David W. 08204
- Florida, western, Alligator Spit, low-energy environment: Goldsmith, V. 08531
- Hawaii, coastal segments, energy sources, sediment transport: Moberly, Ralph, Jr. 09883
- Hawaii, seasonal variations, 1962-63: Chamberlain, Theodore. 00822
- Measurement system, water particle motion, wave tank bed: Wells, Donald R. 09238
- New Jersey, Spiral Beach, rates: Yasso, Warren E. 08193
- Ontario, Port Bruce area, Lake Erie bluffs, stability tests: Quigley, R. M. 07090
- Pleistocene sea-level changes, analysis method: Flemming, N. C. 03455
- Shore erosion, scales, Bruun effect: Schwartz, Maurice L. 04430

California

- Monterey-Carmel submarine canyons, weathering processes: Martin, Bruce D. 07942
- Santa Barbara area, sea cliff, retreat rate: Norris, Robert M. 02052

Controls

- Paleohydrologic, plant cover effect: Schumm, S. A. 04283

Cycles

- Climatic effects: Birot, Pierre. 02598

Eolian features

- Wind direction, determination, mapping: Rudberg, Sten. 07375

Erosion—Continued*Estuaries*

Maryland-Virginia, Chesapeake Bay, sedimentation: Schubel, J. R. 10966

Experimental studies

Aerodynamic, rillensteine formation on ventifacts: Whitney, Marion Isabelle. 03659
Cohesive soils, variables: Dash, Umakant. 07165
Extent, pre-turbidite deposition, scour marking indicators: Allen, J. R. L. 06610
Sediment transport in conveyance system, model: Graf, Walter H. 02979
Washington, forest soils: Balci, A. N. 02269

Floods

California, Rubicon River, Hell Hole dam failure: Scott, Kevin M. 07531
Hundred-year storms, velocities: Magorian, T. R. 08432
Idaho, Lake Bonneville, cf. historic catastrophes: Malde, Harold E. 05449

Glaciers

Ontario, Niagara Escarpment: Straw, Allan. 02000

Gullying

Restoration, valley floors, arid, semiarid regions: King, Norman J. 06066

Illinois

Barry area, Calhoun peneplain surface: Illinois State Geological Survey. 05855

Iowa

Adair and Harrison Counties, loess watersheds, soil formation: Ruhe, R. V. 07440

Landforms

California, Pinnacles National Monument, volcanic field: Hinds, Norman E. A. 03515
Connecticut, Ansonia and Milford quadrangles: Flint, Richard Foster. 04722
Cuestas, West Indies, climate effect: Blume, Helmut. 07616
Denudation platform, Colorado Plateau, evolution, review: Badoux, Heli. 04729
Idaho, Lake Bonneville flood: Malde, Harold E. 05449
Penepains, classification and theories: Cotet, Petre V. 11021

Materials

Colorado, Front Range, talus, types: White, Sidney E. 09736
Sand grains, chemical vs. mechanical, wave energy effect: Margolis, Stanley V. 07915

New Hampshire

Wolfeboro-Winnepesaukee area, streams and glaciers: Goldthwait, Richard P. 09075

Rates

Arizona, Colorado River, Grand Canyon: McKee, Edwin D. 00523
Calculation of volumes, effect of man: Judson, Sheldon. 06508
California, Sierra Nevada, vertical zonation: Janda, Richard J. 08290

Reefs

Hurricane effects, Florida, Bahamas: Perkins, R. D. 05681

Slopes

Arizona, bahadas and pediments, floods: Rahn, Perry H. 10795
California, effects of fire: Doebling, Donald O. 01485
California, rates of degradation: LaMarche, Valmore C., Jr. 00162
Oregon, Coast Range foothills, Woods Creek Canyon: Balster, Clifford A. 01691

Erosion—Continued*Soils*

United States, southeastern, erodibility factors: Barnett, A. P. 09901
Wind, mechanics: Woodruff, N. P. 11056

Streams

Arid regions, mechanisms: Wertz, Jacques B. 11382
Degradation below dams, prediction: deVries, M. 00303
Degradation below dams, prediction: Egiazaroff, Ivan. 00304
Degradation below dams, prediction: Gill, Mohammad Akram. 00302
Degradation, below dams, prediction: Hasan, Saiyed M. 01053
Degradation below dams, prediction: Herbertson, John G. 00300
Degradation, below dams, prediction: Moss, Marshall E. 01054
Degradation below dams, prediction: Peters, John C. 00301
Degradation of bed below dams, prediction methods: Ackermann, Norbert L. 00107
Experimental studies, sediment transport, grain size effect: Hooke, Roger LeB. 01068
New York, Erie-Niagara basin, sediment transport and discharge: Archer, R. J. 09115
United States, western, arid regions, ephemeral: King, Norman J. 09898
Vermont, steep gradient, flash flood, effects: Johnson, Martin L. 08420
Virginia, Scott Run basin, during highway construction: Vice, Raymond B. 00056

Submarine canyons

California, Monterey: Starke, George W. 01892

Tidal flats

Quebec, Saint Lawrence Estuary, shore ice action: Dionne, Jean-Claude. 07976

Washington

Mount Rainier, mass wasting: McKee, Bates. 07219

Wisconsin

Devils Lake area: Black, Robert F. 02281

Estuaries*Erosion*

Maryland-Virginia, Chesapeake Bay, rates, sediment transport: Schubel, J. R. 10966

Maryland

Chesapeake Bay, northern, suspended sediment: Schubel, J. R. 03201

New York

Hudson River, geology and mineral resources: Johnsen, John H. 06365
Hudson River, U.S. Geological Survey studies: Heath, Ralph C. 06368

Research

Need: Stewart, Harris B., Jr. 07380

Sedimentation

Gulf of California, Colorado River delta: Thompson, Robert Wayne. 07021
Gulf of Saint Lawrence, south shore beaches, ice transport: Dionne, Jean-Claude. 07339
Maryland, Chesapeake Bay, northern: Schubel, J. R. 03201
Maryland-Virginia, Chesapeake Bay, rates, sediment transport: Schubel, J. R. 10966
Puget Sound-Strait of Juan de Fuca, tidal channels: Sternberg, R. W. 03802
United States, Columbia River, diffusion: Lockett, John B. 09541

Estuaries—Continued

United States

Eastern, suspended material, salt flocculation:
Meade, Robert H. 07357

Eurolpium*Abundance*

Igneous rocks, minerals, anomalies: Schnetzler,
Charles C. 08871

Analysis

Emission spectroscopy, cathode-ray excited:
Larach, Simon. 02997

Geochemistry

Mafic rocks and meteorites, anomalies in
phenocrysts, basalt origin: Philpotts, John A.
02603

Evaporites*Alberta*

Elk Point Group, basins, occurrence: Gorrell, H.
A. 01028

Elk Point Group, occurrence: DeMille, George.
01016

California

Saline Valley, genesis, Holocene nonmarine:
Hardie, Lawrence A. 06675

Canada

Occurrence, Devonian, Muskeg Formation:
Klingspor, A. M. 01172

Colorado

Paradox Basin, Pennsylvanian, occurrence: Hite,
Robert J. 01029

Experimental studies

Deposition, chloride-carbonate sequence, simul-
taneous process: Sloss, L. L. 01196

Sedimentation, digital simulation models:
Briggs, Louis I. 01229

General

Symposium: Mattox, Richard B. 01119

Genesis

Basin configuration, structural vs. sedimentary
interpretation: Storey, T. P. 01199

Deposition in deep water, basin model: Schmalz,
Robert F. 01195

Ground-water flow systems as transport
mechanism: Williams, Roy E. 07904

Shallow-water and supratidal environments:
Kinsman, D. J. J. 01171

Geochemistry

Analysis, volumetric, nitrates: Reichen, Laura E.
04002

Marine deposits: Stewart, F. H. 01652

Manitoba

Elk Point Group, basins, occurrence: Gorrell, H.
A. 01028

Mexico

Caprock: Salas, Guillermo P. 04147

Northern, Permian-Cretaceous, occurrence:
Salas, G. P. 01019

Michigan

Michigan basin, occurrence, genesis: Briggs,
Louis I. 07441

New Mexico

Carlsbad district, Fifth ore zone, occurrence:
Jones, Charles L. 05984

Northwest Territories

Sverdrup Basin, Paleozoic, occurrence: Sproule,
J. C. 01023

Occurrence

Stratigraphic and geographic, incidence in time:
Kozary, Myron I. 01037

Saskatchewan

Elk Point Group, basins, occurrence: Gorrell, H.
A. 01028

Evaporites—Continued*Saskatchewan—Continued*

Elk Point Group, occurrence: DeMille, George.
01016

Watrous-Kandahar area, occurrence, genesis,
geochemistry: Wardlaw, Norman C. 03864

United States

General: Briggs, Louis I. 01015

Utah

Paradox Basin, Pennsylvanian, occurrence: Hite,
Robert J. 01029

Evolution*Algae*

Charophyta, Devonian-Recent: Eyer, Jerome A.
01208

Amphibia

Dissorophidae, Pennsylvanian-Permian, armor:
DeMar, Robert. 05708

Lissamphibia, possible descent from Rhipidistia:
Thomson, Keith Stewart. 08941

Origin, aqueous-terrestrial transition,
phylogeny: Schmalhausen, I. I. 04888

Bryozoa

Poricellariidae, Cretaceous-Holocene, zoecial
asymmetry: Cheetham, Alan H. 11394

Rhombotrypa-like trepostomes, Paleozoic,
budding patterns, convergence: Boardman,
Richard S. 11441

Cephalopoda

Ammonoidea, Cretaceous, morphogenetic in-
terpretation: Wiedmann, Jost. 07894

Ammonoidea, shell modifications, Paleozoic,
late: Davis, Richard Arnold. 06548

Ordovician, actinoceroid expansion, North
America: Flower, Rousseau H. 01775

Paragastrioceratidae, Permian: Mikesch, David
Leonard. 06554

Concepts

Biologic, atmospheric, lithologic: Tappan,
Helen. 08014

Charles Darwin, origin of species, controversy
and conquest: Karp, Walter. 08149

Contribution to philosophy: Shaw, Denis M.
02520

Darwinism, history from letters and quotations:
Daniels, George. 09494

Group appearances and extinctions, paleocli-
matic interpretations, evaluation: Teichert,
Curt. 04677

Heterochrony, ontogenetic allometry: Gould,
Stephen Jay. 08707

History: Broms, Allan. 02507

North Atlantic biota, dispersal, symposium:
Love, Askeel. 11425

Paleontology, introductory textbook: Clark,
David L. 04797

Religious controversy: Eckelmann, F. Donald.
06315

Rotational pole positions, taxonomic diversity
gradients: Stehli, Francis G. 10863

Systematics, applications to life and non-life
systems: Sylvester-Bradley, P. C. 02928

Thermoregulation, origin: Heath, James Edward
10865

Conodonts

Basal opening, Cambrian to Triassic: Clark,
David L. 02184

Symmetry in element-pairs, phylogenetic sig-
nificance: Lane, H. Richard. 05689

Triassic, platform types, North America, Eu-
rope: Mosher, L. Cameron. 05672

Crinoida

Permian, Nevada: Webster, G. D. 10127

Evolution—Continued

Dinoflagellates

Peridiniales: Wall, David. 05013

Echinoidea

Cidaroida, Paleozoic, origin from echinocystoids: Kier, Porter M. 05711

Devonian-Recent, isotopic composition, skeletal calcite: Weber, Jon N. 00493

Disasteroida, Mesozoic, transition to exocyclic forms: Mintz, Leigh W. 05694

Foraminifera

Globigerina angustumbilicata-quinqueloba lineage, Cenozoic: Asano, K. 09128

Globigerina, Miocene-Holocene, Pacific Ocean: Asano, Kiyoshi. 03808

Rates, Cenozoic, Atlantic Ocean cores: Phillips, J. D. 02676

Gastropoda

Bellerophonacea, morphology, phylogeny: Rollins, Harold Bert. 02625

Ontogenetic allometry, pedomorphosis, Bermuda land snail: Gould, Stephen Jay. 05739

Pleurotomarian species, Pennsylvanian, convergence: Eldredge, Niles. 00488

Poecilozonites, Quaternary, Bermuda: Gould, Stephen Jay. 01746

General

Cosmic aspects, immutable characteristics of environment: Simpson, George G. 09467

Elementary account: Moore, Ruth. 04332

Evolution and environment, symposium: Drake, Ellen T. 10857

Popular account: Hotton, Nicholas, 3d. 05665

Gymnosperms

Cupulate seeds, Upper Devonian, Pennsylvania: Pettitt, John M. 08999

Cycad cones: Delevoryas, T. 02548

Cycadeoidales, Mesozoic, cone origin, hypotheses: Delevoryas, T. 09372

Invertebrata

Paleozoic, marine communities, rate: Bretsky, Peter W. 00178

Mammalia

Apatemyidae from palaeoryctids: Szalay, Frederick S. 05993

Artiodactyls, early Eocene, tarsus, lateral toes: Guthrie, Daniel A. 11292

Cetacea, monophyletic origin from protocetid: Van Valen, Leigh. 01092

Cretaceous, acoustic mechanisms: Norris, Kenneth S. 10866

Cretaceous, Lower, Texas, earliest eutherians, premolar occlusion: Slaughter, Bob H. 09081

Dentition, molars, Triassic origin of therians: Crompton, A. W. 04779

Equidae, Oligocene-Holocene, manus osteology: Sondaar, P. Y. 07006

Hominidae and Pongidae, Tertiary, parallel: Pilbeam, David. 03916

Hyracodon, dentition: Hanson, C. Bruce. 06997

Ischyromys, Oligocene, Montana, South Dakota, Nebraska: Black, Craig C. 02848

Marsupialia, Cretaceous-Eocene, origin, radiation: Clemens, William A. 01091

Marsupial-placental dichotomy, Cretaceous: Lillegraven, Jason Arthur. 06521

Mesozoic, phylogenetic considerations: Kuhne, Walter G. 10860

Multituberculata, Cretaceous-Tertiary, generic diversity: Fox, Richard C. 04842

Evolution—Continued

Mammalia—Continued

North America, Pleistocene, lemmings: Guilday, John E. 08061

Origin from reptiles, definition of class, discussion: Fox, Richard C. 05620

Picrodontidae, dentition: Szalay, Frederick S. 03870

Primates, dentition, transition from insectivores: Szalay, Frederick S. 01093

Primates, hominid and hominoid lines, immunological study: Sarich, Vincent M. 06507

Teeth: Weller, J. Marvin. 02204

Tertiary, gophers, Oregon, John Day Formation: Rensberger, John Marshall. 04549

Man, fossil

Pliocene-Pleistocene, effect of paleoclimates: Emiliani, Cesare. 10951

Popular account: Clymer, Eleanor. 09182

Processes leading to: Broms, Allan. 02507

Metazoa

Origin, pre-metazoan evolution: Cloud, Preston E., Jr. 10858

Mollusca

Bivalvia, siphon formation: Stanley, Steven M. 08003

Origin from flatworms, development of coelom: Salvini-Plawen, Luitfried von. 02926

Shell calcification, phylogenetic trees: Matheja, Johann. 10958

Paleobotany

Adaptation: Gottlieb, Joan Eiger. 10123

Land plants, early history: Banks, Harlan P. 10859

Pelecypoda

Crassatellacean hinge, Permian: Boyd, Donald W. 03869

Crassatellid: Boyd, Donald W. 07810

Post-Paleozoic adaptive radiation, siphonate groups: Stanley, Steven M. 00558

Thyasira, North America: Kauffman, Erle G. 07908

Venericardia, alticostate, Tertiary, U.S. Gulf and east coasts: Heaslip, William Graham. 04377

Pisces

Acanthodes, Permian, gill arches, relation to elasmobranchs: Nelson, Gareth J. 08936

Clupeomorpha, Cretaceous-Holocene, tail, relations: Cavender, Ted. 10944

Dipnoi, Permian, Texas, herbivorous vs. lepidosirenids: Berman, David S. 03208

Dipnoi, *Uranolophus*, Lower Devonian, relations: Denison, Robert H. 08940

Ganopristinae, Cretaceous-Paleocene, Texas: Slaughter, Bob H. 00485

Lungfish: Carlson, Keith J. 05679

Osteichthyes, origin, basic radiation: Schaeffer, Bobb. 08939

Rhipidistia, relation to modern Amphibia, diphyletic theory: Thomson, Keith Stewart. 08941

Rhipidistia, rhizodontid, Devonian, origin of Amphibia: Thomson, Keith Stewart. 04798

Teleostomi, branchiostegals, hyoid arch: McAllister, D. E. 03055

Porifera

Demospongia, phylogeny, origin, heloclones and megacloones: Reid, R. E. H. 05703

Microscleres in demosponges: Reid, R. E. H. 07907

Processes

Ecological units, above population level: Valentine, James W. 02966

Evolution—Continued*Processes—Continued*

Geomagnetic field reversal, and climatic change:

Harrison, C. G. A. 00634

Life origin, laboratory experiments: Fox, Sidney. 09382

Marine, environmental effects: Weyl, Peter K. 01921

Paleoecology and Earth environments: Termier, Henri. 07867

Size change rates, in ontogeny and phylogeny: Bonner, John Tyler. 05754

Species diversification, climatic regulation: Valentine, James W. 00521

Reptilia

Climate factor, Cretaceous extinctions: Axelrod, Daniel I. 03742

Cynodontia, jaw musculature: Barghusen, Herbert R. 03708

Dinosaurs, Mesozoic, popular account: deCamp, L. Sprague. 11236

Textbooks

Introductory: McAlester, A. Lee. 02902

Vertebrata

Dentition, textbook: Peyer, Bernhard. 11199

Diversity: McCoy, C. J., Jr. 08152

Phylogeny, discussions: Romer, Alfred Sherwood. 07914

Skeletal development, delamination principle: Jollie, Malcolm. 08935

Skeletal tissues, bone origin, processes: Moss, Melvin L. 08942

Explosion phenomena*Experimental studies*

Basalt, P-V curves, equation of state: Stephens, D. R. 07413

Microdeformation of rock, nuclear event: Short, Nicholas M. 07493

Rock fracturing, mechanism: Saluja, Sunder S. 11167

Sand, pore pressure propagation: True, Daniel G. 07708

Seismic signals, underwater explosions: Weinstein, Marvin S. 03213

Shock deformation, biotite, nuclear event: Cummings, David. 07494

Shock spectrums, effect of fault zone: Galbraith, Frank W. 05737

Surface waves, propagation characteristics, Alberta: Hasegawa, H. S. 01988

Underground, chemical, petrographic, mineralogic effects: Kahn, J. S. 07473

Products

Crystalline damage and other deformation: Dachille, Frank. 07464

Ejecta characteristics, Nevada, Sedan crater: Roberts, Wayne A. 07407

Shatter cones, criterion for astroblemes: Dietz, Robert. 06310

Shatter cones, Danny Boy nuclear crater: Bunch, T. E. 07499

Shatter cones, diagnostic of meteor impact: Dietz, Robert S. 07498

Shock metamorphism, crystalline solids: DeCarli, Paul S. 11407

Size-frequency distribution, cf. impact fragmentation: Fielder, G. 05097

Triclinic K-feldspar, impact evidence: Aitken, F. K. 07463

Faults*Analysis*

Automatic data processing: Hodgson, J. H. 08281

Faults—Continued*Antithetic*

Utah, Wasatch and House Ranges: Hintze, Lehi F. 10004

Basin range

Basin and Range, evolution: Roberts, Ralph J. 10257

Nevada, Nye County, Eagle Springs oil field: Horton, Robert C. 08284

Nevada, Timber Mountain caldera, effect: Cummings, David. 00665

Block

California, Kelseyville quadrangle: McNitt, James R. 01776

Cuba, Sierra de Nipe, southern: Kumpera, Otakar. 07896

Nevada, Hungry Valley Mountains: Lovejoy, Earl M. P. 10241

United States, central, Nemaha ridge: Gammill, E. R. 10072

Wisconsin, Milwaukee County, well-log evidence: Distelhorst, Carl A. R. 02280

Detachment

California, Santa Monica Mountains: Campbell, R. H. 08248

Nevada, Roberts Mountains, gravity sliding: Winterer, Edward L. 03452

Dip-slip zones

Deep structure, fluid theory, island arcs: Turcotte, D. L. 06332

En echelon

Soil, recognition, displacement vectors: Nason, Robert D. 10027

Experimental studies

Brittle-ductile transition in rocks: Byerlee, James D. 02364

Dislocation model, variable displacement: Chinnery, Michael A. 03914

Mechanism, gravity creep: Cloos, Ernst. 00920

Mechanism, role of differential compaction: Carver, Robert E. 00913

Rates of slip, computation method: Brune, James N. 00081

Wrench and overthrusts, mechanism: Sales, John K. 04513

General

Active, selected areas, location by earthquakes: Westphal, W. H. 08347

Alaska, Lake Peters area, history: Reed, Bruce L. 04488

California, historically and recently active, map: Stanford Univ. School Earth Sci. 03956

California, San Bernardino Mountains, north flank: Hollenbaugh, Kenneth Malcolm. 06551

California, southern, borderland evolution: Yeats, Robert S. 04025

California, Transverse Ranges, movement, history: Crowell, John C. 04026

Gulf Coastal Plain, curvature: Steinhoff, R. O. 10347

Lake Superior region, magnetic data: O'Hara, Norbert Wilhelm. 02617

Mexico, Baja California, southern tip, continental margin: Normark, William R. 04297

Nevada, Schell Creek Range: Dechert, Curt Peter. 03027

Nevada, Yucca Flat area: Hinrichs, E. Neal. 06794

New Mexico, Sangre de Cristo uplift: Baltz, Elmer H. 10204

Nova Scotia, Fundy Basin, Carboniferous rocks: Fyson, W. K. 08220

Faults—Continued*General—Continued*

- Nova Scotia, Minas Passage area, systems, tectonics: Swift, Donald J. P. 01417
 Oklahoma, Red Oak-Norris gas field: Six, David A. 04303
 Subhorizontal, seismic events: Wallace, Robert E. 08346
 Utah, Toquerville area, Hurricane Cliffs: Watson, Robert A. 06137
 Washington, Pasco basin, secondary to folding: Brown, Randall E. 00813
 Wyoming, Bighorn Mountains, northern: Jennings, Ted Vernon. 00853
 Wyoming, Grand Teton Natl. Park and vicinity: Love, J. D. 11319

Grabens

- Colorado, San Juan Mountains, Paleozoic history: Baars, D. L. 01075

High-angle

- Arizona, Shylock fault zone, Precambrian wrench faulting: Anderson, C. A. 09962
 California, Fremont Peak and Opal Mtn. quadrangles: Dibblee, T. W., Jr. 01841
 California, southeastern, Pinto Mtn. fault: Dibblee, T. W., Jr. 09989
 Colorado, Front Range, history: Kupfer, D. H. 06111
 Ontario, Elliot Lake area, Townships 149 and 150: Robertson, J. A. 01769
 Pennsylvania, Mount Holly Springs quadrangle: Freedman, Jacob. 08219
 South Carolina, central, Piedmont: Secor, D. T. 04728

Major

- Ontario, Black River area: Milne, V. G. 05440

Mechanism

- Alabama, normal, Late Mississippian strata: Thomas, William A. 05721
 California, San Andreas and related zones movement: California Dept. Water Resources. 09028
 Differential compaction of sediments: Carver, Robert E. 00913
 Earthquake faults, parameters, from long-period P-waves: Bollinger, G. A. 00082
 Gravity creep, Gulf Coastal Plain: Cloos, Ernst. 00920
 Midoceanic ridges: Sykes, Lynn R. 08011
 Nevada, Yucca Flat, displacement, nuclear explosion trigger: Dickey, D. D. 06814
 Overthrust: Barnes, William C. 07816
 Overthrust, theoretical study: Hsu, K. Jinghwa. 10595
 Strike-slip, friction opposition: Walsh, J. B. 00080

Normal

- Alabama, Late Mississippian strata: Thomas, William A. 05721
 Arkansas, Scranton-New Blaine quadrangles: Haley, Boyd R. 05972
 British Columbia, Greenwood area: Monger, J. W. H. 06314
 California, Kelseyville quadrangle: McNitt, James R. 01776
 California, Nacimiento fault, Salinas reservoir to Big Pine fault, vertical movement: Vedder, John G. 04056
 Continental margin, buried ridges: Burk, C. A. 01875
 Genesis, potential void concept: Tucker, Delos R. 03884
 Idaho, Silver City area, northern: Asher, R. R. 03164

Faults—Continued*Normal—Continued*

- Kentucky, Bluegrass area, northwestern, cluster: Jillson, Willard Rouse. 07987
 Kentucky, Fayette County, Kentucky River and Bryan Station faults: Jillson, Willard Rouse. 03123
 Nevada, Independence Valley, Holocene scarps: Coats, R. R. 00782
 New Mexico, Mockingbird Gap quadrangle, history: Bachman, George O. 05470
 New York-New Jersey, Ramapo fault, seismicity: Page, Robert A. 00963
 Oklahoma, McAlester basin, growth faulting: Koinm, David N. 10075
 Slip, determination: Lowell, J. David. 04123
 Wyoming, Owl Creek Mts., eastern, reversed: Ferris, C. S., Jr. 07577
- Overthrust*
 Alabama, Cahaba coal field: Shotts, Reynold Q. 08165
 Alaska, Brooks Range, western: Tailleir, I. L. 02971
 Alaska, northern: Tailleir, Irvin L. 08012
 Alberta, Cadomin area: Gotts, R. J. 09676
 Alberta, Limestone Mountain area: Oliverenshaw, N. C. 06571
 Alberta, Tertiary: Stelck, Charles R. 10924
 Arkansas, Ouachita Mountains, eastern: Viele, George W. 10092
 California, Buena Vista fault, creep: Nason, Robert D. 02862
 California, Buena Vista Hills fault, displacement data, analysis: Howard, J. H. 08740
 California, Buena Vista Hills, movement, 1932-59: Howard, J. H. 05236
 California, Franciscan Formation-Great Valley sequence: Brown, James A. 09972
 California, Klamath Mountains: Davis, G. A. 01993
 California, Peninsular Ranges, eastern, mylonitic zone: Sharp, Robert V. 04023
 California, Rancho Santa Fe area, Santiago Peak volcanics: Peterson, Gary L. 11062
 California, Slate Range: Smith, George I. 08907
 California, southeastern, Clark Mtn. complex: Burchfiel, B. C. 07773
 California-Nevada, Sevier orogenic belt: Fleck, Robert Joseph. 01744
 Colorado, Elk Mountains, pluton emplacement: Allen, Jack C. 10199
 High-angle dips, causes: Crosby, Gary W. 10222
 Idaho-Montana, Devonian tectonics: Mapel, William J. 05184
 Massachusetts, eastern: Bell, Kenneth G. 09750
 Mechanics: Barnes, William C. 07816
 Montana, Chief Mountain, double klippe: Barnes, William C. 09970
 Montana, Highland Mountains: Smedes, Harry W. 10263
 Montana, northwestern, Lewis salient: Barnes, William C. 08573
 Nevada, Roberts Mountains, gravity sliding: Winterer, Edward L. 03452
 Nevada, Schell Creek Range: Dechert, Curt P. 11275
 Nevada, Snake River decollement, related structures: Whitebread, Donald H. 08350
 Nevada Test Site region, major system, outliers: Barnes, Harley. 06793
 Nevada, Toiyabe Range, Callaghan window: Stewart, John H. 10045
 Nevada-Utah, Sevier orogenic belt: Armstrong, Richard Lee. 01076

Faults—Continued

Overthrust—Continued

- New England, Taconic allochthon, stratigraphic-structural contrasts: Zen, E-an. 09957
- New York, Adirondack Mountains, Jay-Whiteface anorthosite nappe: Crosby, Percy. 09765
- New York, Vermont, Hoosick Falls area, Taconic sequence: Potter, Donald B. 08208
- Oklahoma, Gotebo gas field area: Takken, Suzanne. 03419
- Oklahoma, Springer Group: Shelton, John W. 10084
- Ontario, Elliot Lake area, Townships 149 and 150: Robertson, J. A. 01769
- Quebec, southwestern, Sillery klippe: Saint-Julien, Pierre. 06934
- Rocky Mountains, foothills and ranges, Alberta-British Columbia: Irish, E. J. W. 06695
- Tennessee, Pulaski fault: Byerly, Don W. 10288
- Tennessee, Virginia, Iron Mtn.-Holston Mtn. thrust, age: Cooper, Byron N. 10851
- Utah, Ogden Canyon area, allochthon: Rigo, Richard J. 06136
- Utah, Wasatch area, Laramide: Hintze, Lehi F. 10832
- Virginia, Botetourt-Rockbridge Counties, boundary area: Spencer, Edgar W. 00950
- Virginia, Lee County, L. S. Bales well, subsurface: Harris, Leonard D. 09630
- Virginia, Read-Coyner Mtn. fenster, nappe: Hazlett, William H., Jr. 10305
- Virginia, Saltville fault, Bland window: Webb, Fred, Jr. 08566
- West Virginia, Harpers Ferry area, Blue Ridge: Burford, Arthur E. 10287
- Wyoming, Heart Mountain, tectonic denudation: Pierce, W. G. 06112
- Wyoming, Owl Creek Mts., eastern: Ferris, C. S., Jr. 07577
- Wyoming, western belt: Crosby, Gary W. 04512

Patterns

- Colorado, Canyon City embayment: Gerhard, Lee C. 07262
- Ontario, Kashabowie area: Hodgkinson, J. M. 00586
- Pennsylvania, Franklin County, South Mtn. anticlinorium: Root, Samuel I. 06744
- Pennsylvania, Houtzdale quadrangle, regional trend: Edmunds, William E. 06745

Reverse

- California, Desert Hot Springs area, Mission Creek fault: Proctor, Richard J. 06722
- Colorado Plateau, Hurricane fault: Lovejoy, Earl M. P. 09147
- Massachusetts, Wachusett-Marlborough Tunnel: Skehan, James W. 07248
- West Virginia, Cassell Cave: Eddy, G. E. 07877

Rift valleys

- Arctic Ocean, relict and present, evolution: Johnson, G. Leonard. 08445
- Mid-Oceanic Ridge, relation to trenches and fracture zones, popular account: Briggs, Peter. 09495

Shear zones

- California, Coyote Mountain, deformation episodes: Theodore, Ted G. 08031
- California, Peninsular Ranges, ancient, fault displacements, relations: Sharp, Robert V. 08325
- California, San Andreas fault, relation to Mendocino and Murray: Nason, Robert D. 04030
- Nevada, Las Vegas Valley zone: Fleck, Robert Joseph. 01744

Faults—Continued

Strike-slip

- Alaska, west-central, Kaltag fault: Patton, William W., Jr. 05187
- California, Coyote Creek fault, movement: Allen, C. R. 02580
- California, Death Valley-Furnace Creek zone, displacement: McKee, E. H. 01069
- California, Fremont area, Hayward fault, slip-page: Bonilla, M. G. 08242
- California, Fremont area, Hayward fault, slip-page: Cluff, Lloyd S. 08252
- California, Hayward, Calaveras, Pleasanton faults, movement, historic: Radbruch, Dorothy H. 04050
- California, Hayward fault, slippage, measurement: Bolt, Bruce A. 08239
- California, Kern River fault, strain observations: Vali, V. 04364
- California, Mojave Desert, northwest-trending, relation to San Andreas: Troxel, Bennie W. 04019
- California, Owens Valley zone, right-lateral movement and creep: Bonilla, Manuel G. 03957
- California, Pacific basin, tectonic relationships: Hamilton, Warren B. 04027
- California, Palmdale area, San Andreas zone: Evans, James G. 08267
- California, Parkfield area, San Andreas fault, movement: Hofmann, R. B. 10005
- California, San Andreas and Calaveras zones, Hollister area, recent movement: Rogers, Thomas H. 04049
- California, San Andreas and Garlock, displacements, schist bodies: Ehlig, Perry L. 04024
- California, San Andreas, Caliente Range, southeastern, Miocene movement: Clifton, H. Edward. 04040
- California, San Andreas, Cape Mendocino area, relation to fracture zones: Nason, Robert D. 04030
- California, San Andreas, central, post-Pliocene movement: Cummings, Jon C. 04053
- California, San Andreas, Cholame and Taft-Maricopa areas, deformation: Howard, John H. 04047
- California, San Andreas, Cholame-Camp Dix area, stream channel displacements: Wallace, Robert E. 03952
- California, San Andreas, creep: Tocher, Don. 08339
- California, San Andreas, creep, piezomagnetic effect: Breiner, Sheldon. 02046
- California, San Andreas, displacement, Parkfield area: Smith, Stewart W. 05454
- California, San Andreas, displacements, June 1966: Aki, Keiiti. 03210
- California, San Andreas fault, displacement: Oakeshott, Gordon B. 07850
- California, San Andreas fault, post-early Miocene dislocation: Addicott, Warren O. 09959
- California, San Andreas fault, post-Miocene movement: Berry, Frederick A. F. 07823
- California, San Andreas fault, tectonics, seismicity: Allen, Clarence R. 07745
- California, San Andreas, Gualala area, post-Cretaceous slip evidence: Wentworth, Carl M. 04036
- California, San Andreas, intersection with ocean ridge, tectonics: McEvilly, T. V. 05048

Faults—Continued

Strike-slip—Continued

- California, San Andreas, large post-Cretaceous slip: Hill, Mason L. 04035
- California, San Andreas, large slip, evidence: Gastil, R. Gordon. 04054
- California, San Andreas, mechanism: Crowell, John C. 02482
- California, San Andreas, Miocene movement: Dickert, Paul F. 04039
- California, San Andreas, movement, Pajaro Gap, Franciscan rocks: Maddock, Marshall E. 04034
- California, San Andreas, movement, prediction: Breiner, Sheldon. 04476
- California, San Andreas, movement, Tertiary: Addicott, Warren O. 04037
- California, San Andreas, Paicines-Camp Dix, recent movement: Brown, Robert D., Jr. 03953
- California, San Andreas, Santa Cruz Mts. area, post-Eocene movement: Clark, Joseph C. 04038
- California, San Andreas, strain analysis: Burford, Robert Oliver. 00868
- California, San Andreas, stress changes at depth, piezomagnetic effects: Breiner, Sheldon. 04033
- California, San Andreas system, displacement, strain: Burford, Robert O. 07774
- California, San Andreas system, history: Crowell, John C. 07797
- California, San Andreas system, problems: Wallace, Robert E. 07970
- California, San Gabriel fault, displacement: Ehlig, Perry L. 07707
- California, San Luis Obispo County, San Andreas, cumulative movement: Vedder, J. G. 08344
- California, Slate Range: Smith, George I. 08907
- California, Transverse Ranges, eastern: Hope, Roger A. 07896
- California-Nevada, Great Basin, right-lateral: Stewart, John H. 03830
- Correlation with paleopole positions: Hulley, J. C. L. 04697
- Friction, relation to stress drop and crustal strength: Berg, C. A. 00656
- Gulf of California: Moore, David G. 08462
- Gulf of California, evolution: Moore, David G. 03786
- Gulf of California, Tamayo Fracture Zone: Larson, Roger L. 03063
- Mechanics, friction: Walsh, J. B. 00080
- Mexico, Sonora, northwest-trending, possible San Andreas extension: Merriam, Richard H. 04021
- Midoceanic ridges, relation to sea-floor spreading: Sykes, Lynn R. 05889
- Nevada-California, Death Valley-Furnace Creek zone: McKee, Edwin H. 05983
- Newfoundland, Notre Dame Bay district: Heyl, George R. 10003
- Pacific Ocean, northeastern margin, transverse and peripheral: Burk, Creighton A. 04028
- Pennsylvania, southwestern: Roen, John B. 02700
- Puerto Rico, Cretaceous-Tertiary terrain: Briggs, Reginald P. 08623
- Sea floor, association with spreading questioned: Ranalli, G. 11225
- Trans-Idaho discontinuity, description: Yates, Robert G. 05065

Faults—Continued

Strike-slip—Continued

- United States, Basin and Range province, analysis: Sales, John Keith. 02626
- Virginia, Buchanan County, coal beds, influence: Jeran, Paul W. 08747

Systems

- California, Calaveras, Hayward, Silver Creek faults, gravity, magnetic data: Robbins, Stephen L. 04032
- California, Nacimiento-Sur system: Page, Ben M. 10033
- California, San Andreas, active, inactive areas, tectonic environments: Allen, Clarence R. 04041
- California, San Andreas, geologic problems, conference: Stanford Univ. School Earth Sci. 03956
- California, San Andreas, large-scale displacements, pre-Cretaceous rocks: Silver, Leon T. 04018
- California, San Andreas, magnetic and gravity surveys: Hanna, William F. 04031
- California, San Andreas, movement, recent changes: Hofmann, Renner B. 04046
- California, San Andreas, Peninsular Ranges, displacements, age: Sharp, Robert V. 04023
- California, San Andreas, recent strain, from triangulation surveys: Burford, Robert O. 04045
- California, San Andreas, Transverse Ranges, movement: Dibblee, Thomas W., Jr. 04017
- California, San Andreas, urban development of zone: Cluff, Lloyd S. 04051
- California, southern: Corey, William Henry. 09983
- Canada, eastern, post-Acadian rifts: Belt, Edward S. 07140
- Central America, Chamelecon fault: Walper, Jack L. 10093
- Colorado, south-central, Rio Grande depression, extension: VanAlstine, Ralph E. 02702
- Idaho, central, strike-slip: Yates, Robert G. 10059
- Kentucky, western basin, Pennsylvanian rocks: Mullins, Allan T. 03237
- Massachusetts, Newbury Formation, undeformed fossils, displacement evidence: Cuppels, Norman P. 09766
- Mexico, Baja California, Concepcion Bay area: McFall, C. Carew. 02556
- Mexico, Baja California, northern, Gulf of California origin: Gastil, R. Gordon. 04020
- Minnesota, Vermilion district: Sims, P. K. 07820
- Mississippi, Jurassic oil fields: Oxley, Marvin L. 05424
- Nevada, southern, age: Ekren, E. B. 06795
- Nevada, southern, Las Vegas Valley shear zone, others: Ekren, E. B. 06822
- Nevada, Timber Mountain, caldera dome: Carr, W. J. 06817
- Nevada, Walker Lane: Bonham, Harold F. 08241
- New Mexico, Chaves County, Roswell basin: Havenor, Kay C. 07901
- New Mexico, west-central, Rio Puerco belt: Campbell, J. A. 10215
- Newfoundland, Notre Dame Bay: Heyl, George R. 08180
- Ontario, Lac des Iles area: Pye, E. G. 01043
- Pacific Ocean, Molakai and Clarion fracture zones: Chase, Thomas E. 07787
- Pacific Ocean, Murray fracture zone: Malahoff, Alexander. 08464

Faults—Continued**Systems—Continued**

Tennessee, Dumlplin Valley system: Hatcher, Robert, D., Jr. 10304

Trends, mineralization: Stokes, William Lee. 06985

United States, Basin and Range province, rift: Cook, Kenneth L. 08254

United States, central: Heyl, Allen V. 09395

Wisconsin, Milwaukee County, well-log evidence: Distelhorst, Carl A. R. 02280

Theoretical studies

Depth, determination, surface displacement: Walsh, J. B. 07971

Dip, measured from surface displacement: Walsh, Joseph B. 10576

Feldspar**Appalachians**

Resources, review: Lesure, F. G. 01327

North Carolina

Resources, review: Lesure, F. G. 01327

Florida**Absolute age**

Apalachicola coast, Pleistocene, Holocene shorelines: Schnable, Jon E. 06659

Central, ground water, C-14, verification by tritium analyses: Hanshaw, Bruce B. 08418

Choctawhatchee Bay, gastropods, C-14: Goldsmith, Victor. 08530

Coastal plain, sediments, zircons, feasible method: Parks, Oattis E. 10332

Florida Keys, marine limestone, calcitic crusts: Multer, H. G. 00465

Wood, ancient canoes, central lake basins, C-14: Bullen, Ripley P. 02847

Areal geology

Passage Key, Island Bay, Cedar Keys, Pelican Island refuges: Perdue, Charles L., Jr. 00012

Economic geology

Heavy minerals, Bone Valley Fm.: Stow, Stephen H. 07688

Petroleum and natural gas, exploration, 1965, production: Babcock, Clarence. 08976

Petroleum and natural gas, exploration, 1966, production: Babcock, Clarence. 08977

Phosphate, central, genesis: Freas, D. H. 07442

Phosphate, Tertiary districts, exploration guides: Freas, Donald H. 09104

Engineering geology

Fernandina Beach, littoral drift, quantitative research: Bruun, Per. 09540

Shorelines, beach maintenance, sand fill: Duane, David B. 09205

Urban development, Cape Kennedy area: Anderson, James R. 09175

General

Continental shelf, off Port Everglades, new photogrammetric system: Rebikoff, Dimitri. 07377

Geochemistry

Choctawhatchee Bay, sediments, organic materials: Palacas, James G. 02718

Floridan aquifer, uranium disequilibrium: Kaufman, M. I. 08415

Floridan aquifer, uranium isotopes: Rydell, H. S. 10342

Geomorphology

Apalachicola coast, shoreline, terraces, development: Schnable, Jon E. 06659

Central lake basins, Quaternary rise in water level: Bullen, Ripley P. 02847

Everglades, swamp features, ecology, color airphoto interpretation: Schneider, William J. 02375

Florida—Continued**Geomorphology—Continued**

Florida Keys, hurricane effects, 1960, 1965: Perkins, R. D. 05681

Florida Keys, hurricane erosion, deposition: Pray, Lloyd C. 08092

Florida Keys, origin: Hoffmeister, J. E. 04292

Pleistocene shore lines, tectonic movements: Hoyt, John H. 08742

Western, Alligator Spit, beach erosion, low-energy environment: Goldsmith, V. 08531

Geophysical surveys

Carbonate-rock aquifer system, geothermal gradient: Schneider, Robert. 08067

Myakka River basin area, well logging, electrical: Sutcliffe, H., Jr. 06078

Hydrogeology

Baker County, resources, quality: Leve, Gilbert W. 03758

Broward County, Biscayne and Floridan aquifers, quality: Grantham, Rodney G. 03647

Broward County, ground-water resources: McCoy, H. J. 07386

Central and southern, resources, improvement plans: U.S. Army Corps Engineers. 11365

Charlotte, De Soto, Hardee Counties, basic ground-water data: Kaufman, M. I. 01488

Econfina Creek basin, basic data: Musgrove, R. H. 07299

Everglades, water resources, color airphoto interpretation: Schneider, William J. 02375

Floridan aquifer, uranium disequilibrium, application: Osmond, J. K. 04077

Gainesville area, ground-water contamination, iodide tracers: Bonner, William Paul. 03036

Ground-water levels, 1963-64: Healy, Henry G. 01877

Ground-water resources, boulder zone: Vernon, R. O. 06859

Limestone terrain, filled cavities, permeability: Visser, F. N. 10351

Miami area, Biscayne aquifer, salt-water intrusion: Park, F. D. R. 09533

Miami, salt-water intrusion, tritium as tracer: Kohout, F. A. 08416

Myakka River basin area, test well exploration: Sutcliffe, H., Jr. 06078

Northeastern, Floridan aquifer: Leve, G. W. 00620

Orange County, ground-water resources: Lichtler, W. F. 01872

Orange County, popular account: Joyner, B. F. 08168

Southeastern, salt-water intrusion: Grafton, Robert. 09532

Volusia County, ground water, relation to drainage basins: Knochenmus, Darwin D. 07387

Maps, geomorphologic

Volusia County, drainage basins: Knochenmus, Darwin D. 07387

Maps, ground water

Broward County, levels: McCoy, H. J. 07386

Mineralogy

Attapulgite, alteration, acid-leaching environment: Gremillion, L. Ray. 08712

Cacoxenite, beraunite, Polk County, Palmetto mine: Blanchard, Frank N. 07527

Continental shelf, sedimentary rocks, facies: Weaver, Charles E. 02540

Paleoecology

Pliocene-Pleistocene, Belle Glade area: Skinner, Hubert C. 08039

Florida—Continued

Paleontology

- Amphibia, Miocene, Thomas Farm, anurans, n.sp.: Holman, J. Alan. 02824
- Anthozoa, Pleistocene, Key Largo Limestone, Florida Keys: Hoffmeister, J. E. 04292
- Aves, Pleistocene, Reddick area, first records: Brewer, Richard. 06702
- Bryozoa, Cenozoic, *Floridina*, restriction of genus: Schager, Sten A. N. 11395
- Bryozoa, Miocene, Chipola Formation, paleoecology: Scolaro, Reginald J. 11393
- Burrows, Quaternary, marine sediments, crustaceans, anthozoan: Shinn, Eugene A. 05767
- Cirripedia, Miocene, barnacle, type specimen questioned: Ross, Arnold. 04199
- Foraminifera, Cenozoic, peat, southwestern: Cohen, Arthur D. 05014
- Foraminifera, Eocene, Blake Plateau area: Cordey, W. G. 02925
- Foraminifera, Miocene, Chipola Formation: Seiglie, George A. 00337
- Gastropoda, Cenozoic, Muricidae: Vokes, Emily H. 05057
- Gastropoda, Pliocene, turrid, living occurrence: Radwin, George E. 09020
- Gastropoda, Tertiary, Chipola Formation, *Orthaulax* variations: Vokes, Harold E. 05056
- Mammalia, Pliocene, Alachua County, sloths: Hirschfeld, Sue E. 08054
- Mammalia, Tertiary, northern, paleogeography: Olsen, S. J. 04006
- Pelecypoda, Eocene, Crystal River Formation, glossid, n. sp.: Nicol, David. 09019
- Pelecypoda, Pleistocene, Pamlico Formation, Flagler County: Lewis, Jackson E. 03012
- Protista, coccoliths, Eocene-Oligocene: Wilson, James. 00881
- Vertebrata, Pliocene, Bone Valley Formation, Manatee County: Webb, S. David. 05212
- Sedimentary petrology*
- Big Bend coast, near-shore circulation, low-energy environment: Lee, Thomas N. 10318
- Cape Kennedy, origin, sediment transport, structural influences: Wood, William L. 08438
- Card Sound, sediments, detrital quartz, significance: Earley, Charles F. 06689
- Choctawhatchee Bay, sedimentary environments, changes: Goldsmith, Victor. 08530
- Florida Keys, hurricane sedimentation, carbonate sediments: Pray, Lloyd C. 08092
- Florida Keys, reef-forming organisms, cf. Permian, Texas: Klement, Karl W. 08902
- Miami Ridge, sedimentary structure: White, William. 10355
- Northern, offshore, sediments, mineral composition: Hathaway, John C. 08951
- Okeechobee County, soils: Rowland, L. Orlando 10340
- Ona and Leon fine sands, aggregation of mineral and organic matter: Volk, G. M. 06963
- Perdido Bay and adjacent shelf, bottom sediments, analysis: Parker, Neal M. 08992
- Reefs, annelid building: Kirtley, David W. 08538
- Reefs, sabellariid worm: Kirtley, David W. 01476
- Sedimentary structures, dolomitization: Shinn, Eugene A. 03523
- Seminole Shores, reef sediments, distribution by worms: Gram, Ralph. 03545

Florida—Continued

Sedimentary petrology—Continued

- Southern, Miami Oolite, lithofacies, environment: Hoffmeister, J. Edward. 08953
- Southwestern, Charlotte Harbor area, sediments: Huang, Ter-Chien. 10311
- Southwestern, peat, types, environments: Cohen, Arthur D. 08646
- Western, Magnolia and Greenville soils, genesis, morphology: Caldwell, R. E. 06951
- Western, Marlboro and Faceville soils, genesis, morphology: Dantzman, C. L. 06964
- Stratigraphy*
- Jurassic, Panhandle, facies, depositional environments: Oxley, Marvin L. 09318
- Paleocene-Miocene formations, Floridan aquifer: Leve, G. W. 00620
- Pleistocene, Key Largo and Miami Limestones, Florida Keys: Hoffmeister, J. E. 04292
- Pleistocene-Holocene, Apalachicola coastal area: Schnable, Jon E. 06659
- Tertiary, Hawthorn Formation, lithofacies, phosphate deposits: Freas, Donald H. 09104
- Tertiary, southern, guide fossils, *Pecten*, late Miocene: Hunter, M. E. 09347
- Weathering*
- Keys, limestone, subaerial, laminated crusts: Multer, H. G. 00465
- Okeechobee County, soil genesis, deep profile studies: Fiskell, J. G. A. 06950
- Western, Magnolia and Greenville soils, genesis: Caldwell, R. E. 06951
- Western, Marlboro and Faceville soils, genesis: Dantzman, C. L. 06964

*Fluid inclusions**Composition*

- Gases: Barker, Colin G. 07813
- Isotopes, oxygen, carbon, Mexico: Rye, Robert O. 01914
- Isotopic, salinity, British Columbia: Ohmoto, Hiroshi. 04153
- Mexico, Zacatecas, Providencia: Rye, Robert O. 04116
- Mississippi Valley: Sawkins, F. J. 07638
- Ore-forming fluids: White, Donald E. 04224
- Significance: Roedder, Edwin. 04230

Fluorite

- New Mexico, Hansonburg district: Roedder, Edwin. 04223
- Tennessee, Sweetwater district, temperatures: Nadeau, Joseph E. 10327

General

- Associations, COFFI, founding: Roedder, Edwin. 06977

Leakage

- Experimental studies: Roedder, Edwin. 06943

Porphyry copper

- Arizona, Mineral Park deposit, genesis: Ypma, P. J. M. 10682

Salt

- Kansas, Permian salt deposits: Holser, William T. 01024

Shape

- Transient feature, little diagnostic value: Roedder, Edwin. 10683

Sphalerite

- Northwest Territories, Pine Point: Roedder, Edwin. 04231

Thermometry

- Gas pressure measurements: Ypma, P. J. M. 11379
- Greenland, chkalovite and Ilímaussaq massif: Banskchikova, I. V. 03711

Fluid inclusions—Continued*Thermometry—Continued*

Significance, limitations: Roedder, Edwin. 08055

Fluorine*Abundance*

Ultramafic rocks: Stueber, A. M. 00903

Analysis

Activation, rocks and minerals: Vincent, H. A. 03504

Spectrophotometric, rocks, mica, meteorites: SenGupta, J. G. 03566

Geochemistry

Sedimentary cycle, major: Carpenter, Roy. 10787

Fluorspar*California*

Resources, occurrence, production: Elevatorski, E. A. 03744

Illinois

Cave-In-Rock district, exploration: Hughes, T. H. 06874

Hardin and Pope Counties, occurrence, production: Bradbury, J. C. 01518

Hydrothermal alteration: Brecke, E. A. 01909

Occurrence, genesis: Grogan, Robert M. 05406

Southern, exploration, geochemical: Keighin, Charles W. 06876

Kentucky

Hydrothermal alteration: Brecke, E. A. 01909

Occurrence, genesis: Grogan, Robert M. 05406

Salvisa quadrangle, occurrence: Cressman, E. R. 04768

Mississippi Valley

Geochemistry, trace elements: Hall, Wayne E. 04122

United States

Central, general: Heyl, Allen V. 09395

Midcontinent ore district, general: Snyder, Frank G. 05385

Folds*Anticlinal*

Arizona, Santa Catalina Mts., East Forerange: Peterson, Richard Charles. 07200

Colorado, San Juan Mountains: Baars, D. L. 01075

Continental margin, Mexico, Gulf of Mexico: Bryant, William R. 03777

Missouri, Schell City-Rich Hill area: Gentile, Richard J. 08064

Oklahoma, Red Oak-Norris gas field: Six, David A. 04303

Rocky Mountains, foothills and ranges, Alberta-British Columbia: Irish, E. J. W. 06695

Utah, Toquerville area, Hurricane Cliffs: Watson, Robert A. 06137

Wyoming, Big Horn County, Sheep Mtn. anticline: Johnson, Gary D. 06982

Anticlinoria

Connecticut, eastern: Dixon, H. Roberta. 07243

North Carolina, Piedmont, eastern: Parker, John M., 3d. 04101

Cylindrical

Axis orientation, mathematical method: Cruden, D. M. 00539

Disharmonic

Montana, Crazy Mountains basin, Paleocene deformation: Skipp, Betty. 10262

Drag

Utah, Toquerville area, Hurricane Cliffs: Watson, Robert A. 06137

En echelon

Alberta, Limestone Mountain area, thrust sheets: Ollerenshaw, N. C. 06571

Folds—Continued*En echelon—Continued*

Pennsylvania, northeastern, Devonian: Fletcher, Frank W. 09775

Experimental studies

Anisotropic rocks, flow: Bayly, M. Brian. 10593

Deformation diagram, for analysis: Kupfer, Donald H. 05617

Quartz-rich layers in phyllite, kink folds: Pater-son, M. S. 01891

Schistose material, synthetic: Means, W. D. 10489

Slip folds, asymmetry, kinematic significance: Hansen, Edward. 11104

Flexural slip

Colorado, Glenwood Springs area: Murray, Frederick N. 10247

Fold belt

Northwest Territories, Ellesmere Island: Trettin, H. P. 00005

General

Alaska, Lake Peters area, history: Reed, Bruce L. 04488

British Columbia, Revelstoke area, Shuswap Complex, phases: Ross, John V. 02740

California, San Bernardino Mountains, north flank: Hollenbaugh, Kenneth Malcolm. 06551

Idaho, Idaho County, deformation history: Morrison, Donald A. 10245

Idaho, Priest River-Hoodoo Valley area, history: Clark, Sandra Helen Becker. 06547

Idaho, Saint Joe area: Reid, Rolland R. 11075

Maine, Waterville-Vassalboro area: Osberg, Philip H. 05444

Montana, Sheridan district, Precambrian: Burger, Henry Robert, 3d. 08632

New York, Hudson Highlands, Precambrian gneiss: Helenek, Henry L. 08218

Newfoundland, Bay d'Espoir Group: Anderson, F. D. 09747

North Carolina, Blue Ridge: McKniff, Joseph. 10324

Nova Scotia, Fundy Basin, Carboniferous rocks: Fyson, W. K. 08220

Oklahoma, Springer Group: Shelton, John W. 10084

Ontario, West Lake St. Joseph area, evolution: Clifford, P. M. 07979

Pennsylvania, Mount Holly Springs quadrangle: Freedman, Jacob. 08219

Quebec, Sutton area: Clark, T. H. 07135

Geometry

Alberta, Limestone Mountain area, thrust sheets: Ollerenshaw, N. C. 06571

Alberta, Nordegg area, Brazeau Range anticline: Cruden, D. M. 04064

British Columbia, Kootenay arch, Slocan syncline: Ross, John V. 02726

Interpretation, isogonic maps: Elliott, David. 00509

Nevada, Ruby Mountains, triclinic, flow direction: Howard, Keith A. 05209

New Brunswick, Letang Peninsula-Frye Island area: Lee, D. T. C. 05533

Subsurface analysis, computer program: Whitten, E. H. Timothy. 06682

Gravity

Utah, Soldier Summit area, Flagstaff Formation: Moussa, Mounir T. 06138

Interpretation

Mean-dip maps, construction: Greenwood, William R. 10671

Folds—Continued

Isoclinal

- Greenland, Ammagssalik area: Bridgwater, D. 02242
 Massachusetts, western: Hatch, Norman L., Jr. 05183
 Nevada, Ruby Mountains, Antler orogenic belt: Willden, Ronald. 08352
 Oregon, Klamath Mountains: Kays, M. A. 00534
 Wyoming, Laramie Mountains: Toogood, David J. 10270

Major

- British Columbia, Dogtooth Range: Wind, G. 04090
 British Columbia, Foothills, Peace and Liard Rivers area: Fitzgerald, E. L. 01450
 California-Nevada, Sevier orogenic belt: Fleck, Robert Joseph. 01744
 Kentucky, western basin, Pennsylvanian rocks: Mullins, Allan T. 03237
 Maryland, Baltimore-Washington anticlinorium, northeast end: Bromery, Randolph Wilson. 05514
 New York, Ohio quadrangle: Nelson, Arthur E. 04003
 Nova Scotia, Minas Passage area: Swift, Donald J. P. 01417
 Washington, Boulder Creek metamorphic terrane: Lyons, David James. 01349

Mechanism

- California, Santa Monica Mts., gravity, in progress: Ehlig, Perry L. 08671
 Composite anticline, salt and dolomite deformation, New York: Prucha, John James. 06012
 Connecticut, western: Dieterich, James H. 07011
 Massachusetts, New Hampshire, fill area, pro-alpine type: Wolfe, C. W. 08191
 Mathematical theory, finite-amplitude folding: Chapple, William M. 00522
 New Brunswick, Letang Peninsula-Frye Island area: Lee, D. T. C. 05533
 Residual body stresses, effects: Voight, Barry. 08018
 Single-layer, Biot theory, application: Sherwin, Jo-Ann. 00574
 Slip folds, displacement, ratio for finding: Hansen, Edward. 01587
 Slip folds, fold axis orientation: Hansen, Edward. 01586

Minor

- Nevada, Yucca Flat area: Hinrichs, E. Neal. 06794

Monoclinial

- Utah, Wyoming, Flaming Gorge area: Threet, Richard L. 09167

Multiphase

- British Columbia, Shuswap complex: Hyndman, Donald W. 01166
 Hinge-line ore bodies, tracing, geometric techniques: Stauffer, Mel R. 02172

Nappes

- Vermont-Massachusetts, Collinsville quadrangle: Stanley, Rolfe S. 05998

Patterns

- Pennsylvania, Franklin County, South Mtn. anticlinorium: Root, Samuel I. 06744
 Pennsylvania, Houtzdale quadrangle, regional trend: Edmunds, William E. 06745

Folds—Continued

Recumbent

- British Columbia, Kootenay arch, Slocan syncline evolution: Ross, John V. 02726
 British Columbia, Revelstoke area, Shuswap Complex: Ross, John V. 02740
 Greenland, Ammagssalik area: Bridgwater, D. 02242
 New York, Adirondack Mountains, Jay-Whiteface anorthosite nappe: Crosby, Percy. 09765
 Pennsylvania, Lancaster County, Conococheague Formation: Henderson, John R. 08179

Synclinal

- Michigan, Marquette-Sands quadrangles: Gair, Jacob E. 04113
 Oklahoma, Ouachita Mountains, Lynn Mtn. syncline: Briggs, Garrett. 02493
 Ontario, Hastings County, Lake syncline: Laakso, R. K. 00582
 Ontario, Lac des Iles area: Pye, E. G. 01043
 Quebec, Lake Megantic range area: Marleau, R.-A. 03173
 Wyoming, Absaroka Mountains, southern, origin: Fisher, Frederick S. 00783

Synclinoria

- Connecticut, eastern: Dixon, H. Roberta. 07243
 Virginia, Salem synclinorium: Tillman, C. G. 08124

Theoretical studies

- Flow folds, interpretation: Oxburgh, E. R. 11001
 Stress history: Dieterich, J. H. 10592

*Foliation**Cleavage*

- Idaho, Coeur d'Alene district: Clark, Bruce R. 11231
 Orientation, fanning, mathematical theory: Chapple, William M. 00522
 Pennsylvania, Caledonia Park area, South Mtn. anticlinorium: Fauth, John L. 06754

Experimental studies

- Martinsburg Slate, strain-slip cleavage: Means, W. D. 11327
 Slaty cleavage, genesis, mechanism: Clark, Bruce R. 10591

Genesis

- British Columbia, Kootenay arch, Slocan syncline: Ross, John V. 02726
 Idaho, Coeur d'Alene district, slaty cleavage: Clark, Bruce Robert. 02027
 Wyoming, Laramie Range, transpositional: King, John S. 10884

Gneiss

- Arizona, Santa Catalina Mts., East Forerange: Peterson, Richard Charles. 07200
 New York, Ohio quadrangle: Nelson, Arthur E. 04003
 Ontario, Ganonoque area, Grenville series: Blackburn, W. H. 06781

Metamorphic rocks

- Layering oblique to bedding: Talbot, J. L. 04435
 North Carolina, Piedmont, eastern: Parker, John M., 3d. 04101
 Oregon, Klamath Mountains: Kays, M. A. 00534

Patterns

- Michigan, Marquette-Sands quadrangles: Gair, Jacob E. 04113

Schist

- Alaska, Alaska Range, Precambrian-Paleozoic formations: Wahrhaftig, Clyde. 01659

Foliation—Continued

- Slip cleavage*
North Carolina, Pilot Mountain, development:
Dunn, David E. 07705

Foraminifera

- Amphistegina* faunas
Pleistocene-Holocene reefs, Puerto Rico, correlation: Seiglie, George A. 06349
Bermudezinella n. gen.
Miocene-Holocene, Caribbean region, from
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Cassigerinella eocaenica, n.sp.
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Catalog

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Caribbean region, new buliminacean, cassidulacean genera: Sellier de Civrieux, J. M. 11418
Fossil and modern, trace-element analyses: Lipps, Jere H. 11317
Gulf Coastal Plain, eastern, assemblages: Maher, John C. 07067
Planktonic, Miocene-Holocene, zonation, paleoclimatology: Bandy, Orville L. 09127
West Indies, Barbados Ridge, cores: Ramsay, A. T. S. 07978
Chubbina jamaicensis, n. gen. n. sp.
Jamaica and Mexico, Cretaceous, Upper: Robinson, E. 05136

Chubbina macgillavryi, n. gen. n. sp.

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Cretaceous

- Alberta, British Columbia, paleoecology: Wall, John H. 11033
British Columbia, Trent River Formation, Vancouver Island: Langhus, B. G. 05528
California, Hex Formation, Kern County: Church, Clifford C. 00170
California, southern coast, Upper: Sliter, William V. 06699
Colorado, Greenhorn Formation, water depths: Eicher, Don L. 10878
Colorado, Mancos Shale, northern: Kent, Harry C. 05719
Colorado, Niobrara Formation, Mancos Shale, biostratigraphy: Kent, Harry C. 10880
Colorado-New Mexico, San Juan Basin, Mancos Shale: Lamb, George M. 01893
Georgia, Alabama, Blufftown Formation, paleoecology: Nikravesh, Rashel. 00856
Gulf Coastal Plain, generic-level re-evaluation: Mello, James F. 10244

Foraminifera—Continued

Cretaceous—Continued

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Mexico, Baja California, northwestern, Upper: Sliter, William V. 06699
Planktonic, zonation: Bandy, Orville L. 07812
Saskatchewan, eastern, zones: Caldwell, W. G. E. 07780

Ecology

- Oregon, marginal marine environments: Fowler, Gerald A. 07727
Relation to organic carbon in sediments: Seiglie, George A. 05712

Eggerella advena

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Evolution

- North America, Cambrian, Cenozoic, continental margins, extinctions, climate: Rothwell, W. T., Jr. 01191

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Pennsylvanian, New Mexico, Sandia and Madera limestones, biostratigraphy: Myers, Donald A. 01182
Permian, New Mexico, Sacramento Mts., Laborcita Formation: Steiner, Maureen B. 00494

Geographic distribution

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North America, Cambrian, Cenozoic, continental margins, extinctions, climate: Rothwell, W. T., Jr. 01191
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North Carolina, continental shelf: Schnitker, Detmar Friedrich. 02627
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Globigerina angustumbilicata

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Pliocene-Pleistocene, Atlantic Ocean, north, philo-genetic change: Phillips, J. D. 02676
Tertiary, reclassification: McGowran, Brian. 02524

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- Louisiana, Miocene, type locality: Barker, R. Wright. 09351
Tertiary, morphology of holotype: Cifelli, Richard. 05016

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Foraminifera—Continued

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Caribbean-Antilles area, benthonic, bibliography: Seiglie, George A. 06024

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Mesozoic

Gulf Coastal Plain, eastern, assemblages: Maher, John C. 07067

Methods

Population analyses, variations, Florida: Lynts, George W. 07936

Mississippian

Kentucky, Golconda Formation, central karst area, new faunule: Pohl, E. Robert. 02188

Missouri, Illinois, Chouteau Group limestones: Conkin, James E. 02523

Newfoundland, Codroy Group, St. Georges Bay area: Mamet, B. L. 06935

Morphology

Analysis, electron microscopy: Bartlett, Grant A. 01991

Experimental studies, pollen-sized from normal-sized: Cohen, Arthur D. 05014

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Ordovician

New York, Trenton Group, Trepostomata: Ross, June R. P. 08082

Paleozoic

Index species, catalog, smaller, benthonic and planktonic: Ellis, Brooks F. 03145

Pennsylvanian

British Columbia, Cache Creek Group: Danner, Wilbert R. 07769

Permian

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Oregon, central, fusulinid fauna: Bostwick, David A. 07808

Planktonic

Temperature indicators, review: Kane, Julian. 01597

Pseudoguembelina kempensis, n.sp.

Cretaceous, Texas, Kemp Clay, possible index: Esker, George C., 3d. 04406

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Quaternary

California, Tomales Bay, benthonic, ecology: Maurer, Don. 04407

Foraminifera—Continued

Quaternary—Continued

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Delaware, Rehoboth Bay, spatial distribution in sediment, Holocene: Buzas, Martin A. 10994

Gulf of Mexico, Holocene, biofacies, cluster analysis: Mello, James F. 03230

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Schubertella

Permian, Texas, Heuco Formation, Franklin Mts.: Stewart, Wendell J. 02190

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California, Adelaida quadrangle, Miocene: Smith, Patsy B. 04774

California, San Joaquin basin, middle marine units, planktonic: Bandy, Orville L. 01322

California, San Juan Bautista Formation, Eocene: Waters, J. N. 00329

California, Santa Susana Formation, Paleocene: Schmidt, Ronald R. 08868

Caribbean region, larger, Oligocene, faunal associations: Cole, W. Storrs. 01876

Central America, large: Eames, F. E. 01042

North Carolina, Yorktown Fm., paleoecology: Schnitker, Detmar. 08556

Nova Scotia, continental margin, assemblages, correlation: Bartlett, Grant A. 09353

Foraminifera—Continued

Tertiary—Continued

Oregon, Tyee Formation: Bird, Kenneth John. 02026

Tennessee, Clayton Formation, cf. adjacent areas: Herrick, Stephen M. 02721

Toriyamaia americana, n.sp.

Permian, Texas, Wolfcamp, description: Stewart, Wendell J. 02190

Triassic

Idaho, Wyoming, Thaynes Formation: Schroeder, Marvin L. 00936

Triticites ventricosus

Permian, Kansas, Hughes Creek Shale, statistical study: Kaesler, Roger L. 08757

Trochammina pacifica

Shell material variation, experimental studies: Sliter, William V. 04994

United States

Cretaceous-Pleistocene, continental margin, northeastern: Gibson, Thomas G. 05234

Vlerkina, n. subgen.

Tertiary, Central America: Eames, F. E. 01042

Vlerkinella, n. subgen.

Tertiary, Central America: Eames, F. E. 01042

Fossils, problematic

Devonian

Iowa, Maple Hill Shale: Davis, Richard Arnold. 10893

Ophiobolus lapidaris

Cretaceous, New Jersey, Red Bank Formation, morphology, egg case: Evitt, William R. 10983

Precambrian

California, Reed Dolomite: Taylor, Michael E. 09166

Greenland, Ketilidian fold belt: Pedersen, K. Raunsgaard. 01864

Michigan, Nonesuch-Copper Harbor Formations, White Pine area: Jost, Manfred. 05015

Newfoundland, Conception Group, metazoans: Anderson, M. M. 05047

Ontario, Cobalt Group: Hofmann, H. J. 09789

Virginia, Mount Rogers Group, possible organic film: Kopp, Otto C. 09080

Tentaculites

Devonian, Alaska, McCann Hill Chert and Salmontrout Limestone: Churkin, Michael, Jr. 02888

Tullimonstrum gregarium

Pennsylvanian, Illinois, Francis Creek Shale: Johnson, Ralph Gordon. 10698

Volborthella

Cambrian, California, Harkless Formation, Wheeler Canyon, cf. Europe: Lipps, Jere H. 02192

Fractures

Columnar joints

Hawaii, Kilauea lava lakes, genesis: Peck, Dallas L. 02976

New Mexico, Mount Taylor, peripheral volcanic stumps: Hernandez, F. Louis. 09138

Cooling

Mineral assemblages, differential thermal contraction of compressibilities: DeVore, George W. 08661

Experimental studies

Brittle, initial stages in compression: Bombolakis, E. G. 07063

Deformation diagram, for analysis: Kupfer, Donald H. 05617

Generation, propagation, fluorescent dye penetrant method: Gardner, R. D. 01620

Fractures—Continued

Experimental studies—Continued

Microfractures, granite, earthquake prediction: Scholz, C. H. 00280

Mineral and rock fracture surfaces, scanning electron microscope: Willard, Robert J. 05335

Genesis

Desiccation polygons, Great Basin playas: Neal, James T. 00542

Frost cracking, rock types, Greenland and experimental: Malaurie, Jean. 07856

Ground cracks

Alaska, 1964, earthquake-mobilized sediments, Kenai Lake area: McCulloch, David S. 06491

Joints

Alberta, Bow River area, Cardium Formation: Muecke, G. K. 08307

Breakage indexes of rocks: McMahon, Barry K. 11161

Colorado, San Juan Mountains, relations to doming, collapse: Schwarz, Frederick P. 10261

Kansas, south-central, patterns: Ward, John R. 06510

Limestone, correlation with cave survey data: Rutherford, John M., Jr. 07783

Massachusetts, Wachusett-Marlborough Tunnel: Skehan, James W. 07248

Michigan, Marquette-Sands quadrangles: Gair, Jacob E. 04113

Oregon, ultramafic rocks: Kays, M. A. 00534

Quebec, Schefferville area, qualitative stress, open-pit mine: Bullock, W. D. 11151

Rock mechanics, relation: Goodman, Richard E. 01005

Systematic, propagation history, surface morphology: Ziony, Joseph I. 09746

Washington, Yakima Basalt, origin: Holmgren, Dennis A. 00430

Metamorphic rocks

Colorado, Front Range, permeability: Snow, David T. 10266

Microshears

Basalt, deformed rocks, orientation, closure angle: Stevens, George R. 09936

Mineral deposits

Replacement, susceptibility: McDougall, David J. 09430

Nascent

Pacific Ocean, Gorda Ridge: Northrop, J. 03060

Olivine

Nonuniform compressive strain during cooling: DeVore, George W. 10894

Patterns

Appalachians, oil fields, surface trends, induced fractures, correlation: Overbey, William K., Jr. 10971

Arizona, southeastern, dome location, ore deposits: Wertz, Jacques B. 05029

Arizona, southern, ore guide: Wertz, J. B. 09863

Atlantic Ocean, Mid-Atlantic Ridge: Lowrie, A., Jr. 10997

Kentucky, central karst area, cave passages control: Deike, George H., 3d. 07782

Massachusetts, Boston area, tunnel engineering: Tierney, F. Lyle. 07390

Micro, brittle rocks, relations to ground stresses, larger structures: Norman, Carl Edgar. 02636

Montana, Little Rocky Mountains: Cotera, Augustus S., Jr. 04396

Nevada, Yucca Flat, explosion-produced: Barosh, Patrick J. 06813

Fractures—Continued*Patterns—Continued*

Nova Scotia, Cobequid fault, quartz pebbles, stress field: Eisbacher, Gerhard H. 07709

Wyoming, Bighorn Mountains, northern: Jennings, Ted Vernon. 00853

Ring

Charlevoix structure, Quebec: Rondot, Jehan. 05477

Zones

New York, Lockport Dolomite, water temperatures as indicators: Trainer, Frank W. 00731

Fulgurites*Arizona*

San Francisco Mountains, Mount Humphreys: Davis, Donald G. 03191

California

Riverside County, Chuckwalla quartz diorite, copper: Webb, Robert W. 05646

Fungi*Basidiomycetes*

Pennsylvanian, mycelium with clamp connections: Dennis, R. L. 02347

Cretaceous

Alberta, Edmonton Formation, spores, n. spp.: Srivastava, Satish K. 09024

Quaternary

North Carolina, Lake Singletary, sediments, spores: Wolf, Frederick A. 00726

Gallium*Abundance*

L-group chondrites: Tandon, S. N. 04867

Volcanics, United States, western: Noble, Donald C. 10989

Geochemistry

Meteorites, Canyon Diablo and others: Wasson, John T. 00952

Gas, natural*Alabama*

Black Warrior basin, occurrence: Pike, Stuart J. 03403

Fields and possibilities: Joiner, Thomas J. 04264
Production, 1965-66: White, H. Gene. 04301

Alaska

Cook Inlet basin, occurrence: Kelly, Thomas E. 02095

Possibilities: Gates, George O. 02094

Alberta

Alexander field, occurrence: Jackson, K. E. 02135

Carbon field, occurrence: Workman, L. E. 02138

Fort Saskatchewan field, occurrence: White, N. B. 02136

Homeglen-Rimbey field, occurrence: Webb, J. B. 03400

Medicine Hat-Hatton field, occurrence: Hancock, W. P. 02139

Panther River culmination area, occurrence: Oilerenshaw, N. C. 02923

Peace River area, occurrence: Clark, L. M. 02133

Pembina Cardium oil field, occurrence: Mills, B. A. 02134

Plains, production, occurrence: Prather, R. W. 03250

Provost field, occurrence: Suey, Harry. 02137

Reserves, exploration: Heise, Horst. 00088

Rocky Mountain Foothills, occurrence: Wells, G. C. 03249

West-central, Swan Hills Formation: Hemphill, Charles R. 01216

Gas, natural—Continued*Appalachians*

Occurrence, composition: Roth, Ernest E. 03404

Resources, review: Meyer, Richard F. 01399

Arizona

Black Mesa basin, occurrence: Turner, Daniel S. 03428

Four Corners region, occurrence: Picard, M. Dane. 03427

Arkansas

Aetna field, occurrence: Planalp, Roger. 03411

Arkoma basin, occurrence: Branan, C. B., Jr. 03412

Greenwood quadrangle, occurrence: Haley, Boyd R. 05451

Jerusalem field, occurrence: Hartman, F. H. 03388

Jurassic fields, nitrogen gas, occurrence: Lokke, Donald H. 02163

Washburn anticline fields, occurrence: Bartlett, Charles S., Jr. 03410

British Columbia

Exploration, foothills, possibilities: Heise, Horst. 00088

Peace River area, occurrence: Clark, L. M. 02133

Resources summary, 1967: British Columbia Minister of Mines. 06100

California

Arbuckle field, occurrence: Vaughan, Richard H. 02129

Brea-Olinda field, occurrence: Gaede, Verne F. 04418

Brentwood field, occurrence: Ditzler, Clark C. 02102

Corning and South Corning fields, occurrence: Sacramento Petroleum Association. 02126

Eel River basin, occurrence: Ogle, Burdette A. 02096

Lathrop field, occurrence: Teitsworth, Robert A. 02130

Los Angeles basin, occurrence: Brown, James B. 02105

Maine Prairie field, occurrence: Arleth, Karl H. 02098

Perkins Lake field, occurrence, production: Harding, Tod P. 02097

Rio Vista field, occurrence: Burroughs, Ernest. 04419

Rio Vista field, occurrence, production: Burroughs, Ernest. 02100

Sacramento and San Joaquin Valleys: Jones, Vern. 02123

Sacramento Valley, gas-show pattern cf. structure: Knight, Raymond L. 03776

Sacramento Valley, occurrence: Reedy, R. D. 02125

San Joaquin Valley, occurrence: Rudkin, George H. 02103

Santa Maria and Ventura basins, occurrence: Dryden, J. E. 02104

Ten Section field, occurrence, production: Hluz, A. G. 00576

Thornton and Walnut Grove fields, occurrence: Silcox, John. 02099

Vernalis field, occurrence: Manlove, C. F. 02131

Wild Goose field, occurrence: Hawley, Arthur S. 02128

Willows-Beehive Bend field, occurrence: Alkire, James. 02127

Gas, natural—Continued*California—Continued*

Wilmington field, occurrence: Hamilton, S. V. 02106

Canada

Arctic Islands, possibilities: Link, Theo A. 11222

Production, reserves, present and future: Sproule, J. C. 05162

Reserves and potential: Sproule, J. C. 07056

Resources, general: Hilborn, James D. 07079

Western, exploration history: Sproule, J. C. 07080

Western plains, occurrence: Edmonton Geological Society. 02132

Western, reserves, 1967: Connell, Gordon A. 07083

Western, reserves: Leslie, Gordon A. 03402

Colorado

Banty Point quadrangle, Rangely field: Cullins, Henry L. 01601

Denver basin, occurrence, potential: Beebe, B. W. 02151

Elk Springs quadrangle, occurrence: Dyni, John R. 01432

Four Corners region, occurrence: Picard, M. Dane. 03427

Greenwood field, occurrence, reserves: Wingerter, H. R. 04464

North Park area, occurrence: Oburn, Richard C. 02147

Northwestern, occurrence, pre-Mancos fields: Aaker, Robert. 02148

Piceance basin, occurrence: Millison, Clark. 02150

San Juan basin, occurrence: Silver, Caswell. 02153

Sand Wash basin, occurrence: Masters, Charles D. 02149

Southeastern, exploration, Mississippian and Pennsylvanian: Matson, Roger M. 07260

Experimental studies

Nitrogen, fluid flow, porous media: Huang, J. H. 05007

Exploration

Electrical logging, mapping from Rw and Sh data: Jones, Bob. 05916

Geologic maps, supplements to subsurface data: Wilson, Edward N. 09631

Nonassociated gas, factors, new ideas: Conselman, Frank B. 03471

Trend-surface analysis: Schramm, Martin W., Jr. 03781

General

Directory of information, Illinois basin: Smith, Avery E. 07885

Genesis

Solution of organic material in sedimentary rocks: Meinschein, W. G. 05107

Summary, popular and elementary: Haun, John D. 03397

Geochemistry

Canada, western, composition, variations: Hitchon, Brian. 03398

Composition, geologic controls: Dobbin, Carroll E. 03514

Helium content, bibliography: Lipper, Harold W. 04104

Helium distribution: Voronov, A. N. 08922

Hydrothermal alteration, Wyoming: Reese, Douglas L. 02144

Methane, carbon isotope composition: Sackett, William M. 03867

Gas, natural—Continued*Geochemistry—Continued*

Ne, Ar, N isotopic abundances, relations to helium genesis: Stroud, Lowell. 08009

Gulf Coastal Plain

Central, potential, review: Rainwater, E. H. 09324

Hawaii

Volcanic composition, lava lake research: Finlayson, J. Bruce. 04660

Illinois

Illinois basin, occurrence: Bond, D. C. 03406

Illinois basin, storage: Thomas, Ralph N. 07962

Map of fields, 1968: Meents, Wayne F. 06799

Northeastern, occurrence, geochemistry, glacial drift: Meents, W. F. 03407

Illinois basin

General, symposium: Illinois Geological Society. 07826

Indiana

Illinois basin, occurrence: Bond, D. C. 03406

Illinois basin, storage: Thomas, Ralph N. 07962

Kansas

Anadarko basin, controlling factors: Swanson, Donald C. 09860

Glick field, occurrence, production: Euwer, Robert M. 03416

Greenwood field, occurrence, reserves: Wingerter, H. R. 04464

Hardtner field, occurrence, production: Young, Robert T. 03414

Hugoton-Panhandle field, occurrence: Mason, John W. 03422

Nichols field, occurrence, production: Curtis, Graham R. 03417

Occurrence, production: Merriam, Daniel F. 03386

Otis-Albert field, occurrence: Miller, Robert R. 03387

Panhandle-Hugoton field, occurrence: Pippin, L. 00416

Production, 1966: Oros, Margaret O. 07664

Spivey-Grabs field, occurrence, production: Frenslay, Robert W. 03415

Kentucky

Camp Breckinridge, resources, evaluation: Avila, John. 09628

David quadrangle, occurrence: Outerbridge, William F. 02947

Dorton quadrangle, occurrence: Barr, J. L. 00454

Dundee quadrangle, occurrence: Goudarzi, Gus H. 00993

Eastern, Cambro-Ordovician rocks, exploration: McGuire, William H. 03236

Eastern, central, exploration, 1965-66: Wilson, Edward N. 03235

Eastern, exploration, geophysical methods: McGuire, William H. 03239

Exie quadrangle, occurrence: Moore, Samuel L. 02913

Graham quadrangle, occurrence: Kehn, Thomas M. 07013

Greensburg quadrangle, occurrence: Taylor, Alfred R. 02414

Illinois basin, occurrence: Bond, D. C. 03406

Illinois basin, occurrence: Rose, W. D. 03408

Illinois basin, storage: Thomas, Ralph N. 07962

Jamboree quadrangle, occurrence: Outerbridge, William F. 07384

Majestic, Hurley, Wharncliffe quadrangles: Outerbridge, William F. 04412

McDowell quadrangle, occurrence: Rice, Charles L. 00380

Gas, natural—Continued*Kentucky*—Continued

- Nortonville quadrangle, occurrence: Palmer, James E. 04770
 Olaton quadrangle, occurrence: Johnson, William D., Jr. 00451
 Perry County, Big Sandy field, occurrence, production: Ray, Edward O. 03205
 Pleasant Ridge quadrangle, occurrence: Goudarzi, Gus H. 06672
 Redbush quadrangle, occurrence: Rice, Charles L. 00335
 Rough Creek uplift, possibilities: Rehn, E. E. 03243
 Western, Bethel Sandstone: Reynolds, Douglas W. 09627
 Western, possibilities: Stanonis, Frank L. 03242

Louisiana

- Coastal area, Pleistocene: Sabate, R. W. 09342
 Northern, occurrence: Shreveport Geological Society. 02164
 Southern, occurrence: Lafayette Geological Society. 02121
 Thornwell field, occurrence: Hardin, Frank R. 02122

Mexico

- Burgos basin and Isthmus-Tabasco region, occurrence: Beebe, B. W. 02110
 Occurrence, exploration, reserves: Bullard, Fredda Jean. 07864

Michigan

- Fields, symposium: Michigan Basin Geological Society. 08018
 Michigan basin, occurrence, production, storage: Vary, J. A. 03409
 Occurrence, producing formations: Champion, Beverly L. 07927
 Production, fields: Michigan Geological Survey. 03525

Mississippi

- Black Warrior basin, occurrence: Pike, Stuart J. 03403
 Post-Paleozoic, occurrence: Beebe, B. W. 02165
 Resources, production, Pascagoula River basin: Arndt, Robert H. 02459

Montana

- Sweetgrass arch area, occurrence: Nordquist, Jack W. 02140
 Williston basin, occurrence, nitrogen-bearing: McCrae, R. O. 03384

New Brunswick

- Stony Creek field, occurrence: Howie, R. D. 09402

New Mexico

- Delaware basin, occurrence: Hills, John M. 03431
 Four Corners region, occurrence: Picard, M. Dane. 03427
 Lusk Strawn field, occurrence, production: Thornton, Dewey E. 00069
 Permian basin, occurrence: Salisbury, Gerald P. 03812
 San Juan basin, occurrence: Silver, Caswell. 02153

North America

- General, symposium: Beebe, B. Warren. 03248
 General, symposium papers: Beebe, B. Warren. 02093
 Provinces, summary: Knight, G. L. 03399
 Resources, production, economics, summary: Beebe, B. W. 03392

North Dakota

- Occurrence, geochemistry, production: Anderson, Sidney B. 03426

Gas, natural—Continued*Northwest Territories*

- Arctic areas, exploration: Mining in Canada. 07882

Ohio

- Cincinnati arch, northern, occurrence: Lockett, Robert. 03405

Oklahoma

- Anadarko basin, controlling factors: Swanson, Donald C. 09860
 Anadarko basin, exploration, gravity: Scott, R. L. 00947
 Anadarko basin, western, occurrence: Totten, Robert B. 03421
 Arkoma basin, occurrence: Branan, C. B., Jr. 03412
 Canadian County, occurrence, possibilities: Bado, John T. 02471
 Carter-Knox field, occurrence, production: Reedy, Harold J. 03418
 East Durant field, occurrence: Jones, Fred B., Jr. 03385
 East Oconee field, occurrence, production: Morris, Don L. 02854
 Exploration, production, 1967: Roberts, John F. 03168
 Franks graben area, occurrence, production: Withrow, Jon R. 00137
 Greenwood field, occurrence, reserves: Wingerter, H. R. 04464
 Hugoton-Panhandle field, occurrence: Mason, John W. 03422
 Kinta field, occurrence: Woncik, John. 03413
 Laverne area, occurrence: Pate, J. Durwood. 03420
 Love and Marshall Counties, Marietta basin, possibilities: Henry, Gary E. 05575
 North Gotebo area, occurrence: Takken, Suzanne. 03419
 Oklahoma City area, occurrence, history: Taylor, John Allen. 00949
 Oklahoma City field, structure, exploration history: Gatewood, Lloyd E. 00422
 Panhandle-Hugoton field, occurrence: Pippin, L. 00416
 Pittsburg County, Hartshorne Formation, occurrence: McDaniel, Gary A. 01159
 Red Oak-Norris field, occurrence: Six, David A. 04303
 Wheatland area, production, possibilities: Ahmeduddin, Mir. 05584
 Woodward field, occurrence, production: Wein-kauf, Don G. 02852

Ontario

- Lake Erie and Hudson Bay-James Bay area, new finds: Beards, Ronald J. 05161
 Southwestern, Cambrian formations: Pounder, Jack A. 09629
 Southwestern, occurrence, production: Sanford, B. V. 09460

Oregon

- Exploration, 1967: Newton, V. C., Jr. 09262

Pennsylvania

- Developments, production, 1967: Lytle, William S. 05727
 Monongahela quadrangle, occurrence: Roen, John B. 01803
 Popular account: Wagner, W. R. 09006

Production

- Ultimate amount and rate: Elliott, Martin A. 11277
 Well logging, reservoir analysis, computer technique: Schmidt, A. W. 07902

Gas, natural—Continued

Quebec

Anticosti Island, exploration: Roliff, W. A. 04718

Reserves

Estimation factors, methods: Stephenson, Eugene A. 03401

Reservoirs

Mathematical modeling, computer technique: Weinaug, C. F. 06176

Migration and accumulation of fluids: Gussow, William C. 07892

Water saturation from well logs: Paul, R. H. 07273

Resources

Continental shelf, worldwide: Weeks, Lewis G. 01418

North America, symposium papers: Beebe, B. Warren. 02093

Saskatchewan

Medicine Hat-Hatton field, occurrence: Hancock, W. P. 02139

Paleozoic rocks, occurrence, production: Beach, Floyd K. 03251

Tennessee

Hilham quadrangle, occurrence: Taylor, Landon C. 03584

Springfield North quadrangle, occurrence: Hershey, Robert E. 07607

Texas

Anadarko basin, exploration, gravity: Scott, R. L. 00947

Anadarko basin, western, occurrence: Totten, Robert B. 03421

Bethel field, occurrence, reserves: Krusekopf, H. H., Jr. 02158

Carthage field, occurrence: Rogers, Robert E. 02160

Collegeport field, occurrence: Fleming, Curtis C. 02119

Cooke and Grayson Counties, Marietta basin, possibilities: Henry, Gary E. 05575

Eastern, Cretaceous, possibilities: Bushaw, Dewey J. 09346

Eastern, Jurassic fields: Rinehart Oil News Company. 06164

Fashioning field, occurrence: Keahey, Robert A. 02155

Fort Worth basin, occurrence: Blanchard, K. S. 03423

Gulf Coast, Eocene producing trend: Hardin, George C., Jr. 02114

Gulf Coast, resources, possibilities: Halbouty, Michel T. 02113

Hidalgo County, McAllen-Pharr field area, Frio Sand, occurrence: Collins, J. W. 11017

Hugoton-Panhandle field, occurrence: Mason, John W. 03422

Jurassic fields, nitrogen gas, occurrence: Lokke, Donald H. 02163

Marietta syncline, occurrence: Bakker, D. 03425

Mustang Island-Red Fish Bay area, occurrence: Corpus Christi Geological Society. 02112

New Hope field, Smackover reservoir: Chisholm, L. R. 02162

Northeastern, occurrence: Nichols, P. H. 02156

Old Ocean field, occurrence, reserves: Halbouty, Michel T. 02115

Opelika field, occurrence: Brogdon, D. R. 02157

Panhandle-Hugoton field, occurrence: Pippin, L. 00416

Gas, natural—Continued

Texas—Continued

Permian basin, occurrence: Salisbury, Gerald P. 03812

Port Acres and Port Arthur fields, occurrence: Halbouty, Michel T. 02120

Red River-Electra arch, occurrence, development: Reutinger, C. A. 03424

Refugio County, Tom O'Connor field, occurrence: Mills, H. G. 01181

Rio Grande embayment, Vicksburg fault zone, entrapment: Stanley, Thomas B., Jr. 01197

Sheridan field, occurrence: Lofton, Coleman L. 02116

South Liberty Dome, possibilities: Craig, Jack W. 02117

South-central, occurrence: Rives, John S. 04317

Southern, deep Edwards trend, occurrence: Beebe, B. W. 02154

Southern, occurrence, post-Eocene: Corpus Christi Geological Society. 02111

Trawick field, occurrence: Townsend, John V. 02159

Val Verde and Delaware basins, occurrence: Hills, John M. 03431

West-central, occurrence: Mattis, Lynn. 11428

Wharton County, West Bernard area, occurrence: Cooke, W. F., Jr. 02118

Willow Springs field, occurrence, reserves: Loetterle, G. J. 02161

Worsham field, occurrence: Winn, Vernard. 03430

United States

Analyses, helium: Moore, B. J. 04106

Continental margin, exploration rights, offshore: Goldie, L. F. E. 05110

Reserves, ultimate, discovery status: Hubbert, M. King. 11307

Resources, general: Davis, Ralph E. 03390

Resources, potential: Beebe, B. W. 03513

Utah

Four Corners region, occurrence: Picard, M. Dane. 03427

Lisbon field, occurrence, production, reserves: Parker, John M. 03429

Uinta basin, occurrence: Osmond, John C. 02108

Uinta basin, production: Folsom, L. W. 02109

Wasatch Plateau, occurrence, potential: Walton, Paul T. 02152

Virginia

Buchanan, Dickenson, and Tazewell Counties, production: Young, David M. 01136

West Virginia

Charleston area, production: Haight, Oscar L. 08053

Eastern, Oriskany Sandstone-Huntersville Chert: Patchen, Douglas G. 05463

Greenbrier Limestone: Haight, Oscar L. 07617

Kanawha-Jackson Counties, Williamsport Sandstone, development: Haney, Gene. 03240

Newburg Sand, exploration, occurrence: Patchen, Douglas G. 04158

Ohio, Brooke, and Hancock Counties: Haight, Oscar L. 08926

Tuscarora Sandstone and pre-Silurian wells: Patchen, Douglas G. 05464

Vadis field: Milner, William. 05577

Wayne County area, Keefer Sandstone, potential: Patchen, Douglas G. 04801

Wyoming

Casper area, Iron Creek field, occurrence, production: Dahill, Murray P. 09369

Gas, natural—Continued

Wyoming—Continued

- Church Buttes field, occurrence: Gras, Victor B. 02143
- Green River basin, occurrence: Krueger, Max L. 02142
- Hanna and Laramie basins, occurrence: Mitchell, Steven D. 02146
- Rock Springs uplift, occurrence: Reese, Douglas L. 02144
- Sand Wash basin, occurrence: Masters, Charles D. 02149
- Wamsutter arch, occurrence: Ritzma, Howard R. 02145
- Wind River basin, occurrence: Paape, Donald W. 02141

Gastropoda

Argobuccinum

- Tertiary, taxonomy and distribution: Terry, Judith Shoemaker. 05497

Bellerophonacea

- Cambrian-Ordovician, Mexico, Oaxaca, Tinu Formation: Yochelson, Ellis L. 03233
- Phylogeny, morphology: Rollins, Harold Bert. 02625

Buccinidae

- Miocene-Pleistocene, North America, southern, nomenclature: Emerson, William K. 02808

Creteaceous

- Mexico, San Luis Potosí, Cardenas Fm.: Myers, Ralph L. 07967
- United States, Western Interior, assemblages, paleoecology: Sohl, Norman F. 10875

Creteaceous-Pleistocene

- California, San Diego County, guide: Moore, Ellen J. 04354

Creteaceous-Quaternary

- Mexico, Baja California, northwestern: Perrilliat Montoya, Maria del Carmen. 09131

Cyclosporgia discus Miller

- Devonian(?), Indiana, Bunker Hill, operculum: Solem, Alan. 05676

Cypraea

- Systematic list, nomenclature, genera and subgenera: Schilder, Franz Alfred. 02679

Devonian

- Michigan, Ohio, Ontario, Anderdon Limestone, new: Linsley, Robert M. 03053

Eobucania mexicana, n.sp.

- Cambrian-Ordovician, Mexico, Oaxaca, Tinu Formation: Yochelson, Ellis L. 03233

Fusitriton

- Tertiary, taxonomy and distribution: Terry, Judith Shoemaker. 05497

Geographic distribution

- Ohio, Quaternary, fresh-water: LaRocque, Aurele. 05642

Glyptaesopus proctorae

- Pliocene, Florida, living occurrence: Radwin, George E. 09020

Hexaplex

- Cenozoic, Atlantic and Gulf Coastal Plains: Vokes, Emily H. 05057

Mediargo, n.gen.

- Tertiary, United States, northwestern: Terry, Judith S. 03195

Morphology

- Bellerophonacea: Rollins, Harold Bert. 02625
- Ontogenetic allometry, adaptive significance, Bermuda land snail: Gould, Stephen Jay. 05739

Muracypraea

- Tertiary, United States, southeastern, distribution: Olsson, Axel A. 02401

Gastropoda—Continued

Murexiella

- Cenozoic, Atlantic and Gulf Coastal Plains: Vokes, Emily H. 05057

Muricinae

- Cenozoic, Gulf Coastal Plain, taxonomy: Vokes, Emily Hoskins. 01740

Nomenclature

- Cypraea and Triviacea, systematic list, genera and subgenera: Schilder, Franz Alfred. 02679

Omphalotrochus cf. *O. whitneyi*

- Permian, British Columbia, northeastern, Ranger Canyon Formation: Logan, Alan. 05686

Orthaulax

- Oligocene-Miocene, variations: Vokes, Harold E. 05056

Orthaulax gabbi

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Planorbula campestris

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Pleurotomariacea

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Poecilozonites

- Quaternary, Bermuda, evolution: Gould, Stephen Jay. 01746

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Predatory

- Boreholes, Holocene cf. Ordovician borings: Carriker, Melbourne R. 00537

Priene

- Tertiary, taxonomy and distribution: Terry, Judith Shoemaker. 05497

Quaternary

- Idaho, Soda Springs area, spring deposits: Jones, Robert W. 00383

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- Quebec, Lake No. 2, paleoecology: Warner, David J. 03757

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Siphocypraea

- Tertiary, United States, southeastern, distribution: Olsson, Axel A. 02401

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Taxonomy

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Teichispira, n.gen.

- Ordovician, Early, Alabama, Newfoundland, Utah, Malaysia: Yochelson, Ellis L. 05863

Tertiary

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Triviacea

- Systematic list, nomenclature, genera and subgenera: Schilder, Franz Alfred. 02679

Gems

Corundum

- Asterism, cause: Nassau, K. 09439

Gems—Continued

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- Great Lakes region, drift occurrences, catalog: Gunn, Christopher B. 08108

General

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Great Lakes region

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Jet

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Nevada

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Perlite

- Mexico, Sonora, Alamos area, peanut obsidian: Broughton, Paul L. 00358

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General

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- Elementary, fossil casts, technique: Edge, Lyle N. 01447
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- Hydrogeology, Canada: Morris, W. V. 05595
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- Student enrollment, 1967-68: Downs, George R. 05241
- United States, new buildings, selected colleges: Snyder, John. 08143
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- Professional geologists, requirements: VanCouvering, Martin. 08026

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General—Continued

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- Information structuring and search, computer methods: Briggs, Louis I. 10891
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- Flood theory, history, in stone: Nelson, Byron C. 09201
- Geological inquiry, limits, randomness vs. orderliness: Krauskopf, Konrad B. 00549
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- Graduate students, change in 20 years: Stone, Richard O. 08147
- Hypothesis confirmation, tests, sources: Henry, Thomas W. 09299
- International information and communication, American isolation: Routhier, Pierre. 05244
- Paleoecology and uniformitarianism: West, Ronald R. 09298
- Revolution, concepts, stimulation by oceanographic data: Hill, Mason L. 05245
- Scientific thinking, persistent error: Tilley, Philip. 03728
- Teaching of earth sciences: Allen, John Eliot. 00613
- Uncertain determinism, factors: Shaw, Denis M. 02520

Practice

- Automatic data processing, applications, simulation, colloquium: Merriam, Daniel F. 06110
- Chemical companies, professional opportunities: McNulty, W. N., Sr. 09429
- Contact with nongeologists, public dissemination: Boyer, Robert E. 08145
- Early, Nicholas Steno, *Prodromus*, 1679: Steno, Nicolaus. 10912
- Earth sciences, Canada, nature and organization: Harrison, J. M. 09207
- Environmental geologist, responsibilities: Flawn, Peter T. 09380
- Future geologists, economic adaptations: Conselman, Frank B. 08146
- Future role in petroleum exploration: Cordell, Robert J. 00928
- Geological research, Canada, trends: Wynne-Edwards, H. R. 09209
- Geologists, South Carolina, 1817-1912: Smith, Laurence L. 04864
- Geology, public image, Canada: Baird, D. M. 09218
- Graduate geologists, Mexico, distribution, future: Lopez Ramos, E. 09229
- High school science education, explosion: Bisque, Ramon E. 05997
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- Hydrogeology, continuing education: Torpey, W. G. 05594
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General—Continued*Practice—Continued*

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- Mineralogy, crystallography, M. J. Buerger: Azaroff, Leonid V. 09644
- Petroleum geologists, shortage, explanations: Bates, Robert L. 01444
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- Petroleum geology, contributions of: Everett Carpenter: McMurtry, Wilbur E. 03877
- Petroleum, needed coordination with geophysics, engineering: Halbouty, Michel T. 07891
- Professional career, unique problems: Owen, Edgar W. 02853
- Professionalism, excessive, problems caused: Rogers, John J. W. 08119
- Professionalism of geologists: Gotautas, Vito A. 00944
- Promotion of geology, subdisciplines, Geol. Soc. America: Sloss, Laurence L. 05336
- Public relations, Oregon: Allen, John Eliot. 09590
- Reports, value of summaries: Goode, Harry D. 01710
- Statistical methods, review: Charlier, Roger H. 07341
- Status of geologist, Oklahoma City Geol. Soc. survey: Darnell, Richard D. 05574
- University education, American cf. European national systems: George, T. Neville. 01497
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Principles

- Maillet, Benoit de (1956-1738), system: Maillet, Benoit de. 10122

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General—Continued*Textbooks—Continued*

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- Paleontology: Beerbower, James R. 06183
- Physical geography, college survey course: Trewartha, Glenn T. 03122
- Physical geography, outline: Pearson, Ross Norton. 02513
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Applications

- General: Andrews-Jones, D. A. 06706

Gold

- Natural waters, adsorption on sample containers: Chao, T. T. 05172

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- Stream sediments, anomaly variations, origin: Rose, A. W. 06854

Interpretation

- Trace-element distributions, igneous rocks: Neuberger, G. J. 06851

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- Zinc, Alaska, Fairbanks area: Heiner, L. E. 09835

Mercury

- Soil gas, air, experimental: McCarthy, J. H. 06849
- United States, eastern, anomalous in sphalerite: Jolly, Janice L. 05981

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- Greenland, Mesters-Vig lead-zinc district: Lehner-Thiel, Klaus. 01824

Molybdenum

- Analysis: Marshall, N. J. 01908
- Field kit, analysis: Barakso, John. 04118
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Mowry Shale

- Wyoming, organic carbon as petroleum indicator: Schrayner, G. J. 05906

Pan-concentrate analyses

- Interpretation, gold: Fischer, R. P. 02812

Petroleum

- Methods, precision: Law, Charles. 04322

Polymetallic ores

- Mexico, San Luis Potosí, ore guides: Gomez, Manuel. 04115

Practice

- Review, 1967: Cavender, Wayne S. 04375

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- Gamma-ray spectrometry, field and laboratory, comparison: Bunker, C. M. 02707

Silver

- Natural waters, adsorption on sample containers: Chao, T. T. 05171

Soils

- A-horizon: Lapointe, Guy. 04241

Geochemical prospecting—Continued

Soils—Continued

Appalachians, southern, copper indicators: Tan, Li-Ping. 08908

Trace elements, A horizon: Boyle, R. W. 04232
Utah, Park City district: Garrett, Robert G. 04233

Statistical methods

Utah, Park City district, trace chemical data: Nackowski, M. P. 10999

Stream sediments

Copper: Dahlberg, Eric C. 04236

Trace metals, multivariate study: Dahlberg, Eric Charles. 07159

Techniques

Concepts, development, Canada: Boyle, R. W. 09214

Spectroscopy, emission, mobile laboratory: Grimes, D. J. 02817

Uranium

Radon in surface waters, Ontario, Bancroft and Ottawa-Hull areas: Dyck, Willy. 05342

Water

Gold adsorption on sample containers, prevention: Chao, T. T. 05172

Silver adsorption on sample containers, prevention: Chao, T. T. 05171

Zinc, Wisconsin: DeGeoffroy, J. 06944

Geochemical surveys

Alaska

Alaska Range, southern, Windy Fork-Post River, metals: Reed, Bruce L. 01709

East-central, Livengood district, gold: Foster, R. L. 02818

Fairbanks area, trace element distribution: Heiner, L. E. 09835

Farewell area, metals: Herreid, Gordon. 04840

Fortymile district, metals: Smith, William H. 04771

Sinuk area: Herreid, Gordon. 04841

Slana area, gold, base metals: Richter, Donald H. 04058

Wood River-Tikchik Lakes area: Eakins, Gilbert R. 04772

Yukon-Tanana area, metals, stream sediments: Burand, W. M. 03743

Alberta

Devonian Woodbend reefs, strontium as indicator: Weaver, Charles E. 05723

California

Inyo County, Pine Creek tungsten ore, monzonite, element distribution: Darling, Richard Graydon. 05515

Rocky Hill stock, base metal trends, computer-derived: Putnam, George W. 00816

Colorado

Clear Creek, Mo, Pb, Zn: Mallory, Edward C., Jr. 00775

Metals, Summitville mining district: Sharp, William N. 00355

Rabbit Ears Range, Poison Ridge volcanic center: Kinney, Douglas M. 03994

San Juan Mountains, gold: Fischer, R. P. 02812

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Chattahoochee River, element concentrations: Lawrence, J. M. 09547

Greenland

Mesters-Vig lead-zinc district, mercury-halo dispersion: Lehnert-Thiel, Klaus. 01824

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Southern, fluorspar, trace-element distribution: Keighin, Charles W. 06876

Geochemical surveys—Continued

Indiana

Strip mined areas, spoil banks, pH, relation to glacial till: Guernsey, Lee. 06918

Jamaica

Copper, soils, Barbecue prospect: Black, C. D. G. 07175

Maine

Somerset County, Attean quartz monzonite, sulfides: Young, Robert S. 09956

Maryland

Baltimore area, stream waters, cations and silica, control: Bricker, Owen P. 07358

Michigan

Negaunee quadrangle, west-central, Cu, Pb, Zn: Segerstrom, Kenneth. 04765

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Upper zinc-lead district, zinc dispersion curves, ore guide: Lavery, Norman Garnsey. 05520

Montana

Castle Mountain mining district, metals: Winters, Allen S. 02560

Nebraska

Platte River drainage area, lower, ground and river water: Barnes, Ivan. 01490

Nevada

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Sheep Creek Range, western, metals: Gott, Garland B. 03996

Swales Mountain area, metals, anomalies: Ketner, K. B. 02595

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New Brunswick

Bathurst-Jacquet River district, stream sediments: Boyle, R. W. 02055

Charlotte, Saint John, Kings Counties, Cu, Pb, Zn, Mn, Mo: Wolfe, W. J. 06067

Uranium, stream sediments, southeastern: Smith, A. Y. 09073

New Mexico

Eagle Nest quadrangle, metals: Misaqi, F. Leo 07627

Philmont Ranch region, stream sediments, metals: Misaqi, F. Leo. 01623

Southwestern, Monticello Box, metals: Griffiths, Wallace R. 05425

North Carolina

Democrat area, nickel: Carpenter, Robert H. 10290

Kings Mountain-Charlotte area, water analyses, rock types distinguished: Price, Van. 00924

Northwest Territories

Mackenzie, north-central, elements in rocks, patterns: Mursky, Gregory. 03596

Ontario

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Noranda volcanic belt, Blake River Group, major-element analyses: Baragar, W. R. A. 02723

Panama

Petaquilla and Botija prospects, discovery: World Mining. 08173

Geochemical surveys—Continued

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South Mountain, stream sediments, copper:
Dahlberg, Eric C. 04236

Quebec

Noranda volcanic belt, Blake River Group,
major-element analyses: Baragar, W. R. A.
02723

South Dakota

Eastern, ground-water pH, field and laboratory
determinations, differences: Lufkin, Nat.
06995

Tennessee

Eastern, lead, zinc: Carpenter, R. H. 06834
Zinc, Kentucky Lake-Nashville, ground water,
soils, rocks: Hershey, R. E. 09079

Texas

Terlingua district, mercury: Geddes, Richard W.
11283

United States

Eastern estuaries, suspended material, salt flocculation, cf. experiments: Meade, Robert H.
07357

Virginia

Central, soils, Frederick, Iredell, Lloyd series:
Plaster, Rodger W. 06117

Wisconsin

Southwestern, zinc: DeGeoffroy, J. 06944

Wyoming

Centennial district, New Rambler mine area,
platinum: Theobald, P. K., Jr. 05734

Yukon

Keno Hill area, boron, stream and spring sediments: Gleeson, C. F. 06681
Keno Hill area, cobalt, stream and spring sediments: Gleeson, C. F. 06679
Keno Hill area, copper, stream and spring sediments: Gleeson, C. F. 06678
Keno Hill area, manganese, stream and spring sediments: Gleeson, C. F. 06680

Geochemistry

Absorption

Montmorillonite, organic: Heydemann, Annerose. 06774

Abundance of elements

Crust, chondrites, early solar system: Anders,
Edward. 04345

Gold, oceans: Rosenbaum, J. B. 06855

Iron formation, manganese: Lepp, Henry. 00472

Mafic rocks, phenocrysts compared with matrix,
europium: Philpotts, John A. 02603

Shales, boron, Colorado: Cody, Robert Dow.
04532

Silver: Boyle, R. W. 04720

Aluminosilicates

Stabilities, Great Lakes region: Sutherland,
Jeffrey Clark. 07203

Aluminum

Dissolved complexes, graphical study methods:
Hem, John D. 07360

Amphibole

Catalog of analyses, coexisting mineral assemblages: Leake, Bernard E. 06320

Applications

Mineral deposits: Kalliokoski, J. 04242

Aquatic environments

Organic-inorganic reactions: Hood, Donald W.
08737

Aragonite

Transformation from vaterite, common ion effect: Bischoff, J. L. 00278

Geochemistry—Continued

Boron

Clay minerals, soils, Al-, Fe-coated, retention:
Sims, J. R. 09468

Retention in sesquioxides: Sims, J. R. 02264

Brines

Factor analysis, R-mode: Sampson, Robert J.
01006

Bryozoa

Amino acids, elements, compositional-ecologic groups, Holocene: Schopf, Thomas J. M.
08068

Calcite

Solubility, 200°, 300° C, 500, 1000 bars:
Dickson, F. W. 08663

Transformation from aragonite, common ion effect: Bischoff, J. L. 00277

Carbohydrates

Paleozoic plants, components, possible evolution: Swain, F. M. 06304

Carbonate minerals

Precipitation, low temperature, pressure: Conrad, Eric H. 00922

Carbonate rocks

Lead-zinc deposits, Canada, trace-element group, atomic ratios: Sangster, D. F. 02908

Clay minerals

Adsorption isotherms: Weber, J. B. 05968

Cation equilibria: Fertl, Walter. 04745

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Vermiculite, hydrobiotite, Cs and Rb fixation: Kaddah, Malek T. 05083

Coal-bearing strata

Trace elements, depositional environment: Nicholls, G. D. 05872

Connate water

Na:K, Cl:SO₄ ratios: Sawkins, F. J. 07638

Continental rocks

Cyclic evolution: Barth, T. F. W. 09352

Crust

Canadian Shield, chemical evolution: Fahrig, W. F. 05447

Cycles

Carbon, atmosphere, hydrosphere, biosphere: Holland, Heinrich D. 08020

Carbon, organic, sea water: Ryther, John H. 08864

Concepts: El-Baz, Farouk 10896

Flow of elements: Barth, T. F. W. 09352

Diamonds

Genesis: Dawson, J. B. 04228

Genesis: Kennedy, George C. 04229

Dolomite

Synthesis at low temperature, model: Donahue, Jack D. 07765

Elements

Problems, techniques, research: Ingerson, Earl. 08022

Exchange capacity

Aluminum in natural water: Hem, J. D. 00074

Geochemistry—Continued*Exchange capacity—Continued*

Aluminum, soils, drying effects: Westfall, Dwayne Gene. 04448

Clay minerals, Al-saturated, equilibrium constants: Foscolos, A. E. 02952

Clay minerals and soils, cation selectivity: Dolcater, D. L. 05961

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Montmorillonite, potassium: Yaalon, D. H. 02220

Soils, clays, lithium-calcium equilibria: Bair, F. L. 02255

Soils, nitrogen-induced changes: Schafer, John William, Jr. 06531

Soils, zinc: Clarke, A. L. 02221

Vermiculites, equilibrated dioctahedral: von Reichenbach, H. 07430

Fluid inclusions

Leakage, experimental studies: Roedder, Edwin. 06943

Graphite schists

Metals, sulfides: Boyle, R. W. 06978

Ground water

CaCO₃ saturation, Barbados: Harris, William H. 08430

Cave formation: Thrailkill, John. 00545

Multiple aquifers, drilling wells, field monitoring: Rawson, Jack. 07033

Total dissolved salts, specific gravity, relations: Agnihotri, S. K. 09044

Hydrogen

P-V-T measurements, oxygen fugacity: Presnall, D. C. 01588

Igneous rocks

Nickel-cobalt ratios, variations: Fleischer, Michael. 09282

Illite

Alteration studies, hydrous character: Wentworth, Sally Ann. 01758

Instruments

Field kit, water alkalinity: Kunkler, J. L. 07032

Piston-cylinder apparatus, calibration: Boettcher, A. L. 02521

Titration apparatus, atmospheric CO₂, caves: Delecour, F. 11044

Water-bath, temperature controlled, mineral phase studies: Hostettler, P. B. 05198

Ion exchange

Clays, exchange with brines: vanEverdingen, R. O. 05474

Kaolinite and bentonite, Rb-Na pairs, experimental: Kunishi, H. M. 01852

Iron

Sediments, fractionation: Angino, Ernest E. 07749

Isoelectric point

Equivalency, oxygen polarization: Kramer, K. F. 10316

Jasperoid

Gold content, trace-element associations, United States: Lovering, T. G. 00773

Kimberlite

Review: Dawson, J. B. 04228

Magnetite

Solubility, 150°, 200°, 250°C, 100, 500, 1000 bars: Dickson, F. W. 08662

Manganese

Lakes, water and sediments: Delfino, Joseph John. 06534

Geochemistry—Continued*Manganese—Continued*

Ore deposits, general: Roy, Supriya. 06986

Wisconsin, Lake Mendota, eutrophic: Delfino, Joseph J. 09373

Mantle

Solid solution equilibria, olivine-spinel: Akimoto, Syun-iti. 00281

Methods

Au, Pt, Pd analysis, combined technique: Barnett, Paul R. 02686

Coal, mineral constituents, infrared determination: Estep, Patricia A. 09634

Minor element determination, X-ray fluorescence, thin film technique: Price, N. B. 09635

Redox equilibrium calculations, use of pE rather than Eh: Truesdell, A. H. 00616

Sediments, gases in interstitial water: Reeburgh, William S. 00359

Silicate analysis, ion exchange dissolution: Govindaraju, Kuppusami. 09633

Spectrochemical: Joensuu, Oiva I. 03496

Sulfide ion activity, determination, silver sulfide electrode: Sato, Motoaki. 08865

Minerals

Magmatic, hydrothermal, gas contents: Barker, Colin G. 07813

Montmorillonite

Ketone adsorption: Parfitt, R. L. 02254

Niobium

Abundance, occurrence, summary: Parker, Raymond L. 04103

Organic materials

Analytical methods, mass spectroscopy: Haug, Patricia Ann. 03016

Chelating and sequestering agents, exogenic cycle: Pauli, F. W. 04711

Life, origin, applications: McCarthy, Eugene Desmond. 02620

Petroleum origin and accumulation: Hunt, John M. 03809

Sediments, ancient: Burlingame, A. L. 07775

Oxygen

Earth's crust, review: Volborth, Alexis. 08025

Permian atmosphere: Holser, W. T. 07894

Petroleum

Genesis, organic processes, role of environmental electric forces: Sisler, F. D. 09642

Potassium

Apatite, synthetic: Simpson, Dale R. 05969

Processes

Biologic, metals: Boyle, R. W. 04234

Cationic diffusion, homogeneous and heterogeneous systems, clay minerals: Lai, T. M. 00901

Diffusion, carbonates, isotopic exchange with CO₂: Anderson, Thomas F. 07747

Diffusion, fluid inclusions: Roedder, Edwin. 06943

Equilibrium crystallization, magmatic, terminology questioned: Wagener, H. D. 03852

Fixation of heavy metals, soils and waters, controls: Jenne, E. A. 03751

Ion exchange, bentonite, cations: Rollins, M. B. 07028

Ion exchange, clay minerals, Al-saturated: Foscolos, A. E. 02952

Ion exchange, clay minerals, aluminum interlayers: Sawhney, B. L. 07027

Ion exchange, clay organic complexes: Bissada, Kadry Kaddis. 04530

Ion exchange, kaolinite clay: Brown, D. A. 07042

Geochemistry—Continued

Processes—Continued

- Ion exchange, lake mud, exchangeable cations, emission spectroscopy: Cowgill, Ursula M. 04884
- Ion exchange, vermiculite, cations: Lai, T. M. 07015
- Irreversible reactions, minerals and aqueous solutions: Helgeson, Harold C. 02992
- Isotope exchange: Rye, Robert O. 01914
- Isotope fractionation, Ca-C-H-O systems: Bottinga, Yan. 04545
- Isotope fractionation, geothermal field areas: Clayton, R. N. 05269
- Isotope fractionation, tellurium: Smithers, R. M. 09071
- Leaching, ore deposit outcrops: Blanchard, Roland. 03143
- Life origin, laboratory experiments: Fox, Sidney. 09382
- Polymerization, silicic acid, dilute aqueous solution: Bishop, Allen David, Jr. 05512
- Solution, borates: Smith, Ward C. 07635
- Supersaturation: Roedder, Edwin. 04230
- Weathering, soils, mineral desilication: Jackson, M. L. 07434

Sanidine

- Mixing properties, ion-exchange data: Thompson, J. B., Jr. 07519
- Mixing properties, molar volume data: Waldbaum, D. R. 07520

Scandium

- Trace element, diadochic relation to 6-coordinated (Fe, Al): Frondel, Clifford. 09649

Sea water

- Ba, Sr abundances, determination: Andersen, Neil R. 11009
- Magnesium sulfate speciation, synthetic: Kester, Dana R. 06119
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- New Jersey, New York, continental shelf: McKinney, Thomas F. 08183
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Geochemistry—Continued

Soils—Continued

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- Sphalerite*
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07032

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diagram: Villalobos, Crescencio Ignacio.
06791

Silica and iron, interactions: Schenk, John E.
09037

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Fossil shells, potential: Mitterer, Richard M.
08809

Coral rings

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Fatty acids

Algae: Das, Salil K. 07045

Fission-track

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R. L. 08505

Colorado, Eldora stock, contact zone: Naeser,
C. W. 08820

Natural, man-made glasses: Huang, W. H. 08502
Tektites, possible errors: Gentry, Robert V.
08501

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Principles, methods, textbook: Eicher, Don L.
03124

Growth layers

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07288

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Friedman, Irving. 00171

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500 yr: Viereck, Leslie A. 02289

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James B. 00723

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Richard D. 01130

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02676

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Geochronology—Continued*Radiation damage*

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minescence, techniques: Zeller, Edward J.
03969

Stromatolites

Algal, rhythms, possible use: McGugan, Alan.
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Medlin, W. L. 05292

Lava flows, historic, evaluation: Aitken, M. J.
03971

Limestones, 600°K glow peaks, growth curves in
calcite: Medlin, W. L. 03973

Pleistocene-Pliocene dating tool, combination
with radiation dosimetry: Johnson, Noye M.
03949

Pleistocene-Pliocene dating tool, combination
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W. 04704

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Geodesy*Figure of Earth*

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Donald A. 10856

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Geologic thermometry—Continued

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Geological exploration—Continued

Methods—Continued

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Glacial features—Continued

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- Till, Colorado, Hayden Park-Rampart Range area: Weber, W. Mark. 10274
- Till, Connecticut, Naugatuck-Torrington area, field trip: Pessl, Fred, Jr. 05942
- Till, erratics, Nova Scotia, Prince Edward Island, late history: Prest, V. K. 09817
- Till, Ohio, Logan County, soils, vegetation: Forsyth, Jane L. 11064
- Till, stratigraphy, correlation, Pennsylvania: White, George W. 10797

Geomorphology—Continued

Glacial features—Continued

- Till, Vermont, Brandon-Ticonderoga quadrangles: Connally, G. Gordon. 11136
- Till-cored ridge, Labrador: Cowan, W. R. 07992

Lacustrine features

- Beach ridges, New York, Erie Lowland, glacial: Calkin, Parker E. 09757
- General, stratigraphy, Utah, Lake Bonneville: Bissell, Harold J. 11442
- Kame delta, ripple-drift cross-laminations, genesis: Jopling, Alan V. 06733
- Lake level, Lake Erie, changes: Wall, Robert E. 00543
- Lake-bog succession, Minnesota, Cedar Creek Bog: Buell, Murray F. 06705
- Sedimentation, rate since Pleistocene, New Mexico: Wright, H. E., Jr. 03089
- Shore features, Massachusetts, Berkshire Hills, glacial: Holmes, G. William. 09791
- Strandline, Lake Nipissing, Ontario, Manitoulin Island: Smith, J. Edward. 09469
- Strandlines, late Pleistocene, New York, Buffalo area: Calkin, Parker E. 01138
- Strandlines, Ontario, Wasaga Beach, glacial lake Nipissing, dating: Farrand, W. R. 10975
- Terraces, Alaska, Point Barrow area, postglacial strands, C-14: Carson, Charles E. 01515

Landform description

- Alabama, physiographic provinces and divisions: Drahovzal, James A. 07654
- Alaska, Johnson River area: Holmes, G. William. 02428
- Alaska, Mendenhall Valley: Barnwell, William W. 00373
- Alaska, Prince of Wales Island, Maybeso Valley: Swanston, Douglas N. 02609
- Appalachians, review: Davies, William E. 01409
- Arctic Ocean basin, geomorphic provinces: Hunkins, Kenneth. 09877
- Atlantic Coastal Plain, Delmarva Peninsula: Jordan, Robert R. 08210
- Bedrock topography, Alberta, Gleichen area: Geiger, K. W. 08897
- British Columbia, Rocky Mountain Trench, drainage patterns: Robinson, J. Lewis. 09622
- California: Albers, J. P. 01501
- California, by provinces: Durrenberger, Robert W. 07618
- California, West Walker River, glacial effects: Clark, Malcolm Mallory. 11232
- Canada, eastern seaboard, Pleistocene glaciation, maximum extent: Ives, J. D. 11399
- Canada, major features: Clibbon, Peter B. 05037
- Central America, morphotectonic units: Dengo, Gabriel. 06324
- Colorado, Canon City embayment, pediments: Kane, Henry E. 10236
- Colorado, Morrison quadrangle, Quaternary: Pearl, Richard Howard. 06005
- Colorado-Wyoming, Sherman Granite areas: Eggle, David H. 10895
- Connecticut, Ansonia and Milford quadrangles: Flint, Richard Foster. 04722
- Connecticut, West Torrington quadrangle: Colton, Roger B. 01099
- Drainage patterns, controls, Georgia, Piedmont: Grant, Willard H. 00892
- Erosion surfaces, Colorado, San Juan region: Steven, Thomas A. 01700
- Georgia, land resource areas, summary: Perkins, H. F. 01696
- Greenland: Hansen, Kaj. 05113

Geomorphology—Continued*Landform description—Continued*

- Greenland, Inglefield Land: Nichols, Robert L. 09809
 Hawaii, Puu Hou littoral cones: Fisher, Richard V. 10921
 Illinois, Thebes area, river drainage, guidebook: Illinois State Geological Survey. 05774
 Karst areas and granite terrain, Mexico, British Honduras: Furley, Peter. 02259
 Karst, pseudokarst types, classification: Quinlan, James F. 08967
 Louisiana, popular account: Kniffen, Fred B. 11198
 Map, world: Murphy, Richard E. 01648
 Mississippi, Hattiesburg district: Bowen, Richard L. 11080
 Mississippi, southeastern, drainage patterns: Bowen, Richard L. 08511
 Mississippi Valley, lower, braided-stream surfaces: Saucier, Roger T. 02505
 Missouri, Rolla quadrangle, map interpretation: Schroeder, Walter A. 08140
 Missouri, Saint Louis quadrangle, map interpretation: Conoyer, John W. 08141
 Montana, Kalispell Valley: Konizeski, R. L. 03621
 New England, deglaciation, chronology: Schafer, John P. 09930
 North Dakota, Cass County: Klausing, Robert L. 01641
 Oklahoma, Caddo County buttes: Shead, A. C. 05138
 Ontario, Bolton area: Karrow, P. F. 02403
 Ontario, Hamilton-Guelph area, surficial geology: Straw, Allan. 10129
 Ontario, Scarborough area: Karrow, P. F. 09516
 Physical geography outline: Pearson, Ross Norton. 02513
 Puerto Rico, geographic zones and subzones, vegetation: Dansereau, Pierre. 08912
 Quebec, Eastern Townships: Ritchot, Gilles. 06363
 Quebec, Leaf River area, and border islands of N.W.T.: Stevenson, I. M. 09117
 Quebec, Poste-de-la-Baleine area, Rock square: Cailleux, Andre. 07994
 Quebec, southeastern, deglaciation, history: Gadd, Nelson R. 09777
 Relief, qualifying terms, definitions: Drummond, Robert R. 03729
 South Dakota, Beadle County: Hedges, Lynn S. 06026
 Texas, west-central: Watts, Jerry. 11207
 United States, aerial photographs, catalog: Denny, Charles S. 02291
 United States, Atlantic coast, crescentic features: Dolan, Robert. 00122
 Utah, Wasatch Mountains, Spanish Fork Canyon: Rigby, J. Keith. 06153
 West Virginia, Mineral-Grant Counties, transverse drainage: Clark, G. Michael. 08645
 Wisconsin, Driftless area, structural control: Palmquist, Robert C. 10113

Landform evolution

- Alberta, Red Deer Valley, lower: McPherson, H. J. 06309
 Alp, gipfelflur, United States, western: Thompson, Will F. 04999
 Arizona, San Pedro River valley: Haynes, C. Vance. 02666
 Arizona-New Mexico, drainage patterns: Cooley, M. E. 02665

Geomorphology—Continued*Landform evolution—Continued*

- Bahamas, Cat Island, coastal, Holocene: Lind, Aulis Olaf. 07150
 Barrier islands: Cooke, C. Wythe. 01894
 Barrier islands: Hoyt, John H. 01895
 California, Big Pine drainage area, glacial modifications: Fleisher, Penrod Jay. 01342
 California, Fremont Peak and Opal Mtn. quadrangles: Dibblee, T. W., Jr. 01841
 California, Monterey Submarine Canyon: Starke, George W. 01892
 California, Pinnacles National Monument: Hinds, Norman E. A. 03515
 California, Riverside County, Perris basin: Kim, Young Il. 02024
 Canada, major features: Clibbon, Peter B. 05037
 Climato-genetic regionalism: Paul, A. H. 01629
 Climax morphogenesis, climatic influences: Garner, H. F. 11177
 Colorado Plateau, review: Badoux, Heli. 04729
 Colorado, San Juan peneplain refuted: Steven, Thomas A. 01700
 Connecticut, Ansonia and Milford quadrangles: Flint, Richard Foster. 04722
 Cycle of erosion, Davis concept, criticisms: Tilley, Philip. 03728
 Erosion, cycles, climatic effects: Birot, Pierre. 02598
 Erosion surfaces, weathering, relation to soils genesis: Cady, J. G. 07419
 Idaho, Columbia River plateau: Ptacek, Anton D. 09157
 Idaho, Washington, Palouse Hills: Fryxell, Roldal. 07731
 Illinois, Saint Elmo area: Illinois State Geological Survey. 05857
 Indiana, Mitchell Plain: Powell, Richard L. 10116
 Indiana, southern: Gray, Henry H. 10105
 Jamaica, Puerto Rico, limestone regions: Birot, P. 07984
 Kentucky, central karst area: Howard, Alan D. 09821
 Loess terrain: Bariss, Nicholas. 02327
 Louisiana, Pontchartrain Basin: Saucier, Roger Thomas. 03022
 Mexico, Guatemala, limestone mountains and plateaus: Enjalbert, H. 07985
 Nevada, Humboldt River, Lake Lahontan, late Quaternary history: Hawley, John W. 11020
 New Jersey, Musconetcong Valley, natural and cultural: Wacker, Peter O. 06323
 New York City region, Precambrian-Holocene: Schuberth, Christopher J. 06968
 North Dakota, Badlands, piping: Bell, Gordon L. 04852
 Northwest Territories, Prince Patrick Island, slopes: Pissart, A. 10919
 Nova Scotia, Bay of Fundy: Lyall, Anil K. 08789
 Ontario, Georgian Bay, entrance origin: Tovell, Walter M. 05303
 Peneplains, theories, classification: Cotet, Petre V. 11021
 Peneplanation, waxing slope concept, Apalachians: Bethune, P. de. 10918
 Popular and elementary account: Matthews, William H., 3d. 00728
 Processes, observation, Vigil Network, data repositories: Emmett, W. W. 02594
 Puerto Rico, Rio de la Plata area: Williams, Richard S., Jr. 09952
 Quebec, Montreal archipelago: Macpherson, Joyce Brown. 06339

Geomorphology—Continued*Landform evolution—Continued*

- Rocky Mountains, northern, pediments: Bullard, Reuben G. 08629
 Tennessee, Sequatchie Valley area: Milici, Robert C. 01821
 Texas, Sabine County, "Potato Hills": Van-Sielen, DeWitt C. 09082
 Textbook, college survey course: Trewartha, Glenn T. 03122
 Tors, theories of origin, Puerto Rican evidence: Cunningham, Frank F. 07333
 Utah, Provo area, Wasatch Mountain front: Rigby, J. Keith. 06157
 Virginia, North Carolina, barrier islands: Fisher, John J. 08688
 West Indies, costas, climate effect: Blume, Helmut. 07616
 West Indies, Montserrat, southern: Rea, W. J. 06953
 Wisconsin, Devils Lake area: Black, Robert F. 02281
 Wyoming, Grand Teton National Park: Love, J. D. 05987
 Wyoming, Medicine Bow Mts., Cenozoic history: McCallum, M. E. 01713

Marine features

- Changes of level, Quebec, Little Whale River area, beach ridges: Archer, David R. 05035
 Dunes, Atlantic Ocean, Bay of Fundy: Swift, Donald J. P. 08010
 Evolution, sedimentation, Bahama-Blake Outer Ridge: Markl, Rudi G. 10846
 Intertidal fan, New Brunswick, Bay of Fundy, sedimentation: Laming, D. J. C. 09796
 Lagoon, barrier islands, Virginia: Newman, Walter S. 04551
 Reef-front platform, Bermuda area: Stanley, Daniel J. 07659
 Sand ridge, Massachusetts, Vineyard Sound: Smith, J. Dungan. 09934
 Sedimentation, evolution, Atlantic Ocean, Blake-Bahama Outer Ridge: Ballard, J. A. 10843
 Sedimentation, New Jersey, Beach Haven-Little Egg Inlet: Charlesworth, Lloyd James, Jr. 07152
 Submarine canyons, current action: Ross, David A. 02010
 Submarine canyons, evolution, hypotheses: DeLuca, Frederick P. 09296
 Submarine canyons, tectonic origin: Dulemba, Jean-L. 11022
 Submarine canyons, United States, eastern, continental rise: Pratt, Richard M. 11043
 Submarine channel, California, La Jolla fan: Normark, W. R. 08461
 Submarine fan-valley, off California, La Jolla: Shepard, Francis P. 04552
 Terraces, Cape Cod to Cape Hatteras, Tertiary: Richards, Horace G. 04010
 Terraces, Hawaii, Oahu, western, submerged: Brock, Vernon E. 02530
 Terraces, Pacific Islands, evolution: Newell, Norman D. 08824
 Terraces, Pacific Islands, submarine, evolution: Newman, W. A. 11000
 Terraces, sea cliffs, California, continental slope: Dill, Robert C. 08460
 Terraces, United States, southeastern, Cenozoic: Alt, David. 04014
 Topography, Atlantic Ocean, North American Basin: Pratt, Richard M. 04519

Geomorphology—Continued*Mass movements*

- Avalanches, Vaughan Lewis (Glacier) Icefall, Alaska: Pinchak, Alfred C. 04872
 Avalanching, superglacial drift formed, Alaska: Reid, John R. 08051
 Earthquake-induced, Alaska, Anchorage area: Kerr, Paul F. 04194
 Landslide, Alaska, Sherman Glacier, 1964 earthquake: Shreve, Ronald L. 06480
 Landslide, Alaska, Sherman Glacier, earthquake of 1964: Marangunic, Cedomir. 06479
 Landslides, absolute age, California, southern: Stout, Martin L. 09707
 Landslides, Alaska, Sherman Glacier: Plafker, George. 06478
 Landslides, ash flows, mechanism, air-layer role: Shreve, Ronald L. 01164
 Landslides, Barbados, Scotland District: Cumberbatch, E. R. St. J. 09900
 Landslides, California, Slate Range: Smith, George I. 08907
 Landslides, coalesced, Wyoming, Carter Mtn.: Pierce, William G. 05200
 Landslides, mechanism, Blackhawk slide, California: Shreve, Ronald L. 04299
 Landslides, mud-flow types, Quebec: Chagnon, Jean-Y. 06933
 Landslides, Ohio, southeastern, shales, stability: Fisher, Stanley P. 09084
 Landslides, Quebec, Kenogami area: LaSalle, Pierre. 01976
 Landslides, Utah: Shroder, John Ford, Jr. 00864
 Landslides, Washington, Pasco basin: Brown, Randall E. 00813
 Rates, classification, Colorado, Front Range: Wallace, Ronald Gary. 02623
 Rock glaciers, Washington, North Cascade Range: Libby, Willard G. 08295
 Rock glaciers, Wyoming, Absaroka Mts.: Potter, Noel, Jr. 11073
 Rock-snow slide, Alaska, Allen Glacier, mechanics: Johnson, Noye M. 06477
 Volcanoes, Washington, Mt. Rainier: McKee, Bates. 07219

Methods

- Aerial photography, color, landform analysis, Ontario: Mollard, J. D. 02379
 Airphoto interpretation: Miller, V. C. 08910
 Drainage basin analysis, radar imagery, evaluation: McCoy, Roger Michael. 02025
 Erosion surfaces, analysis, band width, Massachusetts: Farnsworth, Roy L. 11019
 Hillslope models and soil formation, loess watersheds, Iowa: Ruhe, R. V. 07440
 Morphologic analysis by squares: Cailleux, Andre. 07994
 Photointerpretation: Avery, T. Eugene. 00810
 Slope profiles, device for measurement: Pitty, A. F. 05682
 Space photography, Earth's terrain, Gemini flight: Lowman, Paul D., Jr. 06022
 Stream labeling, topological significance: Ranalli, G. 07317
 Systems approach, application to beaches: Waddell, Evans. 06156
 Terrain analysis, automatic data processing: Turner, A. Keith. 06913

Periglacial features

- Boulder clusters, piping process, Mont.-Wyo.: Smith, H. T. U. 07392

Geomorphology—Continued*Periglacial features—Continued*

- Connecticut, western, field trip: Schafer, J. P. 05943
- Frost cracking, rock types, Greenland and experimental: Malaurie, Jean. 07856
- Ice wedges, Alaska, Fairbanks area: Sellmann, Paul V. 08072
- Patterned ground, Alaska, Arctic slope: Tedrow, J. C. F. 02091
- Patterned ground, Appalachians: Clark, G. Michael. 02279
- Patterned ground, Newfoundland, Avalon Peninsula: Henderson, E. P. 07232
- Patterned ground, Northwest Territories: Pissart, A. 07391
- Patterned ground, United States, Great Basin, Pleistocene: Major, Jack. 02089
- Permafrost, Greenland: Hansen, Kaj. 05113
- Permafrost, Northwest Territories, Mackenzie Delta: Williams, P. J. 07237
- Pingos, Alaska, central: Holmes, G. William. 09400
- Pingos, genesis: Mackay, J. Ross. 02504
- Proglacial lakes, Quebec, Champlain Sea, rebound: McDonald, Barrie C. 05677
- Quebec, bibliography: Dionne, Jean-Claude. 06362
- Rock glaciers, New Mexico, San Mateo Mts.: Blagbrough, John W. 05211
- Slope evolution, Arctic islands: Pissart, A. 10919
- Solifluction, Pennsylvania, Blue Rocks block field: Potter, Noel, Jr. 00467

Photogeology

- Integrating natural resources surveys: Steiner, D. 08915

Practice

- Scope of science, relation to geography: Ritchot, Gilles. 04311

Quantitative geomorphology

- Airphoto interpretation: Miller, V. C. 08910
- Bedrock topographic mapping, buried drainage pattern, Iowa: Sendlein, Lyle V. A. 07589
- Branching phenomena in streams, computer model: Liao, K. H. 01626
- Channel networks, random, geometric-series laws: Shreve, Ronald L. 07965
- Degradation rate, slopes, California: LaMarche, Valmore C., Jr. 00162
- Drainage basin analysis, Horton's laws, rational explanation: Scheidegger, Adrian E. 04568
- Drainage basin analysis, radar imagery: McCoy, Roger Michael. 02025
- Drainage basin analysis, stream lengths, statistical properties: Smart, J. S. 04567
- Drainage patterns, tidal marshes: Pestrong, Raymond. 07847
- Fluvial systems, number of drainage basins, prediction: Woldenberg, Michael J. 00007
- Glacial drift differentiation, slope data analysis, Iowa: Thomas, Barbara. 06643
- Hillslope models and soil formation, Iowa, Cary drift: Walker, P. H. 07438
- Hillslope models and soil formation, loess watersheds, Iowa: Ruhe, R. V. 07440
- Horton's law of stream numbers, explanation: Scheidegger, A. E. 01938
- Landform erosion, regime-flow estimation: Magorian, Thomas R. 10417
- Loess topographies, differentiation: Lohnes, R. A. 06644

Geomorphology—Continued*Quantitative geomorphology—Continued*

- Model studies, stream geometry: Bruun, Per. 01080
- Model studies, stream geometry: Hooke, Roger LeB. 01079
- New Jersey, Sandy Hook, progradation: Yasso, Warren E. 08193
- River network, graph patterns: Scheidegger, Adrian E. 07630
- Rivers, flooding, frequency analysis, Markov model: McGilchrist, C. A. 00138
- Sediment transport, data correlation, similitude theory: Barr, D. I. H. 04589
- Sediment transport, data correlation, similitude theory: Maddock, Thomas, Jr. 09426
- Sediment transport, data correlation, similitude theory: Barr, David I. H. 04588
- Shore erosion, scales: Schwartz, Maurice L. 04430
- Slope determination, scales for use on topographic map: Thrower, Norman J. W. 02508
- Slope measurement, device: Pitty, A. F. 05682
- Stream flow, simulation techniques, statistical methods: Stolte, W. J. 05439
- Stream ordering systems, Horton's law, temperature-analog: Scheidegger, A. E. 00155
- Stream profile, probabilistic formulation: Dacey, Michael F. 01834
- Stream profile, random walk formulation, Leopold-Langbein model: Dacey, Michael F. 00139
- Stream transport processes, thermodynamic analogy: Chung, C. L. 05102
- Stream transport, sand waves, statistical description: Nordin, Carl F. 05164
- Terrain analysis, automatic data processing: Turner, A. Keith. 06913
- United States, Basin and Range province, trend-surface analysis: Lustig, Lawrence K. 08788
- Valley shapes, sizes, cf. stream discharge: Tuttle, Sherwood D. 08023

Shore features

- Bar and barrier island sands, origin, Gulf Coastal Plain: Weidie, A. E. 09345
- Barrier island-lagoonal complex, Georgia: Hails, John R. 07319
- Barrier islands, genesis, submergence hypothesis: Fisher, John J. 03855
- Barrier islands, genesis, submergence hypothesis: Hoyt, John H. 03848
- Barrier islands, Virginia, North Carolina: Fisher, John J. 08688
- Beach ridges, relict, North Carolina, Outer Banks: Fisher, John Joseph. 02033
- Beaches, equilibrium, wave spectrum influence: Wells, Donald R. 08436
- Beaches, erosion, Hawaii: Moberly, Ralph, Jr. 01477
- Beaches, evolution, California, Crescent City area, Smith River Plain: Roberts, James A. 10965
- Beaches, experimental study, effect of waves of low phase difference: Kemp, Patrick H. 04577
- Beaches, glacial Lake Agassiz, North Dakota, field trip: Blumle, Mary E. 10770
- Beaches, Hawaii, littoral sand budget, 1962-63: Chamberlain, Theodore. 00822
- Beaches, Hawaii, summary: Moberly, Ralph, Jr. 09823
- Beaches, Northwest Territories, Cornwallis Island: Hannell, F. G. 01517

Geomorphology—Continued*Shore features—Continued*

- Beaches, profiles, North Carolina, Outer Banks: VanBeek, Johannes L. 11137
- Beaches, sediment dispersal, statistical analysis: Boon, John D., 3d. 00529
- Beaches, study, systems approach: Waddell, Evans. 06156
- Beaches, transverse bars, sedimentation: Niedoroda, Alan William. 08826
- Changes of level, Northwest Territories, Baffin Island: Andrews, J. T. 01133
- Chenier, barrier island plains, genesis: Todd, Thomas W. 03547
- Chenier plain, Louisiana, southwestern: Leont'yev, O. K. 07297
- Crescentic landforms, United States, Atlantic coast: Dolan, Robert. 00122
- Cuspate forelands, sedimentation, structural influences, Florida: Wood, William L. 08438
- Deserts, research, appraisal: Schreiber, Joseph F., Jr. 08101
- Erosion, scales, Bruun effect: Schwartz, Maurice L. 04430
- Erosion, sedimentation, hurricane effects, Florida: Pray, Lloyd C. 08092
- Erosion, transport, North Carolina: El-Ashry, Mohamed T. 07369
- Evolution, Bahamas, Cat Island, Holocene: Lind, Aulis Olaf. 07150
- Evolution, Hawaii, coastal segments, processes: Moberly, Ralph, Jr. 09883
- Evolution, North Carolina, Lookout Bight, anoxic basin: Menzies, Robert J. 03720
- General, Alaska, southeastern, earthquake effects: Stanley, Kirk W. 07515
- General, North Carolina, Cape Fear, submerged: Riggs, Stanley R. 10339
- Headland-bay beach, New Jersey, Sandy Hook: Yasso, Warren E. 08193
- Lagoon, barrier beach, Mexico, Laguna Madre: Yanez, Amado. 09224
- Marsh, stratigraphy, geometry, Massachusetts, Plum Island: McCormick, Charles Larry. 07194
- Mississippi-Louisiana, Natchez-New Orleans area: Durham, C. O., Jr. 08889
- Placers, gold: Tuck, Ralph. 01899
- Sand ridges, Delaware, Bethany Beach area: Moody, David W. 08204
- Schorre, Quebec, Saint Lawrence Estuary: Dionne, Jean-Claude. 02553
- Sedimentation, Gulf of St. Lawrence, south shore: Dionne, Jean-Claude. 07339
- Sedimentation, history, Gulf of Mexico, Sabine-High Island area: Nelson, Henry F. 07864
- Sedimentation, processes, Louisiana: Beall, Arthur O., Jr. 03546
- Sedimentation, storm effects, British Honduras, northern coast: High, Lee R., Jr. 01217
- Shore lines, Pleistocene, Florida, Georgia: Hoyt, John H. 08742
- Shoreline changes, Quaternary record, Baja California: Walker, Theodore R. 03890
- Spits, experimental studies, spit-platform concept: Meistrell, F. J. 04066
- Terraces, Atlantic Coastal Plain: Colquhoun, Donald J. 07982
- Terraces, Barbados, erosion: Tricart, J. 07971
- Terraces, erosional, Barbados, off west coast: Macintyre, Ian G. 04886
- Terraces, genetic connotation, erroneous, Virginia: Coch, Nicholas K. 07981

Geomorphology—Continued*Shore features—Continued*

- Terraces, Pleistocene sea-level changes, analysis: Flemming, N. C. 03455
- Terraces, Yarmouth age, South Carolina: Colquhoun, D. J. 03005
- Transport, sedimentation, intertidal, Nova Scotia: Swift, D. J. P. 01987
- Transverse bars, low-energy beaches: Niedoroda, Alan William. 10328
- Solution features*
- Caves, channels, sinuosity: Deike, George H., 3d. 07878
- Caves, earth sciences and speleological studies: Davies, William E. 08074
- Caves, earth sciences and speleological studies: Quinlan, James F. 08075
- Caves, genesis, chemical and hydrologic factors: Thraikill, John. 00545
- Caves, geometry, changing, solution processes: Lange, Arthur L. 04353
- Caves, karst, drainage, Virginia, Scott County, Rye Cove: Holsinger, John R. 07872
- Caves, Kentucky, central karst area, passage control: Deike, George H., 3d. 07782
- Caves, Kentucky, Mammoth Cave region: Deike, George Herman, 3d. 03028
- Caves, Mexico, new discoveries, exploration: Russell, William H. 08969
- Caves, Missouri, Ozark Mts.: Owen, Luella Agnes. 11031
- Caves, New Mexico, Carlsbad Caverns: Bullington, Neal R. 10166
- Caves, sediment transport, dynamics: White, Elizabeth L. 09820
- Caves, sulfuric acid reaction, Iowa: Morehouse, David F. 01492
- Caves, Texas, Stockton Plateau: Kunath, Carl E. 08158
- Caves, Virginia, southwestern, summary: Holsinger, John R. 08954
- Caves, wall geometry, constant solution gradient: Lange, Arthur L. 01155
- Caves, wall geometry, exponential solution gradient: Lange, Arthur L. 01135
- Caves, West Virginia, Bone-Norman cave system, description: Davis, John O. 07876
- Caves, West Virginia, Cave Hollow System: Smith, Gordon L. 10867
- Caves, West Virginia, Flower Pot Cave, description: Medville, Douglas. 07874
- Caves, West Virginia, Great Savanna: Rutherford, John M. 08970
- Experimental studies, limestone dissolution: Howard, Alan D. 08955
- Karst and caves, Mexico, description: Thompson, P. 07361
- Karst, Barbados: Tricart, J. 07971
- Karst, Cuba, development: Gerstenhauer, A. 03676
- Karst, Cuba, mogotes, development: Lehmann, H. 03677
- Karst, Cuba, mogotes, development: Panos, Vladimir. 03747
- Karst, depression morphology, analysis, Kentucky: LaValle, Placido. 05165
- Karst, detection by electrical methods: Kennedy, J. M. 01889
- Karst evolution, Jamaica, Puerto Rico: Birot, P. 07984
- Karst evolution, Mexico, Guatemala: Enjalbert, H. 07985
- Karst, Jamaica, central inlier, northern margin: Brown, M. C. 07749

Geomorphology—Continued*Solution features—Continued*

- Karst, Jamaica, research: Smith, D. Ingle. 07362
 Karst, Kentucky, Fayette County, Ordovician limestones: Mull, D. S. 06586
 Karst, Mexico, San Luis Potosí, Matehuala area: Grande Lopez, Raul. 06792
 Karst, Missouri, Ozark Mts., Hurricane Creek basin: Aley, Thomas. 07052
 Karst, Puerto Rico, Arecibo quadrangle: Briggs, Reginald P. 04762
 Karst, Puerto Rico, northern: Monroe, Watson H. 11329
 Karst, solution rate, Jamaica, Puerto Rico: Birot, Pierre. 10917
 Karst, Texas, Kirschberg Evaporite, drip pockets: Quinlan, James F. 07750
 Karst, types, pseudotypes, classification: Quinlan, James F. 08967
 Karst, vertical shafts, topographic effects, Kentucky: Quinlan, James F. 08968
 Karst, West Virginia, Friars Hole area: Bicking, Lewis A. 09178

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- Continental margin, Montague Island area: Malloy, R. J. 07939

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- Chukchi rise, southern: Hall, John K. 08451

Canada

- Research, trends, applications: Garland, G. D. 09208

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- Cayman trough, interpretation: Bowin, Carl O. 03223
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- World, summary: Worzel, J. Lamar. 09865

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- Ridge, trench, and rise, crust and mantle: Woolard, George P. 07975

Geophysical surveys—Continued*Kentucky*

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Montana

- Crustal structure, lateral variation: Glover, Peter. 00042

Northwest Territories

- Pine Point area, lead-zinc, exploration history: Seigel, H. O. 03050

Pacific Ocean

- Bering Sea, review: Stone, D. B. 07062
 Murray fracture zone, structure: Malahoff, Alexander. 08464

Quebec

- Schefferville area, iron exploration: Seguin, Maurice. 05669

Tennessee

- Wells Creek structure: Wilson, Charles W., Jr. 11374

Texas

- Delaware basin, summary: Miller, S. T. 10178

United States

- Midwestern, basement complex: Patton, J. B. 10114

Worldwide

- 1967 activity, engineering, construction, ground water, statistics: Melickian, G. E. 06143
 1967 activity, mining exploration statistics: Hood, Peter J. 06144
 1967 activity, petroleum exploration, statistics: Tucker, L. R. 06145
 1966, engineering and ground-water projects: Tucker, L. R. 00185

Wyoming

- Grand Teton National Park and vicinity: Behrendt, John C. 07532

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 Index to abstracts: Clarke, James W. 08104
 Index to abstracts: Clarke, James W. 08105
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Education

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General

- Canadian activities, 1968, summary: Garland, G. D. 07626
 Oceanographic data, new concepts and techniques: Hill, Mason L. 05245

Observations

- Natural disasters, prediction, current status: Landsberg, Helmut E. 04501

Practice

- Log analyst as expert witness in court: Walker, Barth P. 06525
 Petroleum exploration, needed coordination with geology, engineering: Halbouty, Michel T. 07891
 Space technology, future applications: Scharon, LeRoy. 00045

Research

- Significant contributions, recent highlights: Simmons, Gene. 00341

Georgia*Absolute age*

- Brunswick area, cypress stump, shoreline submergence: Wait, Robert L. 05176
 Pleistocene shoreline deposits: Hoyt, J. H. 03977

Georgia—Continued

Areal geology

Okefenokee National Wildlife Refuge: Smedley, Jack E. 00027

Economic geology

Barite, resources: Brobst, Donald A. 01390

Copper, southern, exploration, geochemical: Tan, Li-Ping. 08908

Heavy minerals, coastal plain, exploration: Furlow, James W. 00888

Kaolin, Cretaceous deposits, occurrence, genesis: Grim, Ralph E. 09869

General

Environmental science, early, history: Cramer, Howard Ross. 10294

South Georgia Minerals Program, storage and retrieval system: Ostrander, Charles C. 00895

Geochemistry

Chattahoochee River, reservoirs, element concentrations: Lawrence, J. M. 09547

Savannah River area, ground water, trace elements: Salotti, Charles A. 10344

Geomorphology

Atlantic coast, barrier islands, evolution, cf. Australia: Hails, John R. 07319

Brunswick area, shoreline, Holocene submergence: Wait, Robert L. 05176

Land resource areas, summary: Perkins, H. F. 01696

Piedmont, central, drainage patterns, controls: Grant, Willard H. 00892

Pleistocene shore lines, tectonic movements: Hoyt, John H. 08742

Pleistocene shorelines, evolution, modification: Hoyt, John H. 08956

Hydrogeology

Coastal Plain aquifer, piezometric surface, decline: Carver, Robert E. 02525

Coastal plain, Tertiary limestone, buried karst: Herrick, S. M. 08728

Maps, geologic

Brevard fault zone, Atlanta area: Higgins, Michael W. 01806

General: Smith, James W. 10910

Mineralogy

Clay minerals, sediments, relations: Pevear, David R. 08966

Muscovite, structure: Guven, N. 01575

Paleontology

Echinoidea, Eocene, Lake City Formation, new fauna: Kier, Porter M. 04127

Echinoidea, Eocene-Oligocene, coastal plain: Pickering, Sam M., Jr. 00880

Foraminifera, Cretaceous, Blufftown Formation, western: Nikravesch, Rashel. 00856

Invertebrata, Devonian, Frog Mtn. Sandstone, Floyd County, list: Nunan, Walter Edward. 00890

Mammalia, Pleistocene, Bartow County, new: Ray, Clayton E. 00891

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Trilobita, Mississippian, Lavender Shale, northwestern: Rich, Mark. 08553

Petrology

Elbert County, mafic intrusions: Austin, Roger S. 08510

Elberton batholith: Ramspott, L. D. 08551

Troup County, Oxford pegmatite, crystallization sequence: Bailey, Arthur C., Jr. 00896

Georgia—Continued

Sedimentary petrology

Central, eastern, Jackson Group, lithofacies: Carver, Robert E. 08516

Coastal area, shelf and paralic sediments: Henry, Vernon J., Jr. 05435

Coastal plain, sand, heavy minerals: Smith, James W. 10345

Cusseta Sand, deltaic origin, facies, composition: Hester, Norman Curtis. 05518

Frog Mountain Sandstone, provenance: Kiefer, John D. 10852

Sapelo Island, estuarine, nearshore sediments: Henry, Vernon J., Jr. 08533

Stratigraphy

Brevard fault zone, Atlanta area, sections: Higgins, Michael W. 01806

Cretaceous-Tertiary, kaolin deposits, coastal plain: Buie, B. F. 10286

Oligocene, middle, Pulaski County, biostratigraphy: Herrick, S. M. 10308

Pleistocene, shoreline deposits, absolute age, correlation: Hoyt, J. H. 03977

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Summary: Smith, James W. 10910

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Atlanta area, crystalline rocks, microfractures: Norman, Carl Edgar. 02636

Columbia County, ultra-basic bodies, diapiric emplacement: McLemore, William H. 00893

Southwestern Piedmont, Pine Mountain: Grant, Willard H. 10301

Stewart County, clay diapirs: Harrison, Robert Alan. 00885

Tallulah Falls dome: Livingston, John L. 10321

Troup County, Oxford pegmatite mine: Bailey, Arthur C., Jr. 00896

Weathering

Cobb County, ultramafic dike, actinolite, clinocllore: Grant, Willard H. 08532

*Geosynclines**Appalachian*

Sedimentation, Devonian, Upper: Manspeizer, Warren. 09799

Atlantic coastal

Sedimentation, Holocene, Delaware: Kraft, John C. 03738

Cordilleran

Comparison with other geosynclines: Larson, E. R. 08292

Evolution, Nevada-Utah: Armstrong, Richard Lee. 01076

Genesis, tectonics: Crosby, Gary W. 04512

Metamorphic infrastructure: Howard, Keith. 08591

Sedimentation, Ordovician sandstone, source: Ketner, Keith B. 00740

Evolution

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Crustal migration hypothesis: Gastil, Gordon. 08585

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Geosynclines—Continued

Franklinian

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- Sedimentation, tectonics, Northwest Territories: Thorsteinsson, R. 06570

Genesis

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Metallogensis

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Sedimentation

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Geothermal energy*California*

- Salton Sea area: Helgeson, Harold C. 00648
- Salton Sea geothermal system, CO₂ origin: Muffler, L. J. Patrick. 09868
- The Geysers, resources, power plant: Moxey, R. L. 05089

Economic potential

- Optimum environment: White, Donald E. 08349

Exploration

- Infrared methods, line-scanning techniques: Friedman, Jules D. 06389

Nevada

- Steamboat Springs wells: White, Donald E. 00724

New Mexico

- Exploration: Summers, W. Kelly. 09200
- Exploration, hot springs and wells: Summers, W. K. 09139

Sources

- General: Whiting, Robert L. 04263

United States

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Worldwide

- Resources: Summers, W. Kelly. 09200

Germanium*Abundance*

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Geochemistry

- Distribution in meteorites: Wai, C. M. 06674
- Meteorites, Canyon Diablo and others: Wasson, John T. 00952

Geysers*Nevada*

- Beowawe area: Rinehart, John S. 05008

Wyoming

- Old Faithful, mechanism: Rinehart, John S. 00046
- Old Faithful, physical model of internal cavity: Geis, Fred, Jr. 01508
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Glaciation*Causes*

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Glaciation—Continued*Causes—Continued*

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Continental

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History

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- South Dakota, Beadle County: Hedges, Lynn S. 06026

Mineral deposits, genesis

- Lead, zinc, Mississippi Valley: McGinnis, L. D. 04220

Processes

- Effect on cave formation: Baker, Victor R. 07781

Glaciation—Continued*Quaternary*

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McGinnis, Lyle D. 01906

Glaciers*Alaska*

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Casement Glacier, basal sliding: Peterson, Donald N. 08419
Casement Glacier, glacier cave: Peterson, D. N. 08072
Earthquake effects, March 1964: Post, Austin S. 07003
General, earthquake effects, pre-1964: Field, William O. 07039
Martin River and Sioux, superglacial drift, genesis: Reid, John R. 08051
Sherman and Sheridan Glaciers, earthquake effects: Tuthill, Samuel J. 06473
Sherman Glacier, earthquake effects, debris slide: Bull, Colin. 06472
Sioux Glacier, superglacial drift, earthquake origin: Tuthill, Samuel J. 06476
Vaughan Lewis Icefall, avalanche activity: Pinchak, Alfred C. 04872
Worthington Glacier, midsummer heat balance: Streten, N. A. 04873

Alberta

- Athabasca Glacier, icequakes: Savage, J. C. 10579

Arctic Ocean

- Pack ice, effect on air temperature and glaciation: Fletcher, J. O. 04165

British Columbia

- Berendson Glacier, future advance, possibilities: Untersteiner, N. 02503

Colorado

- Arapahoe Glacier, till pebble orientation, relation to ice motion: Harris, Stuart A. 02509

Greenland

- Camp Century, temperature profiles: Weertman, J. 11440
Central icecap, upper layers, physical properties, thickness: Brockamp, B. 10690
Ege region, movement and variations of front: Bauer, A. 01684
Eqip Sermia, Bay Ege, moraines, lagoon formation: Hansen, Kaj. 07908
Ice cap, geochemistry: Langway, Chester C., Jr. 07927
Ice cap, nickel isotopes: Fireman, Edward L. 08498
Ice cap, stratigraphic properties: Langway, Chester C., Jr. 09797
Ice cap, Thule Peninsula, snow accumulation studies: Mock, Steven J. 00945
Ice sheet, firn region, Internat. Expedition 1957-60: Haefeli, R. 07699
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Reconnaissance, airborne: Bauer, A. 05289
Sermilik Glacier: Misar, Zdenek. 06346
Western, fluctuations: Weidick, Anker. 05022
Western, solid discharge, effect on icecap: Bauer, A. 05306
Western, velocity, airphoto study: Carbonnell, M. 05305

Glaciers—Continued*Ice*

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Atmospheric dust, implications to marine sedimentation: Windom, Herbert L. 10711
Composition, oxygen isotopes, microparticles, Greenland: Hamilton, W. L. 00321
Crystal growth, stress-generated: LaChapelle. E. 02544
Crystals, three-dimensional shape: Rigsby, George P. 02541
Deformation, Alberta, Athabasca Glacier: Raymond, C. F. 10616
Deformation history, bubble coalescence as tool: Weertman, J. 11369
Deformation, shear, diffusion law for hard particles: Weertman, J. 11370
Deformation, Washington, Blue Glacier: Fletcher, R. C. 10615
Deformation, Washington, Blue Glacier: Kamb, Barclay. 10614
Dust particles, Greenland cf. Antarctica: Hamilton, Wayne L. 10953
Electrolytic conductivity, Greenland: Gow, Anthony J. 11289
Exploration, thermal probes, measurement: Aamot, Haldor W. C. 11250
Flow, surges: Paterson, W. S. B. 03741
Flow, surges, conference, summary: Briscoe, A. J. 07306
Mass balance, Montana, Beartooth Mts., Grasshopper Glacier: Alford, Donald. 05609
Melting point, local pressure effect: Radd, F. J. 02011
Movement, avalanches: Mellor, Malcolm. 03152
Movement, bottom, computation from surface profile: Lliboutry, L. 05736
Movement, moraine pebble orientation: Harris, Stuart A. 02509
Movement, surges, mechanism: Nielson, Lawrence E. 03003
Petrology, fabric analysis, Northwest Territories, Meighen Ice Cap: Koerner, R. M. 04874
Physical properties, internal friction, melting point: Clee, T. E. 10580
Physical properties, movement, deformation, Greenland: Haefeli, R. 07699
Physical properties, P-wave velocity distribution: Ruter, H. 10693
Physical properties, velocity anisotropy, petrofabric relations, Greenland: Bennett, Hugh Frederick. 10694
Structural features, cyclic folding, annual, Washington: Raymond, Charles F. 11002
Thermoluminescence, relation to stress and flow history: Ronca, L. B. 03967
Thickness, temperature, hot-point drill: Aamot, Haldor W. C. 04871

Instruments

- Ice drill, buoyancy-stabilized hot-point: Aamot, Haldor W. C. 04871

North America

- Cordillera, neoglaciation, chronology: Porter, Stephen C. 08090
Western, dating of activity, tree rings, lichen: Viereck, Leslie A. 02289

Northwest Territories

- Meighen Ice Cap, ice core, fabric analysis: Koerner, R. M. 04874

Glaciers—Continued*Washington*

Nisqually Glacier, kinematic wave steepening vs. thickness: Johnson, James N. 00735

Wyoming

Absaroka Mountains, Galena Creek rock glacier: Potter, Noel, Jr. 11073

Yukon

Kaskawulsh Glacier, Saint Elias Mountains, seismic study: Dewart, Gilbert. 07946

Kaskawulsh Glacier, structural features, movement: Anderton, Peter Wightman. 01722

Klutlan Glacier, posthypothermal history: Krinsley, Daniel B. 07922

Steele Glacier, surge, 1967: Paterson, W. S. B. 03741

Glossaries*Geomorphology*

Encyclopedia: Fairbridge, Rhodes W. 07022

Mineralogy

General: Thrush, Paul W. 11362

Mining geology

General: Thrush, Paul W. 11362

Stratigraphy

Cretaceous, Aptian: Sornay, Jacques. 04863

Formation names, South Dakota, Black Hills area: Wulf, George R. 05883

Gold*Abundance*

Jasperoid, ore-related, United States, western: Lovering, T. G. 00773

Manganese nodules: Harriss, Robert C. 04893

Meteorites, Earth's crust: Jones, Robert S. 04502

Oceans: Rosenbaum, J. B. 06855

Alaska

East-central, Livengood district, geochemical survey: Foster, R. L. 02818

Gulf of Alaska, eastern, exploration: Valencia, Shirley M. 04586

Slana area, geochemical prospecting: Richter, Donald H. 04058

Analysis

Activation, fire-assay preconcentration: Simon, F. O. 10930

Atomic absorption, geologic materials: Thompson, C. E. 00780

Fire assay, ion exchange, spectroscopy, combined technique: Barnett, Paul R. 02686

Fluorescence, rhodamine B: Marinenko, John. 10929

Mercurous chloride: Jenne, E. A. 09410

Neutron activation with fire-assay separation: Rowe, J. J. 03997

Appalachians

Resources, review: Bergendahl, M. H. 01379

Southeastern, occurrence: Rife, David L. 08114

Arizona

Yavapai County, Iron King mine, occurrence, genesis: Gilmour, Paul. 05429

British Columbia

Bralorne mine, reserves estimation, grade control: Weeks, J. P. 05324

California

Continental shelf, off Klamath Mts., possibilities: Moore, George W. 06330

Nevada County, Tertiary channel, occurrence, possibilities: Peterson, Donald W. 01420

Wilbur Springs, genesis: Joralemon, Peter. 04240

Gold—Continued*Colorado*

Empire district, exploration, geochemical: Curtin, Gary C. 01143

Leadville district, occurrence, genesis: Tweto, Ogden. 05387

San Juan Mountains, geochemical prospecting: Fischer, R. P. 02812

Exploration

Geochemical, natural waters, adsorption on sample containers: Chao, T. T. 05172

Genesis

Placers: Tuck, Ralph. 01899

Placers, flood scour: Gunn, Christopher B. 00479

Placers, flood scour: Krook, Leendert. 06980

Geochemistry

Hydrothermal transport: Helgeson, Harold C. 04125

Meteorites, kimberlite and xenoliths, distribution: Ehmann, William D. 08043

Meteorites, nodules, phlogopite, concentrations: Linn, T. A., Jr. 09424

Soils, silt fraction, neutron activation: Yas-soglou, N. J. 04819

Idaho

Big Creek district, occurrence in tungsten deposit: Leonard, B. F. 00525

Silver City area, history, occurrence, possibilities: Asher, R. R. 03164

Manitoba

Watt Lake area, possibilities: Cranstone, Donald A. 07865

Mexico

Fresnillo, exploration: Villasenor, Luis. 04133

Pachuca-Real del Monte district, exploration: Geyne, Arturo R. 04882

Tayoltita, occurrence: Randall, John A. 04197

Nevada

Carlin area, occurrence, genesis: Hausen, Donald M. 05484

Cortez prospect, occurrence: Wells, John D. 00839

Lander County, Copper Canyon, occurrence: Sayers, R. W. 09461

Lander County, exploration: Wrucke, Chester T. 00838

Nellis Air Force range, occurrence: Ekren, E. B. 06822

Tuscarora area, Independence Valley, possibilities: Coats, R. R. 00782

New Mexico

Red River district, occurrence: Clark, K. F. 04226

North Carolina

Slate Belt, genesis: Worthington, J. E. 06863

Northwest Territories

Giant Yellowknife mine, reserve estimation, grade control: Dadson, A. S. 05322

Ontario

Heyson township, Red Lake area, occurrence: Ferguson, S. A. 01048

Hollinger mine, reserve estimation, grade control: Butler, F. C. 05320

Kirkland Lake area, Macassa mines: Ward, W. G. 11067

Kirkland Lake area, Upper Canada mine: Bragg, J. G. 10149

Kirkland Lake-Larder Lake mining area, occurrence: Lovell, Howard. 10147

McGarry Township, Kerr Addison mines: Abel, M. K. 10151

Gold—Continued.*Ontario—Continued*

- McIntyre mine, reserve estimation, grade control: Parfitt, P. O. 05319
- Porcupine area, Hollinger mine: Michie, Harry. 10154
- Porcupine area, McIntyre mine: Carter, O. F. 10155
- Porcupine district, Coniaurum mine area, occurrence: Carter, O. F. 01819
- Porcupine district, Dome mine, occurrence: Holmes, T. C. 01767
- Porcupine district, Hollinger mine, occurrence: Jones, W. A. 01779
- Porcupine district, McIntyre mine, occurrence: Griffith, A. T. 01768
- Porcupine district, Moneta mine area, occurrence: Buffam, B. S. W. 01789
- Porcupine district, Pamour mine, reserve estimation: Paransevicus, J. 05321
- Porcupine district, Paymaster mine, occurrence: Longley, C. S. 01790
- Porcupine district, Preston East Dome mine, occurrence: Lane, H. C. 01874
- Timmins area, Aunor mines: Abel, M. K. 10157
- Timmins district, Dome mine: Holmes, T. C. 10153
- Tisdale township, occurrence: Ferguson, Stewart A. 01820
- Whitney Township, Pamour Porcupine mines: Parans, John. 10156

Oregon

- Continental shelf, off southern, possibilities: Clifton, H. Edward. 01720
- Review: Brooks, Howard C. 07628

Properties

- Fineness, reflectometric determination: Eales, Hugh V. 04120

Quebec

- Abitibi County, Sigma mines: Hoyles, N. J. S. 10134
- Chibougamau area, Campbell mines, reserve estimation, occurrence: Krause, C. A. 05325
- East Malartic mine, grade control, occurrence: Rancourt, C. 11345
- Lamaque and Sigma mines, Au:Ag ratios: Fitzgerald, A. C. 11413
- Louvicourt Township, occurrence: Sharpe, John I. 07858
- Malartic area, Camflo mines: Meikle, B. K. 10138
- Malartic area, East Malartic mines: Rancourt, C. 10137
- Noranda area: Spence, C. D. 10140
- Noranda area, occurrence: Sharpe, John I. 10145
- Val d'Or-Bourlamaque area, Lamaque mine: Graham, R. J. 10135

Reserves

- Estimation, valuation surfaces, weighted moving average technique: Krige, D. G. 05225

Resources

- World status, review: Kavanagh, Paul M. 07889

Saskatchewan

- Anglo-Rouyn deposit, reserve calculation: Skopos, M. J. 05318

South Dakota

- Black Hills, Berne quadrangle, occurrence: Redden, Jack A. 01701
- Homestake mine, Black Hills: Slaughter, A. L. 05352
- Homestake mine, genesis: Slaughter, A. L. 05902

Gold—Continued*South Dakota—Continued*

- Trojan area, Bald Mtn. mine tailings, analysis: Fredlund, Daniel A. 11281

United States

- Districts, production, occurrence: Koschmann, A. H. 05160
- Southeastern, enrichment, migration: Kinkel, Arthur R., Jr. 05190

Utah

- Tintic district, occurrence, genesis: Shepard, W. M. 05485

Washington

- Republic area, Knob Hill mine, electron-probe study: Taylor, Charles Mosser. 05501
- Republic mining district, occurrence, genesis: Full, Roy P. 05355

Wyoming

- Centennial Ridge district, occurrence: McCallum, M. E. 07982
- New Rambler district, occurrence: McCallum, M. E. 07983

Yukon

- Resources, lode mining potential: Green, L. H. 08056

Graphite*Alabama*

- Resources, review: Weis, Paul L. 01368

Appalachians

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Greenland

- Graenseland area, Precambrian, biological origin: Pedersen, K. Raunsgaard. 09448

Graptolithina*Devonian*

- Canada, northwestern, mainland, faunal zoning: Lenz, A. C. 02832
- Nevada, faunal zones: Berry, W. B. N. 02830
- North America, Cordilleran geosyncline, succession, cf. Europe: Berry, William B. N. 02875

Evolution

- Devonian, stratigraphic, paleogeographic significance: Boucek, Bedrich. 02969

Isograptus manubriatus

- Ordovician, Texas, Fort Pena Formation, Marathon area: Bulman, O. M. B. 02258

Monograptus hercynicus

- Devonian, Nevada, occurrences: Berry, William B. N. 02875

Monograptus uniformis

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Morphology

- Tubeidea, *Reticulograptus*, internal structure: Whittington, H. B. 00495

Ordovician

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Quebec

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Reticulograptus tuberosus sinclairi, n.subsp.

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Silurian

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Taxonomy

- Gerontic implications: Braithwaite, L. F. 08620

Gravel*Appalachians*

Resources, review: Maxwell, Charles H. 01387

British Columbia

Strait of Georgia area, occurrence: Leaming, S. F. 06020

California

Southern counties, occurrence, production: Goldman, Harold B. 06721

Urban areas, excavation, control: Young, Eleanor. 04247

Colorado

Corral Bluffs quadrangle, occurrence: Soister, Paul E. 04411

Elk Springs quadrangle, occurrence: Dyni, John R. 01432

Hanover NW quadrangle, occurrence: Soister, Paul E. 01425

Exploration

Electrical methods, Manitoba, southeastern: Wyder, J. E. 00986

Illinois

Northeastern, resources: Major, Robert L. 01627

Saint Elmo area, occurrence: Illinois State Geological Survey. 05857

Indiana

Big Blue River reservoir site, resources: Renick, Abbott. 06096

Big Walnut Reservoir site: Heising, Leonard F. 06095

Kentucky

Calloway County, resources: McGrain, Preston. 07398

Calvert City quadrangle, occurrence: Amos, Dewey H. 02948

Hardin quadrangle, occurrence: Scott, Glenn R. 04159

Johnson Hollow quadrangle, occurrence: Klemic, Harry. 00456

Lovellaceville quadrangle, occurrence, analysis: Finch, Warren I. 05751

Oak Level quadrangle, occurrence: Olive, Wilds W. 04204

Massachusetts

Heath quadrangle, resources: Hatch, Norman L., Jr. 02949

Minnesota

Minneapolis quadrangle, occurrence, genesis: Hogberg, R. K. 07444

Tennessee

Counce quadrangle, occurrence: Russell, Ernest E. 03577

Cumberland City quadrangle, Tuscaloosa Gravel: Wilson, Charles W., Jr. 03073

Dibrell quadrangle, occurrence: Wilson, Charles W., Jr. 05543

Ellis Mills quadrangle: Wilson, Charles W., Jr. 03575

Hebron quadrangle, occurrence: Sykes, C. Ronald. 03785

Hustburg quadrangle, occurrence: Larson, Lawrence T. 03608

Jeannette quadrangle, occurrence: Wilson, Charles W., Jr. 03690

Liberty quadrangle, occurrence: Wilson, Charles W., Jr. 03696

Masseyville quadrangle, sand, occurrence: Sykes, C. Ronald. 07604

Perryville quadrangle, occurrence: Wilson, Charles W., Jr. 03689

Gravel—Continued*Tennessee—Continued*

Poplar Creek quadrangle, occurrence: Wilson, Charles W., Jr. 03606

Readyville quadrangle, occurrence: Wilson, Charles W., Jr. 03074

Short Mountain quadrangle, occurrence: Wilson, Charles W., Jr. 07609

Sligo Bridge quadrangle, occurrence: Wilson, Charles W., Jr. 05537

Smithville quadrangle, occurrence: Wilson, Charles W., Jr. 05542

Sugar Tree quadrangle, occurrence: Wilson, Charles W., Jr. 03607

Woodbury quadrangle, occurrence: Wilson, Charles W., Jr. 05535

Texas

Southern, central, northern, occurrence: Stanley, Roy. 09017

United States

Northeastern, continental shelf, possibilities: Schlee, John. 05155

West Virginia

Occurrence, properties: Arkle, Thomas, Jr. 08903

Gravity field, Earth*General*

Correlation of anomalies with tectonics: Kaula, William M. 10193

Observations

United States, midcontinent: Pan, Cheh. 10391

Gravity methods*Applications*

Intrusive bodies, shape, use of anomalies: Bonini, W. E. 06830

Mid-oceanic ridge system, anomalies along crest: Talwani, Manik. 07997

Petroleum exploration, reef structures, effectiveness: Haye, Edward F. 02573

Instruments

Borehole gravity meter: Hamilton, George V. 08360

Gravimeter, superconducting: Prothero, W. A., Jr. 09240

Gravimeters, calibration standardization, U.S. Geological Survey: Barnes, D. F. 10366

Gravimeters, La Coste, Romberg, noise performances, correlation: Larson, Jerome Valjean. 06565

Vibrating string gravimeter: Bowin, Carl. 08361

Interpretation

Anomalies, correlation with paleopole positions: Hulley, J. C. L. 04697

Anomalies, two-dimensional faults, Fourier transforms: Sharma, Bijon. 02013

Geocentric reference system, parameters: Dimitrijevic, Vojislav. 10404

Geologic, geophysical parameters: Strange, W. E. 09824

Polynomial analysis, criticism: Steenland, Nelson C. 05860

Techniques

Absolute base system, gravity values: Whalen, Charles T. 08366

Computation of mean anomalies: Uotila, Urho A. 08367

Deflection computations, oceanic areas: Vincent, S. 10401

Gravity surveys*Alabama*

Monroe County: MacElvain, Robert C. 07694

Alberta

Southern, crust, upper mantle: Kanasewich, E. R. 05063

Gravity surveys—Continued

Arctic Ocean

Alpha and Nansen Cordillera, sea-floor spreading: Vogt, Peter Richard. 07160

Chukchi Sea, bottom structures: Ostenso, Ned A. 00466

Drifting station, ARLIS II, observations, 1961-62: Ostenso, N. A. 09881

Greenland Sea, subbottom profiles: Ostenso, N. A. 00544

Arizona

Tombstone area, Walnut Gulch watershed: Spangler, Daniel P. 05746

Atlantic Ocean

Straits of Florida: Ball, M. M. 08442

Bering Sea

Floor, interpretation, mosaic structure: Gaynanov, A. G. 03810

California

Alturas sheet: Chapman, Rodger H. 03717

Placerville to Lake Tahoe region: Loomis, Alden A. 10018

San Andreas fault, central, reconnaissance: Hanna, William F. 04031

San Francisco sheet: Chapman, Rodger H. 03716

San Jose area, Calaveras, Hayward, Silver Creek faults: Robbins, Stephen L. 04032

Santa Lucia Range, serpentine bodies: Grannell, Roswitha B. 09998

Slate Range: Smith, George I. 08907

The Geysers area: Chapman, Rodger H. 09975

Canada

Crustal studies, Hudson's Bay area: Weber, J. R. 05476

Colorado

North Park area: Behrendt, John C. 10206

Illinois-Indiana-Kentucky

Illinois basin: Dawson, Woodson H. 07960

Iowa

Washington, Keokuk Counties, Keota dome: Hase, D. H. 01994

Kansas

Eastern: Ball, M. M. 08362

Kentucky

Jeptha Knob, meteorite crater: Seeger, C. Ronald. 04500

Lake Superior region

Wisconsin area: Wold, Richard J. 11376

Louisiana

Ship Shoal shale mass, detection: Musgrave, A. W. 03357

Maine

Interpretation: Kane, M. F. 07258

Manitoba

Churchill-Superior boundary area, anomalies: Gibb, R. A. 02241

Northern, anomalies, relation to rock densities: Gibb, R. A. 02240

Maryland

Baltimore County, structural, lithologic interpretation: Bromery, Randolph W. 09755

Baltimore-Washington anticlinorium, northeast end: Bromery, Randolph Wilson. 05514

Massachusetts

Cape Cod, Harwich-Dennis area: Cabaniss, Gerry H. 09756

Connecticut River valley, preglacial course: Foose, Richard M. 03853

Mexico

Baja California: Phillips, Richard P. 08364

Baja California, base stations: Phillips, Richard P. 08365

Gravity surveys—Continued

Mexico—Continued

Upper Mantle Project, 1966-67: Maldonado-Koerdell, M. 09022

Minnesota

Duluth complex region: Ikola, R. J. 06875

Missouri

Bowling Green area to Memphis, Tenn.: Phelan, Michael. 08363

Ozark uplift, eastern flank: Phelan, Michael. 10115

Montana

Crazy Mountain stock complex: Kelley, William N., Jr. 07910

Deer Lodge Valley, maps: Cremer, E. A., 3d. 04467

Disturbed Belt, northern: Kleinkopf, M. D. 10238

Lewis and Clark Range, southeastern: Mudge, Melville R. 04110

Western, central, structure: Smith, Robert Baer. 00865

Nevada

Nevada Test Site and vicinity: Healey, D. L. 10954

Ruby Mountains: Gibbs, J. F. 00793

Sheep Creek Range, western: Gott, Garland B. 03996

Tonopah area: Erwin, John W. 06068

New England

Northwestern, anomalies: Diment, W. H. 07257

New Mexico

Socorro County, central: Sanford, Allan R. 01622

New York

Eastern, anomalies: Diment, W. H. 07257

North Carolina

Brevard zone, interpretation: Cooley, Tillman. 06004

Oklahoma

Anadarko basin, structural interpretations: Scott, R. L. 00947

Ontario

Northeastern, selected magnetic anomalies: Gaucher, E. G. 01654

Oregon

Cascade Range, Crater Lake region: Blank, H. Richard, Jr. 07747

Regional: Berg, Joseph W., Jr. 08236

Regional: Thiruvathukal, John Varkey. 03035

Pacific Ocean

Chautauqua seamount, Hawaiian Ridge area: Schimke, Gerald R. 00090

Quebec

Manicouagan-Wabush area, anomaly interpretation: Grant, F. S. 02738

Montreal area, two-dimensional faults, anomalies: Sharma, Bijon. 02013

Saskatchewan

Churchill-Superior boundary area, anomalies: Gibb, R. A. 02241

Flin Flon area, greenstone belt: Gendzwil, D. 07818

Kisbey area: Soukoreff, W. W. 05442

Tennessee

Memphis area to Bowling Green, Mo.: Phelan, Michael. 08363

Texas

Anadarko basin, structural interpretations: Scott, R. L. 00947

Central, southeastern, basement rock, crustal structure: Case, J. E. 09339

Gravity surveys—Continued*United States*

Idaho-Oregon-Tufts Abyssal Plain, subcrustal structure: Dehlinger, P. 03623

Midcontinent gravity high, interpretation method: Steenland, Nelson C. 05860

Selected areas, geologic, geophysical parameters: Strange, W. E. 09824

Utah

Iron Springs district, Hurricane fault area: Cook, Kenneth L. 08583

Wyoming

Gravity field, effect of structure: Malahoff, Alexander. 11320

Great Lakes region*Areal geology*

Lake Michigan, subsurface, topography, bedrock, sediments: Somers, Lee H. 07086

Economic geology

Diamonds, drift, kimberlite source, exploration: Gunn, Christopher B. 11150

General

Geological exploration, manned submersible, Lake Michigan: Somers, Lee H. 07095

Geochemistry

Lake Erie, hydroxy-apatite saturation vs. plankton: Snow, Phillip D. 07008

Lake Erie, sediments, ferrous iron analysis: Ross, Curtis. 07093

Lake Erie, water, chemical composition: Weiler, R. R. 07094

Lakes Erie, Ontario, sediments, chlorophyll degradation products: Kemp, A. L. W. 07089

Lakes Erie, Ontario, water analysis, methods: Chawla, V. K. 07092

Mineral-water equilibrium, aluminosilicates: Sutherland, Jeffrey Clark. 07203

Geophysical surveys

Great Lakes, lower, shorelines, infrared: Slaney, V. R. 10934

Lake Erie, seismic reflection: Wall, Robert E. 00543

Lake Ontario, Niagara area, sediments, transit sonar: Donato, R. J. 07087

Lake Superior, acoustic experiment, wave velocity: Browning, David G. 04468

Glacial geology

Continental ice sheet, advances, control by cyclone paths: Andrews, J. T. 07174

Continental ice sheet, advances, control by cyclone paths: Malkin, N. R. 07307

Hydrogeology

Great Lakes, water supply, simulation study for statistical evaluation: Megerian, Edmond. 00146

Mineralogy

Diamonds, drift occurrences, catalog: Gunn, Christopher B. 08108

Manganese nodules, Lake Michigan: Rossmann, Ronald. 04875

Paleoclimatology

Quaternary, air circulation patterns, postglacial: Stuiver, Minze. 04062

Paleontology

Diatoms, Quaternary, Lake Huron, core assemblage: Stoermer, E. F. 07085

Petrology

Huronian rocks, metamorphism: Church, William R. 07819

Sedimentary petrology

Lake Michigan, southwestern, bottom sediments: Somers, Lee H. 07091

Great Lakes region—Continued*Structural geology*

Penokean and Hudsonian orogenies, Grenville Front age: Church, William R. 07819

Weathering

Aluminosilicate stabilities: Sutherland, Jeffrey Clark. 07203

Greenland*Absolute age*

C-14, Copenhagen laboratory list: Tauber, Henrik. 03040

Gardar intrusion: Gerasimovskiy, V. I. 07328

Inglefield Land, carbon-14: Nichols, Robert L. 09809

Ivigtut area, pre-Ketilidian basement, reactivation, K-Ar dates: Jorgensen, Ole. 01859

Umanak district, shells, C-14, summary: Rosenkrantz, Alfred. 05112

West Greenland, Precambrian basement: Larsen, Ole. 09419

Western, K-Ar, general listing: Larsen, Ole. 01858

Western, Precambrian rocks: Pulvertaft, T. C. R. 09454

Areal geology

Ivigtut region, Graenseland area: Pedersen, K. Raunsgaard. 09448

Ubekendt Eiland, projects, Saint Andrews University, Scotland: Drever, H. I. 03113

Economic geology

Beryllium, Ilmaussaq intrusion, exploration: Lovborg, Leif. 01860

Copper, iron, southern, Lilianmine area: Ghisler, Martin. 07700

Mineral resources, cooperative exploration program: Ellitsgaard-Rasmussen, K. 01639

Niobium, Ilmaussaq alkaline complex: Hansen, John. 09393

Uranium-thorium, Ilmaussaq intrusion, exploration: Lovborg, Leif. 01860

Zirconium, South, occurrence, eudialyte: Sorensen, Henning. 07382

General

Current research, icecap and glaciers, reconnaissance, airphotos: Bauer, A. 05289

Field projects, Saint Andrews University, Scotland: Drever, H. I. 03113

Mineral exploration program, private vs. government: Ellitsgaard-Rasmussen, K. 01639

Geochemistry

Fluid inclusions, in chkalovite and Ilmaussaq massif, temperatures: Banskchikova, I. V. 03711

Ice cap, ionic concentrations: Langway, Chester C., Jr. 07927

Ice core, oxygen isotopes, ratios, microparticle correlation: Hamilton, W. L. 00321

Ice, nickel isotopes: Fireman, Edward L. 08498

Ivigtut region, Graenseland area, Ketilidian coal-graphite layer: Pedersen, K. Raunsgaard. 09448

Mesters-Vig lead-zinc district, geochemical prospecting: Lehnert-Thiel, Klaus. 01824

Skaergaard intrusion, rare earths: Haskin, Larry A. 01977

Southwestern, Precambrian rocks, organic compounds: Lam, Jorgen. 09418

Geomorphology

Inglefield Land: Nichols, Robert L. 09809

Landform description and permafrost features: Hansen, Kaj. 05113

Northwestern, research summary: Malaurie, Jean. 11090

Greenland—Continued

Geophysical surveys

- Central icecap, upper layers, physical properties, seismic: Brockamp, B. 01690
 Magnetotelluric, effect of external sources on anomaly: Wilhelm, J. 05133
 North-central, icecap, radar sounding: Walker, J. W. 04284

Glacial geology

- Bay Ege, moraines, lagoon formation: Hansen, Kaj. 07908
 Camp Century, ice sheet, borehole temperature profiles: Weertman, J. 11440
 Central icecap, upper layers, properties, thickness: Brockamp, B. 01690
 Ege region, glaciers, movement, variations of front: Bauer, A. 01684
 Holsteinsborg area, moraines: Weidick, Anker. 02067
 Ice cap, stratigraphic properties: Langway, Chester C., Jr. 09797
 Ice, electrolytic conductivity: Gow, Anthony J. 11289
 Ice sheet, bottom flow, computation from surface profile: Lliboutry, L. 05736
 Icecap and glaciers, reconnaissance, airphotos: Bauer, A. 05289
 North-central, icecap thickness, radar measurements: Walker, J. W. 04284
 Qaumarujuk Glacier, retreat, 1930-67: Loewe, Fritz. 03101
 Sea-level changes, glacioeustatic, Pliocene: Mercer, John H. 04057
 Sermlilik Fjord area, Frederikshab district, glacial features: Misar, Zdenek. 06346
 Southern fjord areas, expeditions, St. Andrews University, Scotland: Drever, H. I. 03113
 Thule Peninsula, snow accumulation studies: Mock, Steven J. 00945
 Tuto ice tunnel, polycrystalline ice, P-waves, velocity distribution: Ruter, H. 01693
 Western, glacier fluctuation: Weidick, Anker. 05022
 Western, glaciers, solid discharge, effect on icecap: Bauer, A. 05306
 Western, glaciers, velocity, airphoto study: Carbone, M. 05305
 Western, icecap ablation zone, movement and variation in altitude: Bauer, A. 04699
 Western, periglacial phenomena, permafrost limits: Olesen, Ole B. 02068

Maps, geologic

- Ilordleq area: Watterson, Juan. 01862
 Ilerdlak area: Higgins, A. K. 09072
 Northwestern, surficial: Malaurie, Jean. 11090
 Nuna qaertoq: Higgins, A. K. 09072
 Skaergaard intrusion: Wager, L. R. 00366
 Southern, Lilianmine area, western: Ghisler, Martin. 07700
 Vesterland and adjacent islands: Watterson, Juan. 07646

Mineralogy

- Bytownite, Cape Parry: Wenk, E. 07554
 Eudialyte, South, nepheline syenites: Sorensen, Henning. 07382
 Ilimaussaq, Ilimaussaq area, new silicate: Semenov, E. I. 09858
 Magnetite, ice sheet, magnetic spherules: El-Goresy, Ahmed. 02272
 Naujakasite, Ilimaussaq intrusion: Petersen, Ole V. 07289
 Olivine, Igaliko nepheline-syenite complex: Emeleus, C. H. 00470

Greenland—Continued

Mineralogy—Continued

- Pyrochlore, Ilimaussaq alkaline intrusion: Semenov, E. I. 09857
 Rare earth minerals, Ilimaussaq area, veins, radioactivity: Hansen, John. 05024

Paleontology

- Angiosperms, Cretaceous, Kome Formation, Nugssuaq Peninsula: Pedersen, K. Raunsgaard. 02064
 Cephalopoda, Cretaceous, western, ammonites, morphology: Birkelund, T. 10947
 Fauna, Permian-Triassic, Cape Stosch area: Birkelund, Tove. 01857
 Fossils, problematic, Precambrian, Ketilidian fold belt: Pedersen, K. Raunsgaard. 01864
 Palynology, Quaternary, shell beds, Umanak district: Rosenkrantz, Alfred. 05112
 Palynomorphs, Mesozoic, Rhaetic-Liassic, catalog: Traverse, A. 01651

Petrology

- Agto area, metamorphic complexes: Bondesen, E. 02065
 Agto area, pseudotachylite: Jensen, Vagn. 02066
 Ammagssalik area, Precambrian rocks: Bridgwater, D. 02242
 Frederikshaab area: Jensen, Stig Bak. 01867
 Frederikshaab area, calc-silicate lenses, zoned: Sorensen, P. Brogger. 01869
 Frederikshaabs Isblink area, dikes, metamorphosed mafic: Dawes, Peter R. 01866
 Godthaab area, Precambrian, history: McGregor, V. R. 01865
 Ilimaussaq Peninsula, northern, microsyenitic dikes: Scharbert, Heinz G. 05667
 Ilordleq area, basic dikes, amphibolite facies assemblages: Watterson, Juan. 01862
 Ivigtut area, pre-Ketilidian basement: Jorgensen, Ole. 01859
 Kap Farvel area, metamorphic complex: Sutton, J. 01861
 Kialineq area, igneous rocks, intrusive: Brown, P. E. 06952
 Kungnat, alkaline igneous complex, melting relations: McDowell, S. Douglas. 08799
 Nigerdlikasik area, deformation and migmatization, phases: Andrews, J. R. 01868
 Qaersuarsuk, Precambrian Gardar dikes: Watt, W. Stuart. 03139
 Scoresby Sund area, basalts, differentiation trends, chemistry: Fawcett, J. J. 03586
 Scoresby Sund fjord complex: Henriksen, Niels. 01856
 Skaergaard intrusion, hedenbergite-wollastonite solid solution inversion: Lindsley, D. H. 01539
 Skaergaard intrusion, layering, crystal fractionation: Wager, L. R. 00366
 Skaergaard intrusion, layering mechanism: Wager, L. R. 04643
 Southern, dikes, multiple injection of gabbroic magma: Bridgwater, D. 04883
 Southern, Gardar alkali intrusives, xenoliths, megacrysts: Bridgwater, D. 05025
 Southern, Gardar intrusions, xenoliths, megacrysts: Bridgwater, D. 05026
 Southern, Ilimaussaq alkaline intrusion, paragenetic analysis: Sorensen, H. 02959
 Southern, Lilianmine area: Ghisler, Martin. 07700
 Southwestern, Precambrian, lower, three-fold chronology: Windley, B. F. 02069

Greenland—Continued*Petrology—Continued*

- Svartenhuk Peninsula, basalts, Tertiary, cf. Baf-fin Island, differentiation: Clarke, D. B. 02063
- Tasiussaq area, Precambrian, basic intrusions, metamorphism: Dawes, Peter R. 01660
- Upernavik-Kraulshavn area, granite and gneisses: Escher, A. 02062
- Vesterland, gneiss, petrofabrics: Watterson, Juan. 07646
- Western, layered gabbro, structural features, crystallization: Thompson, R. N. 06709

Sedimentary petrology

- Ice sheet, dust particles, size-distribution change: Hamilton, Wayne L. 10953

Stratigraphy

- Devonian, Old Red Sandstone and equivalents: Allen, J. R. L. 03187
- Precambrian: Berthelsen, A. 04466
- Precambrian, Frederikshaab area, correlation: Jensen, Stig Bak. 01867
- Precambrian, Tartog Group, Nuna qaqortoq and Ilerdlaq area: Higgins, A. K. 09072
- Precambrian, western: Pulvertaft, T. C. R. 09454

Structural geology

- Agto area: Bondesen, E. 02065
- Agto area, movement zones, major, pseudotachylite formation: Jensen, Vagn. 02066
- Amgmagssalik area: Bridgwater, D. 02242
- Folds, axial plane schistosity: Higgins, A. K. 09072
- Glacial crustal bending: McGinnis, Lyle D. 01906
- Holsteinsborg area, postglacial uplift, absolute age: Weidick, Anker. 02067
- Kap Farvel area, dome, flat-lying metamorphic complex: Sutton, J. 01861
- Nigerdlikasik area, deformation, chronology: Andrews, J. R. 01868
- Precambrian rocks: Berthelsen, A. 04466
- Vesterland, gneisses, deformation, folding phases: Watterson, Juan. 07646

Weathering

- Inglefield Land, frost cracking, rock types: Malaurie, Jean. 07856

Ground water*Alabama*

- Exploration, Heflin area, electrical surveys: Joiner, T. J. 02745
- Exploration, Heflin area, electrical surveys: Zohdy, Adel A. R. 02744
- Exploration, Heflin area, seismic, electrical surveys: Joiner, T. J. 00040
- Quality, data, by counties: Avrett, James R. 01811
- Resources, Barbour County: Newton, J. G. 07269
- Resources, Coffee County: Turner, J. D. 07141
- Resources, Conecuh County: Reed, P. C. 07071
- Resources, Covington County: Turner, J. D. 09477
- Resources, Crenshaw County: McWilliams, R. G. 07074
- Resources, Dale County: Newton, J. G. 07073
- Resources, Henry County: Newton, J. G. 09441
- Resources, Pike County: Shamburger, V. M., Jr. 07070

Alaska

- Earthquake effects, March 1964, Anchorage area: Waller, Roger M. 07038
- Earthquake effects, south-central, March 1964: Waller, Roger M. 06489

Ground water—Continued*Alaska—Continued*

- Resources, quality, Homer area: Waller, Roger M. 09483

Alberta

- Levels, observation wells, effects of Alaskan earthquake: Gabert, Gordon M. 06469
- Model studies, Stettler area: Dunn, Darrel Eugene. 02629
- Movement, southwestern, Marmot Creek basin, fluctuations: Stevenson, D. R. 05548
- Resources, aquifers, surficial, Edson area: Gabert, G. M. 06331
- Resources, water-well data, west-central, townships 11-25: Geiger, K. W. 11284

Appalachians

- Resources: Wyrick, Granville G. 03683

Arizona

- Depletion, central, electric-analog analysis: Anderson, T. W. 03679
- Geochemistry, Tucson basin: Laney, R. L. 04653
- Levels, resources, 1966-67: Cox, C. J. 03144
- Levels, vegetation effects, Cottonwood Wash: Bowie, James E. 00608
- Movement, Colorado River, Lees Ferry to Lake Mead: Johnson, P. W. 00915
- Movement, resources, Sycamore Creek watershed: Thomsen, B. W. 07338
- Recharge, Tucson area, influent seepage: Wilson, L. G. 11375
- Resources, Coconino County, basic data: McGavock, E. H. 00566
- Resources, Hopi Indian Reservation, new: Whitsell, W. J. 09046
- Resources, investigations, Tucson basin: Davidson, E. S. 04652
- Resources, levels, quality, Waterman Wash area: Denis, E. E. 03141
- Resources, Paradise Valley, Maricopa County: Arteaga, F. E. 01879
- Resources, Sonoran Desert: Dunbier, Roger. 09496

Arkansas

- Levels, 1965, Quaternary and Tertiary deposits: Albin, Donald R. 11181
- Resources, Grant and Hot Spring Counties: Halberg, H. N. 04806

Atlantic Coastal Plain

- Composition, distribution: Manheim, F. T. 05436

British Columbia

- Levels, to Dec. 1967: British Columbia Water Res. Service. 07656
- Movement, Okanagan Highland, U-shaped valley, flow systems: Lawson, D. W. 02739

California

- Composition, levels, central coastal area, 1966: California Dept. Water Resources. 02935
- Composition, southern, mineral and trace-element analyses: California Dept. Water Resources. 02937
- Exploration, Santa Clara County, induced polarization: Bodmer, Rene. 11260
- Levels, changes, Los Banos-Kettleman City area: Bull, William B. 07772
- Levels, composition, coastal area, northern: California Dept. Water Resources. 01154
- Levels, Pixley area, aquifer compaction: Riley, F. S. 08085
- Levels, quality, coastal area, northern: California Dept. Water Resources. 06179
- Levels, recharge, southern, 1966 data: California Dept. Water Resources. 02936

Ground water—Continued

California—Continued

- Levels, San Joaquin Valley: California Dept. Water Resources. 04803
- Levels, San Joaquin Valley, changes, relation to subsidence: Lofgren, Ben E. 00733
- Quality, nitrate distributions, Fresno area: Behnke, Jerold J. 09041
- Recharge, southern, artificial, salt-water barrier projects: Kazmann, Raphael G. 00039
- Resources, Fresno County, Pleasant Valley: Prokopovich, Nikola P. 09040
- Resources, Santa Barbara-Montecito area: Muir, K. S. 01695
- Resources, South Bay, Fremont study area, evaluation: California Dept. Water Resources. 09029
- Salt-water intrusion, Los Angeles County, preventive measures: Bruntington, Arthur E. 09537
- Wells and springs, Borrego, Carrizo, San Felipe Valley areas: Moyle, R. W., Jr. 11016

Canada

- Levels, fluctuation, measurement in clay shales, transducer piezometer: Brooker, E. W. 06063
- Levels, Interior Plains, digital recording methods: Gilliland, J. A. 01940
- Network: Brown, I. C. 05493
- Resources, development: Meyboom, P. 10967

Colorado

- Basic data, northwestern, Piceance Creek basin: Coffin, D. L. 02086
- Nitrate pollution, South Platte River valley: Stewart, B. A. 00569
- Resources, Bijou Valley: Code, W. E. 09497
- Resources, Hanover NW quadrangle: Soister, Paul E. 01425

Composition

- Chemical properties, quality of resources, pollution problems: Renn, Charles E. 09004

Connecticut

- Composition, levels, southeastern, well and spring data: Cervione, Michael A., Jr. 02430
- Movement, Storrs area, Fenton River valley, induced infiltration: Rahn, Perry H. 01683
- Resources, Hamden-Wallingford area: LaSala, A. M., Jr. 00935
- Resources, New London area: Thomas, Chester E., Jr. 07642
- Resources, southwestern: Wilson, W. E. 05944

Delaware

- Resources, Kent County: Sundstrom, R. W. 09002

Deserts

- Research, appraisal: Simpson, Eugene S. 08100

Dominican Republic

- Resources, Yaque del Sur basin, photogeologic reconnaissance: Redonnet, J. 08911

El Salvador

- Development, Rio Grande de San Miguel basin: Patchick, Paul F. 04313

Florida

- Basic data, Charlotte, De Soto, Hardee Counties: Kaufman, M. I. 01488
- Basic data, Econfinia Creek basin: Musgrove, R. H. 07299
- Geochemistry, isotope dilution, uranium disequilibrium: Osmond, J. K. 04077
- Levels, 1963-64: Healy, Henry G. 01877
- Resources, boulder zone: Vernon, R. O. 06859
- Resources, Broward County: McCoy, H. J. 07386
- Resources, northeastern, Floridan aquifer: Leve, G. W. 00620

Ground water—Continued

Florida—Continued

- Resources, Orange County: Lichtler, W. F. 01872
- Resources, quality, Baker County: Leve, Gilbert W. 03758
- Resources, quality, salt-water intrusion, Broward County: Grantham, Rodney G. 03647
- Salt-water intrusion, Miami area, Biscayne aquifer: Park, F. D. R. 09533
- Salt-water intrusion, southeastern: Grafton, Robert. 09532
- Salt-water intrusion, tritium as tracer, Miami: Kohout, F. A. 08416

Georgia

- Levels, Coastal Plain aquifer, 1880-1966: Carver, Robert E. 02525

Gulf Coastal Plain

- Composition, aquifer characteristics, Sparta Sand: Payne, J. N. 02081

Hawaii

- Levels, 1961-65: U.S. Geological Survey. 04470
- Resources, Hilo-Puna area: Davis, Dan A. 02905
- Resources, Kona area: Davis, Dan A. 03142
- Resources, Maui, geophysical studies: Adams, W. M. 07860

Idaho

- Development, 1967: Ralston, Dale R. 08898
- Levels, 1968: Whitehead, R. L. 02566
- Recharge, artificial, Moscow basin: Jones, R. W. 04853
- Resources, problems, Pullman-Moscow basin: Crosby, James W., 3d. 04325

Illinois

- Contamination, northeastern, geophysical surveys: Cartwright, Keros. 04269
- Levels and pumpage, 1962-66, East St. Louis area: Reitz, G. E., Jr. 09523
- Levels and pumpage, 1962-66, northeastern: Sasman, R. T. 10913
- Movement, northeastern, closed basins: Williams, Roy E. 09737
- Movement, northeastern, closed basins in till: Williams, Roy E. 03155
- Resources, Little Wabash Basin: Watkins, Frank A., Jr. 06088
- Resources, quality, Shelby County: Sanderson, E. W. 09522
- Resources, Rock Island, Monmouth, Galesburg, Kewanee area: Brueckmann, J. E. 00600
- Resources, Skillet Fork Basin: Watkins, Frank A., Jr. 06089
- Resources, summary: Illinois Tech. Comm. Water Resources. 09822

Indiana

- Lost River basin, subterranean drainage routes: Murdock, Stanley H. 06912
- Movement, Mitchell Plain, Blue Spring Cave conduit: Palmer, Arthur N. 06911
- Resources, Big Blue River basin: Nyman, Dale J. 06091
- Resources, Big Walnut Creek basin: Watkins, Frank A., Jr. 06090
- Resources, composition, Lake County: Rosenshein, J. S. 01608
- Resources, composition, Porter and La Porte Counties: Rosenshein, J. S. 01528
- Resources, Delaware County: Hoggatt, R. E. 06340
- Resources, Flatrock River basin and Downeyville Reservoir site: Nyman, Dale J. 06092

Ground water—Continued*Indiana—Continued*

- Resources, South Bend area and Bartholomew County: Rockaway, J. D. 09500

Iowa

- Composition, Dubuque area: Morehouse, David F. 01492
Levels, Tama County, Four-mile Creek watershed: Vreeken, W. J. 07592
Movement, Des Moines County, Sperry mine: Sendlein, Lyle V. A. 03637
Movement, east-central, Four Mile Creek, base flow: Kunkle, George R. 00375

Jamaica

- Movement, central inlier, northern margin, karst: Brown, M. C. 07749

Kansas

- Levels, Grant and Stanton Counties, 1939-68: Winslow, John D. 04780
Movement, deep percolation, southwestern: Prill, Robert C. 05169
Resources, development: Kansas Water Resources Board. 09202
Resources, Labette County: Jungmann, William L. 00824
Resources, Republican River area: Fader, Stuart W. 04781

Kentucky

- Levels, water table configuration, Mammoth Cave area: Cushman, R. V. 08945
Movement, resources, Fayette County, karst effects: Mull, D. S. 06586
Resources, Arlington, Wickliffe SW quadrangles: Davis, R. W. 04334
Resources, Blandville quadrangle: Hansen, Arnold J., Jr. 00609
Resources, Hardin quadrangle: Scott, Glenn R. 04159
Resources, Hickman quadrangle: Lambert, T. W. 03684
Resources, Middlesboro area: Mull, D. S. 01810
Resources, Oakton-Wolf Island quadrangles: Hansen, Arnold J., Jr. 03685
Resources, quality, Barlow and Cairo (Ill.) quadrangles: Hansen, Arnold J., Jr. 03687
Resources, quality, Wickliffe area: Lambert, T. W. 03686

Louisiana

- Levels, resources, southeastern: Dial, D. C. 03644
Resources, Pointe Coupee Parish: Winner, M. D., Jr. 01625
Resources, quality, Pointe Coupee Parish: Harder, A. H. 03759
Saline: Winslow, A. G. 07142

Maine

- Favorability areas, quality, Androscoggin River basin, lower: Prescott, Glenn C., Jr. 04776

Maryland

- Resources, Charles County: Slaughter, Turbit H. 00568
Resources, Salisbury area, Cenozoic aquifers, well data: Boggess, Durward H. 11261

Massachusetts

- Resources, quality, Housatonic River basin: Norvitch, Ralph F. 04760
Resources, Tenmile and Taunton River basins, northern: Williams, John R. 07035
Salt-water intrusion, Cape Cod, Great Island: Cotton, John E. 09764

Mexico

- General studies: Figueroa Vega, German E. 10809

Ground water—Continued*Mexico—Continued*

- Resources, Coahuila, Gomez Farias-El Vergel Valley: Medina Rivero, Flavio. 11328
Resources, Sonoran Desert: Dunbier, Roger. 09496

Michigan

- Rainfall, retention or runoff, Detroit area: Brater, E. F. 00394
Resources, Gogebic County, wells and springs, quality: Doonan, C. J. 06989

Minnesota

- General, northern, forested bogs: Bay, Roger Rudolph. 01362
Movement, southwestern, relation to streamflow and water quality: vanVoast, W. A. 03154
Resources, Lac qui Parle River watershed: Cotter, R. D. 02075
Resources, north-central, Mississippi headwaters watershed: Oakes, E. L. 07058
Resources, quality, Hibbing area: Lindholm, Gerald F. 02919
Resources, quality, west-central, Chippewa River watershed: Cotter, R. D. 04378
Resources, west-central, Mustinka-Bois de Sioux Rivers watershed: Maclay, R. W. 04424

Mississippi

- Resources, Harrison County, potential: Newcome, Roy, Jr. 01491
Resources, Pascagoula River basin, Eocene-Recent aquifers: Newcome, Roy, Jr. 02458

Mississippi Valley

- Composition, embayment area: Jeffery, H. G. 04518
Movement, Pleistocene: McGinnis, L. D. 04220
Resources, embayment area: Boswell, E. H. 04517
Resources, embayment, east of river: Boswell, E. H. 01510

Missouri

- Movement, North Fork River, Bryant Creek basins, controls: Skelton, John. 02701
Movement, Springfield area, waste-disposal problem: Harvey, E. J. 02694
Recharge, Ozark Mountains, Hurricane Creek basin, karst: Aley, Thomas. 07052
Resources, Maxville quadrangle: Stinchcomb, Bruce L. 02934
Resources, Saint Charles-Jefferson City area, Missouri River alluvium: Emmett, L. F. 06567

Montana

- Levels, artesian pressures, well records, 1953-67: Reed, T. E. 02561
Resources, Bighorn Valley, lower: Hamilton, L. J. 03680
Resources, Deer Lodge Valley: Konizeski, R. L. 04376
Resources, Kalispell Valley: Konizeski, R. L. 03621
Resources, north-central, Judith River Formation: Osterkamp, W. R. 04759
Resources, Powder River valley: Taylor, O. James. 02572
Resources, recharge, advantages over surface-water storage: Konizeski, Richard L. 03762

Nebraska

- Antelope Valley well field, recharge, Lincoln: Marlette, R. R. 08067
Atlas: Nebraska Univ. Conserv. and Survey Div. 09840
Composition, Platte River drainage area, lower: Barnes, Ivan. 01490
Data, Polk County: Smith, F. A. 01642
Levels, wells, 1967: Keech, C. F. 02432

Ground water—Continued*Nebraska—Continued*

Recharge, Ashland area, Lincoln wellfield, abandoned sand pits: Brugger, Wayne E. 02485

Resources, Adams County: Keech, C. F. 02597

Resources, Antelope County: Souders, V. L. 07053

Resources, Fillmore County: Keech, C. F. 00910

Nevada

Flow systems, types, Great Basin: Maxey, George B. 04268

Geophysical logging, hydraulic testing, Pahute Mesa: Blankennagel, Richard K. 03796

Hydrologic response to pumping, Diamond Valley: Harrill, J. R. 04805

Movement, direction, sodium as indicator, Indian Spring valley: Schoff, Stuart L. 05174

Movement, quality, Ruby Mts., central: Dudley, William Wyatt, Jr. 02628

Movement, south-central, structural control: Winograd, Isaac J. 06824

Resources, Butte Valley: Glancy, Patrick A. 07697

Resources, Clayton Valley-Stonewall Flat area: Rush, F. Eugene. 04312

Resources, Mesquite-Ivanpah Valley area: Glancy, Patrick A. 07965

Resources, Moapa-Lake Mead area: Rush, F. Eugene. 08013

Resources, Smoke Creek-San Emidio Desert area: Glancy, Patrick A. 02576

Resources, Snake River basin: Moore, Donald O. 07344

Resources, Thousand Springs Valley: Rush, F. Eugene. 07345

Use, 1950-65: Harrill, J. R. 07911

New Brunswick

Salt-water intrusion, Shippegan area: Carr, P. A. 01604

New England

Resources, glacial deposits: Miller, David W. 09804

New Hampshire

Resources, Merrimack River valley, lower: Weigle, James M. 00322

New Jersey

Recharge, coastal plain: Wolfe, Peter E. 09740

Resources, Atlantic County: Clark, Glenn A. 05640

Resources, Burlington County: Rush, F. Eugene. 06076

Resources, Essex County: Nichols, William D. 07923

Resources, estimates, regional: Widmer, Kemble. 05445

Resources, Monmouth County: Jablonski, Leo A. 08014

Resources, Rahway area: Anderson, Henry R. 05623

New Mexico

Aquifers, control by lithofacies, Carlsbad area: Motts, Ward S. 01074

Artesian system, Chaves County, Roswell basin: Havenor, Kay C. 07901

Levels, 1966: Busch, F. E. 03527

Resource administration, Rio Grande underground water basin: Reynolds, S. E. 05592

Resources, McKinley County, southeastern: Cooper, James B. 01878

New York

Levels, Nassau County, sewerage effects: Franke, O. L. 00730

Ground water—Continued*New York—Continued*

Movement, Schoharie and Albany Counties, cavernous limestones: Baker, Victor R. 07786

Quality, Erie-Niagara basin, shallow flow, effect in streams: Archer, R. J. 09114

Quality, Long Island, Nassau County, glacial aquifers: Padar, Francis V. 09550

Recharge, waste-water injection, Nassau County: Rose, John L. 04730

Resources, Crown Point Fish Hatchery area: Kantrowitz, I. H. 07647

Resources, methods, Long Island: Cohen, Philip. 01795

Resources, movement, Erie-Niagara basin: LaSala, A. M., Jr. 09113

Resources, Suffolk County, Brookhaven Natl. Laboratory: Warren, M. A. 11438

Salt-water intrusion, Long Island, protective measures: Montanari, Francis W. 09534

Salt-water intrusion, Long Island, western: Perlmutter, N. M. 01818

Temperature, profiles, Niagara County, wells, fracture indicators: Trainer, Frank W. 00731

North America

Budget, methods of study: Farvolden, R. N. 07977

North Carolina

Resources, Chowan County: Lloyd, O. B., Jr. 04383

Resources, Pitt County: Sumsion, Carlton T. 03682

Resources, quality, Belhaven area: Lloyd, Orville B., Jr. 09491

Resources, quality, Chowan County: Lloyd, Orville B., Jr. 08899

North Dakota

Composition, eastern, Dakota Sandstone aquifer: Kelly, T. E. 02699

Genesis, movement, Dakota artesian basin: Swenson, Frank A. 05879

Levels, 1966, observation wells: Randich, P. G. 00827

Levels, composition, Renville and Ward Counties: Pettyjohn, Wayne A. 01051

Levels, composition, Wells County: Buturla, Frank, Jr. 01052

Movement, composition, Coteau du Missouri: Eisenlohr, William S. 02820

Recharge, dual system, Minot area: Pettyjohn, Wayne A. 02680

Recharge, geochemistry, artesian basin: Swenson, Frank A. 00552

Resources, Cass County, glacial drift aquifers: Klausling, Robert L. 07043

Resources, Eddy and Foster Counties: Trapp, Henry, Jr. 01050

Resources, Grand Forks County: Kelly, T. E. 00066

Northwest Territories

Paleomovements, Pine Point: Roedder, Edwin. 04231

Nova Scotia

Resources, Musquodoboit Harbour area, aquifer, computer evaluation: Pinder, George F. 04569

Resources, quality, Annapolis-Cornwallis Valley: Trescott, Peter C. 09018

Water-well records, 1966-67: Nova Scotia Department of Mines. 11194

Ohio

Model study for well fields, Fairfield-New Baltimore area: Spieker, Andrew M. 03203

Ground water—Continued*Ohio—Continued*

Resources, Cincinnati-Harrisburg area, Interstate Highway 71: Pree, Henry L., Jr. 09503

Resources, development, Great Miami River valley, lower: Spieker, Andrew M. 01495

Resources, Great Miami River valley, lower: Spieker, Andrew M. 05558

Oklahoma

Levels, Great Salt Plains, relation to temperature and humidity: Davis, Johnnie L. 04340

Resources, Cleveland and Oklahoma Counties: Wood, P. R. 00820

Resources, problems: Dover, T. B. 02590

Resources, summary: Oklahoma Water Resources Board. 10125

Ontario

Resources, Etobicoke Township: Watt, A. K. 01791

Resources, levels, southwestern, 1960-63: Ontario Water Resources Commission. 05641

Oregon

Resources, data, Santiam River basin, lower: Helm, D. C. 04321

Resources, Mountain Home area: Ralston, Dale R. 08918

Pennsylvania

Recharge, State College area, from renovated sewage: Parizek, Richard R. 09551

Resources, Chester County, metamorphic and igneous rocks: Poth, Charles W. 03192

Resources, Dauphin County, Martinsburg Formation: Carswell, Louis D. 11415

Resources, Schuylkill River basin: Biesecker, J. E. 08171

Prince Edward Island

Salt-water intrusion, Eliot River estuary area and Georgetown Peninsula: Carr, P. A. 01604

Quebec

Composition, genesis, Beloeil area: Tremblay, J. -J. 04712

Movement, Knob Lake area, mine property evaluation: Nichols, Lee. 07329

Rhode Island

Resources, Potowomut-Wickford area: Rosenshein, J. S. 01489

Saskatchewan

Movement, Good Spirit Lake drainage basin, flow patterns: Freeze, R. Allan. 07974

Regime, South Saskatchewan reservoir area: vanEverdingen, R. O. 00976

South Carolina

Movement, Savannah River Plant: Fenimore, J. W. 11429

Regimen, Berkeley and Charleston Counties, impact of canals: Siple, George E. 04000

Resources, Greenville County: Koch, Neil C. 07172

Resources, U.S. Geological Survey projects: Siple, George E. 04835

South Dakota

Composition, Avon area, quality anomaly: Jorgensen, Donald G. 05702

Composition, eastern, pH, field and laboratory determination, differences: Lufkin, Nat. 06995

Genesis, movement, Dakota artesian basin: Swenson, Frank A. 05879

Model study, southeastern, Choteau aquifer: Kume, Jack. 06998

Recharge, Big Sioux aquifer system, stream discharge: Ackroyd, Earl A. 06996

Ground water—Continued*South Dakota—Continued*

Recharge, Black Hills area, Madison Formation: Gries, John Paul. 05880

Recharge, Black Hills, east side, losses from streams to caverns: Gries, John Paul. 06890

Recharge, geochemistry, artesian basin: Swenson, Frank A. 00552

Resources, Beadle County: Howells, Lewis W. 08016

Resources, Britton area: McMeen, James W. 09914

Resources, Brookings area: Barari, Assad. 09924

Resources, Bryant area: Jorgensen, Donald. 09916

Resources, Burke area: Christensen, Cleo M. 09913

Resources, Dell Rapids area: Barari, Assad. 09920

Resources, Eureka area: Steece, Fred V. 11058

Resources, Faulkton area: Christensen, Cleo M. 09909

Resources, Lake Andes area: Shurr, George W. 09918

Resources, Lake Norden area: Jorgensen, Donald. 09915

Resources, Lake Preston area: Hedges, Lynn S. 09910

Resources, Madison area: Tipton, M. J. 11059

Resources, Menno area: Bruce, Richard L. 09911

Resources, Miller area: Christensen, Cleo M. 09912

Resources, Mission area: Barari, Assad. 11255

Resources, Mitchell area: Barari, Assad. 09922

Resources, Sanborn County, glacial drift aquifers: Steece, Fred V. 10516

Resources, Selby area: Wong, H. D. 11060

Resources, Sioux Falls area, new aquifer: Vaughan, Kenneth D. 06892

Resources, southeastern, Choteau aquifer, analog model and analyzer study: Kume, Jack. 06998

Resources, Tyndall area: Bruce, Richard L. 09908

Resources, Viborg area: Beffort, J. David. 09923

Resources, Waubay area: Beffort, J. David. 09921

Resources, Wessington Springs area: Steece, Fred V. 09919

Resources, Winner area: Barari, Assad. 09917

Tennessee

Movement, quality, Memphis area: Bell, Edwin A. 03678

Texas

Levels, observation wells, Gulf Coastal Plain, northwestern: Howard, James W. 00164

Movement, Nueces River valley, lower, flood-plain alluvium: Garza, Sergio. 01533

Resources, Liberty County: Anders, R. B. 00815

Resources, Nueces and San Patricio Counties: Shafer, George H. 01534

Resources, Polk County: Tarver, George R. 04216

Resources, San Jacinto County: Sandeen, W. M. 04217

Resources, Tyler County: Tarver, George R. 01535

Resources, Upton County, Trinity Sand: White, D. E. 01773

Resources, water plan: Peckham, Richard C. 00196

Ground water—Continued*Texas—Continued*

- Resources, west-central: Farris, Jim. 11211
Resources, Wood County: Broom, M. E. 03190

United States

- Depletion by vegetation, western: Robinson, Thomas W. 05491
Levels, 1961-65, northwestern states: U.S. Geological Survey. 02411
Levels, 1961-65, southwestern: U.S. Geological Survey. 04470
Levels, earthquake effects, Alaskan, March 1964: Vorhis, Robert C. 06468
Occurrence, controls, southeastern, crystalline rocks: LeGrand, H. E. 08541
Quality, Great Basin: Feth, J. H. 08269
Resources, Mississippi embayment, Tertiary aquifers: Hosman, R. L. 01694
Resources, northeastern, drought effect: Thomas, H. E. 09552
Resources, northeastern, effects of 1961-67 drought: Barksdale, Henry C. 06967
Resources, withdrawals, 1965 data: Murray, C. Richard. 06027

Utah

- Discharge, Jordan Valley to Great Salt Lake: Mower, R. W. 05179
Levels, recharge, Cache Valley, southern: Beer, Lawrence Peter. 00843
Movement, resources, Sevier River basin, Yuba Dam region: Bjorklund, L. J. 00073
Resources, analyses, Uinta Basin, Green River Formation: Feltis, R. D. 00729
Resources, Sevier Desert: Mower, R. W. 04469
Resources, Skull Valley: Hood, J. W. 02431

Vermont

- Resources, Ottauquechee-Saxtons River basin: Hodges, Arthur L., Jr. 07624
Resources, Wells-Ompompanoosuc River basin: Hodges, Arthur L., Jr. 07623
Resources, West-Deerfield River basin: Hodges, Arthur L., Jr. 07621
Resources, White River basin: Hodges, Arthur L., Jr. 07622

Virginia

- Levels, fluctuations, factors: Gathright, Thomas M. 03521
Levels, Princess Anne County: Rogers, W. S. 02526
Movement, Gilley Cave, drainage systems: Baroody, Roger. 07873
Movement, Scott County, Rye Cove, karst and caves: Holsinger, John R. 07872
Resources, Accomack and Northampton Counties: Sinnott, Allen. 03140
Resources, central, river basins west of Fall Line: DeBuchananne, George D. 02074
Resources, Coastal Plain: DeBuchananne, George D. 02567

Washington

- Levels, Odessa area: Garrett, A. A. 04777
Levels, Pasco Basin, interarea relations: Brown, Randall E. 08579
Quality, Island County: VanDenburgh, A. S. 05046
Resources, Island County: Anderson, Henry W., Jr. 05045
Resources, King County: Richardson, Donald. 00075
Resources, levels, Odessa-Lind area: Luzier, J. E. 04778
Resources, Pierce County, central, Miocene-Holocene aquifers: Walters, Kenneth L. 09484

Ground water—Continued*Washington—Continued*

- Resources, problems, Pullman-Moscow basin: Crosby, James W., 3d. 04325
Water-balance equation, Rathdrum Prairie aquifer, Spokane area: Pluhowski, E. J. 05180

West Virginia

- Resources, Kanawha River valley: Wilmoth, Benton M. 05579
Resources, Monongahela River basin: Ward, Porter E. 07461

Wisconsin

- Geochemical prospecting, zinc: DeGeoffroy, J. 06944
Irrigation potential, Dunn County: Olcott, Perry G. 09142

Wyoming

- Movement, Shirley basin, solution mining of uranium: Anderson, J. S. 09570
Radioactivity, alpha, beta in bog: Sturges, David L. 00140
Resources, Green River basin: Welder, George E. 07922
Resources, Wind River basin: Whitcomb, Harold A. 01645

Guam*Absolute age*

- Storm-rubble ramparts, Holocene, carbon-14: Curry, J. R. 08652

Geomorphology

- Holocene sea-level fluctuations: Curry, J. R. 08652

Guatemala*Absolute age*

- Central Cordillera, zircon, U-Pb: Gomberg, David N. 03846

Areal geology

- Sierra Madre de Chiapas, southern: Siesser, William G. 09687

Geomorphology

- Karst evolution, cf. Europe: Enjalbert, H. 07985

Maps, geologic

- Chiantla area: Blount, D. N. 06010
Cuilco area: Bradford, Douglas E. 04333

Petrology

- Western, metamorphic, plutonic rocks: Bradford, Douglas E. 08619

Sedimentary petrology

- Chiantla quadrangle, carbonate breccia: Blount, Don N. 08612

Structural geology

- Sierra de Santa Cruz, serpentinite, emplacement, age: Bonis, Samuel B. 08613

Volcanology

- Guatemala City area, Pacaya eruptions, historical, recent: Andrews, James Crandall. 05555
Santiaguito Volcano, activity since 1956: Stoiber, Richard E. 10777

Gulf Coastal Plain*Areal geology*

- Alabama, guidebook: Copeland, Charles W. 07788

- Northern, guidebook, sedimentation: New Orleans Geological Society. 08128

Economic geology

- Petroleum and natural gas, central, potential, review: Rainwater, E. H. 09324

- Petroleum, exploration, logging methods: Tixier, M. P. 06513

- Petroleum, formation evaluation, grain density effect: Granberry, Raymond J. 07278

- Petroleum, trapping mechanism, differential pressures: Myers, John C. 09852

Gulf Coastal Plain—Continued*Economic geology—Continued*

Phosphate, Quaternary deposits, genesis:
Cathcart, James B. 07449

Salt, Louann formation: Hardin, George C., Jr.
07453

Salt, reserves, economics: Hawkins, M. E. 07448
Sulfur, salt dome cap rocks: Myers, John C.
07452

Sulfur, salt-dome cap rock, genesis: Taylor,
Ralph E. 07454

Geochemistry

Sulfur, salt dome cap rock, genesis: Jensen,
Mead LeRoy. 01113

Geomorphology

Alabama, divisions: Drahovzal, James A. 07654
Bar and barrier island sands, origin: Weidie, A.
E. 09345

Geophysical surveys

Well logging, low-resistivity sands: Tixier, M. P.
07346

Hydrogeology

Central, Sparta Sand, lithofacies: Payne, J. N.
02081

Maps, geomorphologic

Mississippi Delta area, relation to submarine
topography: Uchupi, Elazar. 00607

Maps, ground water

Central, Sparta Sand: Payne, J. N. 02081

Maps, structure

Central, Sparta Sand: Payne, J. N. 02081

Mineralogy

Heavy minerals, Cretaceous, Holocene sedi-
ments: Pryor, Wayne A. 01188

Paleoclimatology

Louann Salt, paleobiology: Bowen, Richard L.
09316

Paleontology

Foraminifera, Mesozoic-Cenozoic, eastern, as-
semblages: Maher, John C. 07067

Gastropoda, Cenozoic, Muricidae: Vokes, Emily
H. 05057

Gastropoda, Cenozoic, Muricinae: Vokes, Emily
Hoskins. 01740

Ostracoda, Miocene-Pliocene, trachyleberid dis-
tribution: Bold, W. A. van den. 09130

Pelecypoda, Cenozoic, venericard subgenera,
paleoecology: Park, Richard A. 05673

Pelecypoda, Tertiary, alticostate venericards,
evolution: Heaslip, William Graham. 04377

Protista, Cenozoic, calcareous nannoplankton,
worldwide markers: Bukry, David. 06348

Sedimentary petrology

Bar and barrier island sands, origin: Weidie, A.
E. 09345

Low-resistivity oil sands: Tixier, M. P. 07346

Northern, sediments, Eocene cf. Holocene en-
vironments: New Orleans Geological Society.
08128

Sands, grain density in formation evaluation:
Granberry, Raymond J. 07278

Stratigraphy

Eocene, environment cf. Holocene: New Orle-
ans Geological Society. 08128

Eocene, Sparta Sand, central, lithofacies: Payne,
J. N. 02081

Jurassic-Quaternary, depositional history: Rain-
water, E. H. 09324

Mesozoic-Cenozoic, eastern, correlation, cross
sections: Maher, John C. 07067

Quaternary, Deweyville Formation, western:
Aronow, Saul. 10280

Tertiary, eastern: Toulmin, Lyman D. 10350

Gulf Coastal Plain—Continued*Stratigraphy—Continued*

Tertiary, Eocene delta system: Fisher, W. L.
09315

Structural geology

Fault curvature: Steinhoff, R. O. 10347

Faults, mechanism, differential compaction:
Carver, Robert E. 00913

Faults, mechanism, experimental analysis:
Clos, Ernst. 00920

Salt domes, piercement, Monte Carlo simulation
model: Howard, James C. 06173

Salt-dome regions, peat cf. diapirs in Nether-
lands: Paine, William R. 03355

Weathering

Soils, genesis of clay-poor bodies, B2t horizon:
Daniels, R. B. 04985

Gulf of California*Areal geology*

Northwestern islands, reconnaissance: Phillips,
Richard P. 08311

Geomorphology

Colorado River delta, tidal flat, depositional
regression, beach ridges: Thompson, Robert
Wayne. 07021

Geophysical surveys

Seismic, magnetic: Moore, David G. 08462

Paleontology

Ostracoda, Holocene, distribution, corrections,
IBM data cards: Swain, F. M. 05690

Sedimentary petrology

Colorado River delta, tidal flat sedimentation:
Thompson, Robert Wayne. 07021

Palynomorphs, provenance: Cross, A. T. 02320

Structural geology

Genesis, relation to San Andreas and Baja
California faults: Gastil, R. Gordon. 04020

Ocean-floor spreading, transform faulting: Lar-
son, Roger L. 03063

Ocean-floor spreading, transform faulting:
Moore, David G. 03786

Relation to East Pacific Rise: Yeats, Robert S.
05052

Rift system, crustal dilatation: Gastil, Gordon.
08274

Transform faults: Moore, David G. 08462

Gulf of Maine*Engineering geology*

Bottom sediments, shear-strength measurement,
vane probe, tests: Richards, A. 05280

Gulf of Mexico*Economic geology*

Petroleum, Paleozoic rocks, potential: Meyer-
hoff, A. A. 01161

Petroleum, possible provinces: McCaslin, John
C. 11267

Engineering geology

Sediments, shear strengths, Campeche Canyon:
Morelock, Jack. 07868

General

Federal activity: Berryhill, Henry L., Jr. 09314

Geochemistry

Alacran Reef, carbonate mud, Mg, Sr, analyses:
Hoskin, Charles M. 05724

Near-shore and deep-sea sediments, spectro-
graphic analyses: Young, Edward J. 01525

Sediments, Th, U, distribution: Carpenter, John
R. 08514

Geomorphology

De Soto canyon, S-form, genesis: Harbison, R.
N. 03224

Mississippi River delta, chenier, barrier island
plains, genesis: Todd, Thomas W. 03547

Gulf of Mexico—Continued*Geomorphology—Continued*

Sabine-High Island area, history, sedimentation: Nelson, Henry F. 07864

South Florida continental margin, western Straits of Florida, seismic surveys: Pyle, T. E. 09317

Tortugas Terrace, slump-slip origin: Uchupi, Elazar. 05199

Geophysical surveys

Continental margin, seismic: Uchupi, Elazar. 03773

De Soto canyon, seismic reflection: Harbison, R. N. 03224

Magnetic, ship-towed, over salt dome: Prindle, Robert O. 00721

Sediments, sequences, velocity, sonobuoy data: Houtz, Robert. 00514

Sigsbee Deep, Bay of Campeche, seismic, salt diapirs: Worzel, J. Lamar. 04465

Tortugas Terrace, seismic: Uchupi, Elazar. 05199

West Florida Escarpment, magnetic, seismic, basement fault: Antoine, J. W. 09336

Hydrogeology

Northern, aquifer systems, geochemical hydrodynamics: Jones, Paul H. 09867

Maps, bathymetric

Mississippi Delta to Bahia de Campeche, relation to land: Uchupi, Elazar. 00607

Maps, gravity index

Offshore of United States: Sidney Schafer and Associates. 08989

Marine geology

Alaminos Canyon, seismic and bathymetric surveys, cores, origin: Bouma, Arnold H. 09335

DeSoto and Campeche Canyons, salt tectonics: Antoine, J. W. 09320

Mineralogy

Clay minerals, cores: Scafe, Donald William. 04547

Paleontology

Foraminifera, Holocene, biofacies, cluster analysis: Mello, James F. 03230

Foraminifera, nannoplankton, Cenozoic, Sigsbee Knolls: Pyle, Thomas E. 11048

Sedimentary petrology

Abyssal plain, carbonate turbidites: Davies, David K. 06735

Continental margin, sediment transport, space photography: Stevenson, Robert E. 09703

Continental slope, sediments, physical properties: Morelock, Jack. 00039

Mississippi cone and Sigsbee Deep, Pleistocene sediments, quartz dispersal: Davies, David K. 01235

Sediments, microstructure: Bowles, Frederick A. 00179

Sediments, shear strength: Bryant, William R. 09340

Sigsbee knolls, sedimentation rates, environment: Pyle, Thomas E. 08094

Structure distribution, minor, sediments, cores: Bouma, Arnold H. 09312

Western, sediments, physical properties, sedimentation: Morelock, Jack. 00874

Stratigraphy

Cenozoic, Sigsbee Knolls area: Pyle, Thomas E. 11048

History: Durham, Clarence O., Jr. 08668

Quaternary, base of Pleistocene, foraminiferal biostratigraphy: Beard, John H. 09326

Gulf of Mexico—Continued*Stratigraphy—Continued*

Tertiary, base of Pliocene, foraminiferal biostratigraphy: Beard, John H. 09326

Structural geology

Coastal plain and offshore, salt domes, tectonics: Stafford, Charles F. 00567

Continental margin, reefs, salt diapirs: Uchupi, Elazar. 03773

Gulf Basin, evolution, history: Yarborough, Hunter. 11134

Major features, unresolved problems: Donnelly, Thomas W. 08666

Mexican continental margin, folds: Bryant, William R. 03777

Origin by continental drift, sequence of tectonic events: Tanner, William F. 09321

Salt domes, genesis: Murray, Grover E. 03382

Sigsbee Deep to Bay of Campeche, salt diapirs: Worzel, J. Lamar. 04465

Tectonics: Durham, Clarence O., Jr. 08668

Texas margin, upper mantle, seismic-wave data: Shurbet, D. H. 04254

West Florida Escarpment, basement fault, magnetic and seismic surveys: Antoine, J. W. 09336

Gulf of Saint Lawrence*Geomorphology*

South shore, beaches, terraces, drift-ice features: Dionne, Jean-Claude. 07339

Marine geology

Ecology, Magdalen Shallows, foraminifera: Vilks, G. 04403

Paleontology

Foraminifera, Quaternary, Northumberland Strait sediments: McRoberts, Jill H. E. 07979

Sedimentary petrology

South shore, beach deposits, provenance: Dionne, Jean-Claude. 07339

Stratigraphy

Quaternary, Northumberland Strait, cores: McRoberts, Jill H. E. 07979

Structural geology

Appalachian region, Paleozoic tectonics, cf. Europe, continental drift: Dineley, D. L. 07016

Gymnosperms*Alethopteris*

Pennsylvanian, Middle-Upper, species, world distribution: Wagner, R. H. 09482

Alethopteris ambigua

Pennsylvanian, Missouri, Henry County, xeromorphy: Cridland, Arthur A. 09368

Archaeosperma arnoldii, n.gen., n.sp.

Devonian, Pennsylvania, Oswayo Formation, cupulate seeds: Pettitt, John M. 08999

Aulacotheca, n.sp.

Pennsylvanian, Iowa, Cherokee Group: Eggert, D. A. 02303

Coniferales

Tertiary, Washington, Chuckanut Formation: Pabst, Marie B. 02582

Cordaioxylon Grand'Eury ex Felix

Cordaitales foliage and stems, nomenclature: Arnold, Chester A. 07395

Cycadeoidales

Mesozoic, evolution, cone origin, hypotheses: Delevoryas, T. 09372

Eremopteris zamioides

Pennsylvanian, Pennsylvania, Allegheny Group: Delevoryas, T. 02322

Lescuropteris

Pennsylvanian, Appalachians, taxonomy review: Darrah, W. C. 02321

Gymnosperms—Continued

- Medullosa nocei*
Carboniferous, Illinois, coal beds: Delevoryas, Theodore. 07920
- Mississippian*
Arkansas, Chester Series, southwestern: Taylor, T. N. 02349
Arkansas, Wellington Sandstone, pollen organ: Eggert, D. A. 02954
- Morphology*
Archaeosperma, Devonian, cupules: Pettitt, John M. 08999
Cycad cones, evolution and ontogeny: Delevoryas, T. 02548
Seed fern, root development, Pennsylvanian, Illinois: Dennis, Robert L. 03135
- Neuropteris*, n.sp.
Pennsylvanian, Missouri, Drywood Fm.: Basson, Philip W. 08065
- Nomenclature*
Cordaitales foliage and stems: Arnold, Chester A. 07395
- Paleozoic*
Carbohydrates, components, possible biochemical evolution: Swain, F. M. 06304
- Pennsylvanian*
Illinois, Mattoon Formation, seed fern roots, ontogeny: Dennis, Robert L. 03135
Illinois, McLeansboro Formation, seed: Taylor, T. N. 02323
Kansas, coal balls, Cherokee County: Otto, David Arthur. 01704
- Pinus avonensis*, n.sp.
Oligocene, Montana, western: Miller, C. N. 02306
- Quaternary*
California, Sierra Nevada, Pleistocene: Morey, P. R. 02309
- Russellites taeniata*, n.gen., n.comb.
Permian, Texas, Belle Plains Formation, noegerrathialean: Mamay, Sergius H. 10957
- Sequoia*
Eocene, United States, southeastern: Dilcher, D. L. 02308
- Taxodium dubium*
Miocene, Washington, Rock Island area: Ganders, F. R. 02307
- Tertiary*
Arizona, San Cayetano Mts., volcanics: Damon, Paul E. 11423
Idaho, Nevada, Colorado, conifer pollen: Ting, William S. 07632
Montana, western, cones, Oligocene: Miller, Charles N., Jr. 00384
Washington, Vantage area, Columbia basalts: Prakash, U. 02549
- Williamsonia nishonina*, n. sp.
Triassic, New Mexico, Chinle Formation: Ash, Sidney R. 09349
- Gypsum**
Appalachians
Resources, review: Withington, C. F. 01383
- Tennessee*
Nashville area, anhydrite pod: Hershey, R. E. 09078
- Texas*
Delaware basin, Castile anhydrite, chemical variations: Dean, Walter E., Jr. 08657
West-central, occurrence: Mattis, Lynn. 11428
- Hafnium**
Analysis
Activation, silicates: Greenland, L. Paul. 03010

Haiti

- Absolute age*
Terre-Neuve Mountains, stock, K-Ar: Kesler, Stephen E. 10314
- Economic geology*
Copper, Meme mine: Kesler, Stephen E. 10956
- Geochemistry*
Colombier volcanics, spherulitic andesite: Kesler, Stephen E. 07521
Meme mine, copper deposit: Kesler, Stephen E. 10956
- Petrology*
Colombier volcanics, spherulitic andesite: Kesler, Stephen E. 07521
Terre-Neuve Mountains, quartz monzonite stock: Kesler, Stephen E. 10314
Terre-Neuve stock, magmatic assimilation of marble: Kesler, Stephen E. 05651

Hawaii

- Absolute age*
Kilauea basalt, deep-ocean flows, age uncertainties: Noble, C. S. 03831
Kilauea, basalts, submarine pillows, Ar-40 excess: Dalrymple, G. Brent. 03120
Lava flows, 1750-1907, thermoluminescence method: Aitken, M. J. 03971
Lavas, K-Ar: Funkhouser, John G. 02531
Volcanic rocks: Tatsumoto, M. 08029
- Areal geology*
Coastal areas, shoreline features, changes: Moberly, Ralph, Jr. 09883
- Earthquakes*
1965, graphic summary: Koyanagi, Robert Y. 00794
1962-65, Kilauea, Mauna Loa, common sources: Koyanagi, Robert Y. 02703
Microearthquakes, lava lakes, formation of columnar joints: Peck, Dallas L. 02976
Seismicity: U.S. Bureau of Reclamation. 04180
- Engineering geology*
Foundations, observatory site, Mauna Kea volcano: Furumoto, Augustine S. 04667
Shorelines, conservation, development, urbanization problems: Hawaii Dept. Plan. and Econ. Devel. 09884
Shorelines, Hawaii, beaches and other features: Moberly, Ralph, Jr. 09883
Soils, strength, latosols: Lohnes, R. A. 04846
- General*
Volcano Observatory, investigations, 1959-60: Herbert, Don. 03151
- Geochemistry*
Basalt, fractional crystallization, rare-earth abundance patterns: Schilling, Jean-Guy. 10801
Basalt lavas, analyses, new: Macdonald, Gordon A. 06501
Basalt, phosphorus fractionation: Anderson, A. T. 10746
Basalt, U, Th isotope ratios: Rosholt, John N. 08057
Helium, argon isotopes, ultramafic inclusions in lava: Funkhouser, John G. 02361
Kilauea, basaltic gas, composition: Nordlie, Bert E. 08828
Kilauea volcano, Fe-Ti phenocrysts: Anderson, A. T. 10747
Kilauea Volcano, gases, compositional trends: Finlayson, James Bruce. 04452
Maui, Haleakala Volcano, basalt, analyses: Macdonald, Gordon A. 02001

Hawaii—Continued

Geochemistry—Continued

- Sediments, marine, zirconium distribution: Grunwald, Ross R. 08714
 Volcanic gas, composition, variations, research: Finlayson, J. Bruce. 04660
 Volcanic gases, isotope fractionation: Moore, Larry Joe. 04453
 Volcanic rocks, K-Rb and Ca-Sr ratios: Hubbard, Norman Jay. 07901
 Volcanic rocks, lead, isotopic composition: Tatsumoto, M. 08029

Geomorphology

- Beaches, erosion: Moberly, Ralph, Jr. 01477
 Beaches, summary: Moberly, Ralph, Jr. 09823
 Lanai, "Ka-imu-hoku" area, no evidence for meteoritic crater: Barringer, Brandon. 04832
 Major islands, beaches, littoral sand budget, 1962-63: Chamberlain, Theodore. 00822
 Molokai, Lanai, potential tsunami inundation zones: Adams, William Mansfield. 11045
 Oahu, western, submerged terraces: Brock, Vernon E. 02530
 Puu Hou littoral cones: Fisher, Richard V. 10921

Geophysical surveys

- Alae Lava Lake, heat flow: Decker, Robert W. 07757
 Arch, trench, ridge, seismic: Furumoto, Augustine S. 04666
 Hawaiian arch, seismic: Normark, William R. 04286
 Hawaiian ridge, lower crust, upper mantle, seismic: Jackson, E. D. 05064
 Hawaiian ridge, magnetic, anomalies: Malahoff, Alexander. 04656
 Kilauea, geothermal, geomagnetic spatial noise studies: Hasbrouck, Wilfred P. 10751
 Kilauea Volcano area, seismic, crustal structure: Ryall, Alan. 02360
 Maui, irrigation well, technique evaluation: Adams, W. M. 07860
 Mauna Kea volcano, summit cone, seismic: Furumoto, Augustine S. 04667
 Oahu, off western, bottom topography, wave-cut terraces: Brock, Vernon E. 02530
 Ridge, trench, and rise, crustal and mantle studies: Woollard, George P. 07975

Hydrogeology

- Ground-water levels, 1961-65: U.S. Geological Survey. 04470
 Hilo-Puna area, ground-water resources: Davis, Dan A. 02905
 Kona area, ground-water resources: Davis, Dan A. 03142
 Maui, ground-water exploration, geophysical methods: Adams, W. M. 07860
 Oahu, laterites, water retention and movement: Sharma, M. L. 05933

Mineralogy

- Illite, montmorillonite, authigenic marine: Moberly, Ralph, Jr. 09433
 Makaopuhi lava lake, basalt, cooling history: Evans, Bernard W. 08681
 Makaopuhi lava lake, basalt, variation with depth: Evans, Bernard W. 02276

Paleomagnetism

- Kauai, Oahu, lava: Doell, Richard R. 08373

Petrology

- Basalt, elastic properties to 10 kb: Manghnani, Murli. 04664
 Basalt lava, viscosity, Makaopuhi lava lake: Shaw, H. R. 01039

Hawaii—Continued

Petrology—Continued

- Basalt lavas, major suites, differentiation: Macdonald, Gordon A. 06501
 Basalt, sulfide phases: Desborough, George A. 04124
 Basalt, xenoliths, genesis: Jackson, Everett D. 07903
 Kilauea, basalt, physical and chemical properties: Peck, Dallas L. 07837
 Lava, submarine, water depths, relations: Moore, James G. 07866
 Magmas, differentiation: Macdonald, Gordon A. 07937
 Makaopuhi lava lake, basalt, paragenesis, mineral composition: Wright, Thomas L. 09742
 Makaopuhi lava lake, tholeiitic basalt section, mineralogy: Evans, Bernard W. 02276
 Maui, Haleakala Volcano, basalt: Macdonald, Gordon A. 02001
 Mauna Loa 1868 lava flow, crystal differentiation: Fisher, Richard V. 07721
 Oahu, basalt, spinel-peridotite inclusions: Sakuno, V. G. 10942
 Oahu, Honolulu Group, palagonite tuffs: Hay, R. L. 06356
 Oahu, Koko Craters, palagonite tuffs: Hay, Richard L. 02253
 Puu Hou littoral cones, volcanics: Fisher, Richard V. 10921
 Xenoliths in basalt and nephelinite, subcrustal source: Jackson, E. D. 05064

Sedimentary petrology

- Archipelago, marine sediments: Belshe, John C. 09829
 Beach systems, sediments, sedimentation: Moberly, Ralph, Jr. 09823
 Kauai, western, offshore sediments, lithofacies, ecology: Eppert, Herbert Charles, Jr. 00850
 Midway, Kure atolls, sediments: Gross, M. Grant. 10901
 Sediments, recent, mineral assemblages: Fan, Pow-Fong. 08682
 Soil sequences, influence of rainfall and age: Sherman, G. Donald. 05108
 Wet uplands, soils, mica genesis, biological recycling: Juang, T. C. 00899

Structural geology

- Arch, trench, ridge, crustal thickness: Furumoto, Augustine S. 04666
 Columnar joints in basalt, genesis: Peck, Dallas L. 02976
 Hawaiian ridge, tectonic trends: Malahoff, Alexander. 04656
 Island chain, evolution, sea-floor spreading, relations: Christofferson, Eric. 08466
 Kilauea Volcano area, seismic profile, tectonics: Ryall, Alan. 02360

Volcanology

- Kilauea, 1959-60 eruption, popular account: Herbert, Don. 03151
 Kilauea, 1959 eruption, tilting: Eaton, J. P. 08262
 Kilauea, deformation, 1965-1967: Fiske, Richard S. 10750
 Kilauea, electrical analog model: Decker, R. W. 10749
 Kilauea eruption, 1967, ground deformation: Kinoshita, W. T. 10361
 Kilauea, fume particles, cf. Mayon eruption: Cadle, R. D. 10496

Hawaii—Continued*Volcanology—Continued*

Kilauea, March 1965 eruption: Wright, Thomas L. 00980

Kilauea, spectrometry, 1967-68: Naughton, John J. 10495

Kilauea Volcano, eruption, December 1965: Fiske, R. S. 02427

Kilauea Volcano, eruption, November 1967, fume particles: Cadle, Richard D. 02333

Localization, relation to tectonic trends: Malahoff, Alexander. 04656

Mauna Loa, deformation measurements: Decker, R. W. 06524

Oahu, Waianae, activity span: Funkhouser, John G. 02531

Puu Hou littoral cones, evolution: Fisher, Richard V. 10921

Weathering

Soil sequences, influence of rainfall and age: Sherman, G. Donald. 05108

Heat flow*Alaska*

Mount Wrangell, caldera wall: Benson, Carl S. 05135

Mount Wrangell, variations with barometric pressure: Bingham, Douglas K. 04879

Arctic Ocean

Drifting station investigations: Lachenbruch, Arthur H. 09879

Variations: Marshall, B. Vaughn. 10647

Atlantic Ocean

Mid-Atlantic ridge, conductivity, stratigraphic correlation: Kasameyer, Paul W. 10648

Vema fracture zone: VonHerzen, R. P. 10649

California

Central, southern, major faults: Heyey, T. L. 08729

Sierra Nevada, central, pre-batholithic rocks: Wollenberg, Harold A. 11112

Sierra Nevada, geothermal model: Lachenbruch, Arthur H. 04287

Canada

Eastern, Precambrian shield, variations: Jessop, Alan M. 02171

Colorado

Measurements, interpretation: Decker, E. R. 00044

Conductivity

In situ measurement of transverse anisotropy: Wright, J. A. 03214

Ocean sediments, in situ measurement: Lister, C. R. B. 10427

Random media: Naidu, Prabakar. 10429

Rock-forming minerals: Horai, Ki-iti. 10634

Rocks, measurement apparatus: Viloria, Gloria. 09280

Rocks, variation, factors: Viloria, Gloria. 09279

Sandstones and ocean sediments: Hutt, Jeremy R. 01504

Shield areas, effect on cracks: Simmons, Gene. 09465

Soil, experimental, theoretical: Paaswell, R. 10638

Geothermal gradient

Florida, carbonate-rock aquifer system: Schneider, Robert. 08067

Missouri River, deep wells, South Dakota: Adolphson, D. G. 05177

Superficial measurement, topographic disturbance, estimation: Lachenbruch, Arthur H. 04095

Heat flow—Continued*Geothermal gradient—Continued*

Tectonically active vs. shield areas: MacGregor, Ian D. 01948

Texas, salt domes: Heroy, William B. 01116

Hawaii

Alae Lava Lake: Decker, Robert W. 07757

Heat sources

California, Sierra Nevada batholith, radioactivity, and age relations: Wollenberg, Harold A. 00271

Island arcs, dip-slip fault zone, viscous heating: Turcotte, D. L. 06332

Northwest Territories, Pine Point: Roedder, Edwin. 04231

Instruments

Ocean floor: Corry, Charles. 01814

Interpretation

Borehole, detailed analysis: Beck, A. E. 10650

Earth model, relation to mantle composition: Gast, Paul W. 05886

Fourier equation, Fourier transform technique, layered media: Frasier, Clint. 10636

Ocean-floor data, reduction, models: Shih, Keh-Gong. 02618

Seismic traveltimes anomaly: Horai, Ki-iti. 05003

Measurement

Data, since 1966: Simmons, Gene. 03924

Infrared surveys: VanLopik, Jack. 00351

Method, poorly consolidated sediments: Sass, J. H. 02837

Reliability, refraction effects from structures: MacKenzie, Michael V., Jr. 10637

Soils, resistance-capacitance electric analog, application: Pedersen, Roger J. 06072

United States, methods, data: Roy, Robert F. 03225

Wells, small-diameter, convective flow effect: Sammel, Edward A. 05299

Nevada

Steamboat Springs: White, Donald E. 00724

New England

Thermal history since Early Devonian: Birch, Francis. 09355

New Mexico

Measurements, interpretation: Decker, E. R. 00044

New York

Thermal history since Early Devonian: Birch, Francis. 09355

North America

Effects of glaciation and depth of borehole: Crain, Ian K. 01530

Ontario

Quirk Lake syncline: Sass, J. H. 07230

Pacific Ocean

Juan de Fuca ridge: Lister, C. R. B. 08454

Regional patterns

Midoceanic ridge systems, convection theory: Talwani, Manik. 07997

Theory

Basalt-eclogite transformation: Warner, Jeffrey. 07998

Equality under continents and oceans, explanation: Tozer, D. C. 00661

United States

Plutonic rocks, continental heat flow provinces: Roy, Robert F. 04526

Western, progress report: Sass, J. H. 10652

Utah

Midway area, thermal springs: Baker, C. H., Jr. 05178

Selected areas: Costain, John K. 10651

Heat flow—Continued*Wyoming*

Yellowstone Park, Firehole River drainage:
Fournier, Robert O. 08692

Heavy minerals*Alaska*

Gulf of Alaska, eastern, exploration: Valencia,
Shirley M. 04586

California

Northern, coastal drainages, sediments: Kulm,
L. D. 09265

Exploration

Separation and identification techniques: Stone,
Jerome. 00370

Florida

Bone Valley Fm., potential: Stow, Stephen H.
07688

General

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Jolanta. 09001

Georgia

Coastal plain, shoreline ridges, exploration: Fur-
low, James W. 00888

Illinois

Southern, occurrence, cf. Florida: Hunter,
Ralph E. 02826

Methods

Field concentration technique: Gunn,
Christopher B. 06616
X-ray diffraction analysis, sediments, Gulf
Coastal Plain: Pryor, Wayne A. 01188

Mexico

Tamaulipas, Laguna Madre, provenance, Rio
Bravo basin: Schlaepfer, Carmen J. 09225

New Brunswick

Bathurst-Jacquet River district, exploration:
Boyle, R. W. 02055

Oregon

Coastal drainages, sediments: Kulm, L. D. 09265
Continental margin, southern, placer possibili-
ties: Kulm, L. D. 10962
Horse Sign Butte area, Eocene, black sand
deposit: Baldwin, Ewart M. 09193

Properties

Hydraulic equivalence to quartz grains, data, ap-
plications: Tourtelot, Harry A. 00112

Resources

Submarine: Ocean Industry. 01603

Helium*Abundance*

Atmospheric, escape by nonthermal processes:
Patterson, T. N. L. 06344
Enstatite melts: Kirsten, T. 00657

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General

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Genesis

General: Jodry, R. L. 03443

Geochemistry

Gas, natural, distribution: Voronov, A. N. 08922
Implantation in olivine, enstatite: Lord, H. C.
03227
Natural gas, United States: Moore, B. J. 04106
Sea water, noble gas analyses: Bieri, Rudolf H.
02841

Isotopes

He-3 in stony meteorites: Kruger, S. T. 02358
He-4, ultramafic inclusions, Hawaii: Funk-
houser, John G. 02361

Helium—Continued*North America*

Occurrence, association with hydrocarbon
gases: Jodry, R. L. 03443

History*Absolute age, methods*

Earth, age, Rutherford and Boltwood contribu-
tions: Badash, Lawrence. 01823

Arizona

Tucson Mountains: Mayo, Evans B. 02642

Assoc. Internat. Seis. Phys. Inter. Terre

Summary: Hodgson, J. H. 11435

Canada Geological Survey

Service to oil industry: Belyea, H. R. 07082

Connecticut

Geological surveys, review: Peoples, Joe Webb.
05941

Crystallography

Development: Ryba, Earle. 01661

Evolution

Charles Darwin, origin of species, controversy
and conquest: Karp, Walter. 08149

Exploration

Early geologists, western United States: Holmes,
Kenneth L. 09264

Geologic maps

Guettard, J. E., 1756, North America: Osborne,
F. Fitz. 07146

International Geological Congress

Founding committee, 1876, U.S.A.: Thurston,
William. 00340

Kansas Academy of Science: Jewett, John Mark.
07678

Man, fossil

North America, artifacts, sites, archeological
concept: Jennings, Jesse D. 09000

Mexico

Natural gas industry: Bullard, Fredda Jean.
07864

Mineral exploration

Canada, claims, mines, prospectors: Shannon,
Len. 09560

Oceanography

United States, eastern, continental margin, 19th
century: Schopf, Thomas J. M. 05867

Paleobotany

Arizona: Romans, Robert C. 04384
Kansas, research history: Leisman, Gilbert A.
07677

Paleontology

Dinosaur search, men involved: Colbert, Edwin
H. 01830

Explorers of fossils, methods, conflicts, conclu-
sions: Wendt, Herbert. 03138

Petroleum exploration

Canada, western: Sproule, J. C. 07080
Oklahoma, Oklahoma City area: Taylor, John
Allen. 00949

Seismology

Early: Dewey, James. 08261

Honduras*Mineralogy*

Poughite, Tegucigalpa, El Plomo mine, new:
Gaines, Richard V. 06747

Hydrogen*Geochemistry*

Implantation in olivine, enstatite: Lord, H. C.
03227

P-V-T measurements, oxygen fugacity: Presnall,
D. C. 01588

Hydrogen — Continued

Isotopes

- Abundance, ocean sediments: Savin, Samuel M. 08866
 Fractionation, graphite-calcite-methane-carbon dioxide: Bottinga, Yan. 04545
 H-3 in stony meteorites: Kruger, S. T. 02358
 O:H, sedimentary rocks, minerals: Savin, Samuel M. 10799
 Ratios, British Columbia: Ohmoto, Hiroshi. 04153
 Ratios, porphyry copper deposits: Sheppard, Simon M. F. 09684
 Ratios, sedimentary rocks, minerals: Savin, Samuel Marvin. 01668

Hydrogeology*Aquifer properties*

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 Carbonate, porosity, lithologic controls, Pennsylvania: Rauch, Henry. 08427
 Connecticut, southwestern, coefficients: Ryder, Robert B. 09927
 Florida, northeastern, Floridan aquifer: Leve, G. W. 00620
 Gulf Coastal Plain, Sparta Sand: Payne, J. N. 02081
 Hydraulic conductivity, sediment concentration, effects: Rahman, M. A. 10423
 Leaky, utilization: Saleem, Zubair A. 08428
 Limestone, hydrology, speleological approach: White, William B. 08975
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- Algae, Precambrian, Belt Series, molar tooth structures: Pflug, Hans D. 02551
 Fauna, Permian, Phosphoria rock complex, biostratigraphy: Yochelson, Ellis L. 00126
 Flora, Eocene-Miocene, Snake River basin: Axelrod, Daniel I. 01890
 Foraminifera, Triassic, Thayne's Formation, southeastern: Schroeder, Marvin L. 00936
 Mammalia, Birch Creek valley, Jaguar Cave, large dog: Lawrence, Barbara. 06168
 Mammalia, Pleistocene, Soda Springs area, mammoth, and other: Jones, Robert W. 00383
 Man, fossil, Holocene, Cascadia Cave, artifacts: Newman, Thomas M. 09198
 Palynomorphs, Tertiary, conifer pollen: Ting, William S. 07632
 Pisces, Devonian, Jefferson Fm., Lemhi Range: Denison, Robert H. 07168
 Pisces, Devonian, Water Canyon Fm., Dipnoi: Denison, Robert H. 02833

Petrology

- Idaho batholith, northeastern border, regional metamorphism: Chase, Ronald B. 10218
 Idaho County, augen gneiss, genesis, history: Greenwood, William Rucker. 06550
 Lolo Pass, Idaho batholith, skarn, reaction rims: Nold, John. 10990
 Pioneer Mountains, igneous, metamorphic rocks: Dover, James H. 10831
 Priest River-Hoodoo Valley area, metamorphism: Clark, Sandra Helen Becker. 06547
 Saint Joe area, metamorphism: Reid, Rolland R. 10253
 Seven Devils Mountains, plutons, mafic, granitic: White, Willis Harkness. 07205
 Snake River basalt, iddingsitization: Stone, George Thomas. 10087
 Snake River Plain, Cenozoic basalts: Stone, George Thomas. 01739
 Snow and Mallard Peaks area, Belt Series and igneous rocks: Hietanen, Anna. 09396
 Wallace Formation, regional metamorphism, diffusion limits: Hyndman, Donald W. 08744

Sedimentary petrology

- Belt Supergroup, middle carbonate units: McKelvey, Gregory E. 03856
 Eastern, Owl Cave fill, variance analyses, correlation factors: Ore, H. Thomas. 02538
 Snake River Plain, Melon Gravel: Malde, Harold E. 05449

Idaho—Continued*Sedimentary petrology*—Continued

Soils, northern, volcanic ash content: Smith, Henry W. 05622

Stratigraphy

Albion Range, pre-Tertiary rocks: Armstrong, Richard L. 08571

Leadore quadrangle, sections: Ruppel, Edward T. 02275

Lexicon of geologic names: Savage, C. N. 07903

Mississippian, carbonate strata, east-central: Huh, Oscar K. 01223

Ordovician, Kinnikinic Quartzite, redefinition, subdivision: Hobbs, S. W. 02246

Ordovician-Permian, Samaria Mountain area: Beus, Stanley S. 03861

Ordovician-Silurian, Laketown Dolomite, southeastern: Budge, David R. 08580

Precambrian, Belt Series, Snow and Mallard Peaks area: Hietanen, Anna. 09396

Precambrian, Wallace Formation and equivalents: McKelvey, Gregory E. 03856

Quaternary, Malad Hill, correlation: Swanson, Earl H., Jr. 06169

Structural geology

Beaverhead Range, central, tectonics, mechanisms, evolution: Scholten, Robert. 07899

Central, stratigraphic-petrologic discontinuity, strike-slip fault system: Yates, Robert G. 10059

Coeur d'Alene district, rock cleavage: Clark, Bruce R. 11231

Coeur d'Alene district, slaty cleavage, genesis: Clark, Bruce Robert. 02027

East-central, thrust faults, Devonian tectonics: Mapel, William J. 05184

Idaho County, deformation, regional metamorphism: Morrison, Donald A. 10245

Idaho porphyry belt, intrusions, tectonics: Olson, Harry J. 07199

King's Bowl lava field and Great Rift zone: Prinz, Martin. 07681

Mantle, seismic, gravity data: Dehlinger, P. 03623

Pioneer Mountains, orogenic history: Dover, James H. 10831

Priest River-Hoodoo Valley area, deformation, history: Clark, Sandra Helen Becker. 06547

Saint Joe area, deformation events, folds: Reid, Rolland R. 11075

Saint Joe area, multiple deformation, metamorphism, Beltian rocks: Reid, Rolland R. 05074

Seven Devils Mountains, plutons, emplacement, controls: White, Willis Harkness. 07205

SNAKE River basin, genesis: Axelrod, Daniel I. 01890

Snow and Mallard Peaks area, Belt Series: Hietanen, Anna. 09396

Southeastern, tectonics: Crosby, Gary W. 04512

Southern, Mesozoic orogenic activity: Misch, Peter. 08306

Trans-Idaho discontinuity: Yates, Robert G. 05065

Igneous rocks*Adamellite*

Petrology, zoning, Idaho, Albion Range: Armstrong, Richard Lee. 03865

Alkalic

Alteration, Greenland, Tasiussaq area, metamorphism: Dawes, Peter R. 01660

Composition, niobium mineralization, Ilimaussaq complex, Greenland: Hansen, John. 09393

Igneous rocks—Continued*Alkalic*—Continued

General description, intrusions, intersecting belts, New England: Chapman, Carleton A. 00583

Genesis, mantle convection: Keith, M. L. 04117

Geochemistry, Sr-87/Sr-86, origin: Hamilton, E. I. 04698

Melting, experimental studies, pyroxenite facies conversion: Tilley, C. E. 01567

Petrology, American Samoa: Macdonald, Gordon A. 09584

Petrology, mineralogy, Greenland, xenoliths, megacrysts: Bridgwater, D. 05025

Petrology, mineralogy, Greenland, xenoliths, megacrysts: Bridgwater, D. 05026

Petrology, Quebec, Brome Complex: Valiquette, Guy. 06929

Petrology, structural features, Greenland, Ilordleq area: Watterson, Juan. 01862

Stocks, zoning: Giles, David L. 04154

Alkalic-gabbroic

Petrology, Greenland, dikes: Bhattacharji, Somdev. 04437

Petrology, Greenland, dikes, multiple injection: Bridgwater, D. 04883

Alteration

Idaho, Snake River basalt, iddingsitization: Stone, George Thomas. 10087

North Carolina, Albemarle area: Ragland, Paul C. 10335

Andesite

Alteration, to fulgurite, Arizona, San Francisco Mts.: Davis, Donald G. 03191

Composition, genesis, California-Oregon lavas: Smith, A. L. 05294

Composition, North America, Cascade Range, variations: McBirney, Alexander R. 07734

General description, Cascade Range, conference papers: Dole, Hollis M. 07744

Geochemistry, circum-Pacific types, relation to mantle: Dickinson, William R. 00502

Geochemistry, genesis, orogenic regions, magma from mantle: Taylor, S. R. 08031

Geochemistry, spherulites, element distribution, growth rates: Kesler, Stephen E. 07521

Petrology, California, Sutter Buttes: Hatherton, Trevor. 02981

Petrology, composition, West Indies, St. Kitts, Mt. Misery: Baker, P. E. 03887

Petrology, Lesser Antilles: Baker, P. E. 07014

Andesite, basaltic

Petrology, composition, definition: Coats, R. R. 04645

Anorthosite

Differentiation, New York, Adirondack Mts.: Crosby, P. 05067

Geochemistry, K-Rb ratios, New York, Adirondack Mts.: Reynolds, R. C., Jr. 09925

Petrology, differences, layered cf. massifs: Romey, William D. 05621

Petrology, Quebec, Shawinigan Complex, differentiation: Martignole, Jacques. 06927

Aplite

Petrology, hydrothermal: Randall, John A. 04197

Basalt

Absolute age, oceanic, Earth age: Oversby, V. M. 07303

Absolute age, oceanic, Earth age: Ulrych, T. J. 07304

Absolute age, Pacific Ocean, East Pacific Rise: Fisher, David E. 01926

Igneous rocks—Continued

Basalt—Continued

- Alteration, metamorphism, New Mexico: Carpenter, John R. 02565
- Alteration, P-V curves, to 40 kb, experimental: Stephens, D. R. 07413
- Composition, akermanite stability, importance: Yoder, H. S., Jr. 01570
- Composition, differentiation, Hawaii: Macdonald, Gordon A. 06501
- Composition, genesis, California-Oregon lavas: Smith, A. L. 05294
- Composition, Hawaii, Makaopuhi lava lake, cooling rate effect: Evans, Bernard W. 02276
- Composition, paragenesis, Hawaii: Wright, Thomas L. 09742
- Composition, plagioclase phenocrysts: Hoffer, Jerry M. 06458
- Composition, Puerto Rico Trench, north slope, chemical analyses: Chase, R. L. 09502
- Composition, rare earth abundances: Frey, Fred A. 04359
- Composition, strontium isotopes, magmatic history: Dasch, E. Julius. 00045
- Composition, Washington, Grays River area: McKee, Edwin H. 02711
- Differentiation, Greenland, Scoresby Sund area, chemistry: Fawcett, J. J. 03586
- Differentiation, Greenland, Svartenhuk Peninsula, Tertiary: Clarke, D. B. 02063
- Differentiation, mechanism: Kuno, Hisashi. 04644
- Differentiation, Oregon, Spray area: Aoki, Ken-ichiro. 00666
- Fabric, structural features, pahoehoe cf. pillow lava: Jones, J. G. 03898
- Flood, mantle, convective cell indicators: Clifford, Paul M. 02213
- Fractionation, join nepheline-diopside-anorthite: Schairer, J. F. 01569
- General description, Connecticut, field trip: deBoer, Jelle. 05927
- General description, East Pacific Rise: Bonatti, Enrico. 03067
- General description, New Mexico, west-central, volcanic flows: James, H. L. 09140
- General description, Washington, Yakima River canyon: Diery, Hassan D. 00427
- Genesis, europium crystal chemistry: Philpotts, John A. 02603
- Geochemistry, Ar-40 excess, submarine pillows, Hawaii: Dalrymple, G. Brent. 03120
- Geochemistry, Atlantic, Pacific Oceans: Kay, Robert. 10753
- Geochemistry, Fe-Ti phenocrysts, Hawaii: Anderson, A. T. 10747
- Geochemistry, indium abundances: Schmitt, R. A. 08042
- Geochemistry, lanthanide content, Mohole: Masuda, Akimasa. 03218
- Geochemistry, oceanic, rare earths: Nicholls, G. D. 10754
- Geochemistry, phosphorus fractionation, Hawaii: Anderson, A. T. 10746
- Geochemistry, rare earths, Ba, partition coefficients, matrix, phenocrysts: Schnetzler, C. C. 08900
- Geochemistry, rare-earth abundances, Hawaii: Schilling, Jean-Guy. 10801
- Geochemistry, sulfide phases: Desborough, George A. 04124
- Geochemistry, trace-element fractionation, magma origin: Gast, Paul W. 04866

Igneous rocks—Continued

Basalt—Continued

- Magnetic polarity, correlation with petrology: Larson, E. E. 03905
- Magnetic polarity, correlation with petrology: Wilson, R. L. 03906
- Magnetic polarity, correlation with petrology, Columbia Plateau: Watkins, N. D. 03907
- Mineralogy, cooling history, Hawaii, Makaopuhi lava lake: Evans, Bernard W. 08681
- Petrology, absolute age, Montana, Yellowstone Valley: Bush, John H. 10213
- Petrology, collected papers: Hess, H. H. 09394
- Petrology, composition, West Indies, St. Kitts, Mt. Misery: Baker, P. E. 03887
- Petrology, geochemistry, Colorado Plateau, western: Brimhall, W. H. 08577
- Petrology, geochemistry, Hawaii, Haleakala Volcano: Macdonald, Gordon A. 02001
- Petrology, Hawaii, Kilauea Volcano, December 1965: Fiske, R. S. 02427
- Petrology, Hawaii, xenoliths, subcrustal source: Jackson, E. D. 05064
- Petrology, Idaho, Snake River Plain: Stone, George Thomas. 01739
- Petrology, mafic and ultramafic inclusions, depth of genesis: MacGregor, Ian D. 01948
- Petrology, magnetic properties, variations, initial quenching: Paster, Theodore P. 08838
- Petrology, Mid-Atlantic Ridge: Melson, W. G. 11241
- Petrology, Mid-Atlantic Ridge, gradation, tholeiitic to alkali: Aumento, F. 02166
- Petrology, Oregon, Coast Ranges, alkaline, tholeiitic: Snively, Parke D., Jr. 02446
- Petrology, South Sandwich Islands cf. Lesser Antilles: Baker, P. E. 07014
- Petrology, Washington, flood basalts, genesis: Lefebvre, Richard H. 07932
- Physical properties, elastic, Hawaii: Manghnani, Murli. 04664
- Physical properties, elasticity, experimental: Christensen, Nikolas I. 00015
- Physical properties, elasticity, experimental: Kaarsberg, Ernest A. 06764
- Physical properties, magnetic: Wasilewski, P. J. 08395
- Physical properties, magnetic, Arizona, Flagstaff area: Strangway, David W. 04285
- Physical properties, magnetic, Atlantic Ocean: Phillips, J. D. 07846
- Physical properties, magnetization, classes, oceanic rocks: Wasilewski, Peter J. 05243
- Physical properties, reversed magnetization vs. oxidation state: Wright, J. B. 04290
- Physical properties, strength, experimental: Kumar, A. 01503
- Physical properties, strength in vacuum: Krokosky, Edward M. 00504
- Physical properties, wave velocities, Hawaii: Manghnani, Murli H. 07940
- Pillow structure, North Carolina, Orange County: Wilson, William F. 04102
- Structural features, columnar joints, Hawaiian lava lakes, genesis: Peck, Dallas L. 02976
- Structural features, vesicles, flow-direction indicators, evaluation: Peterson, G. L. 08842
- Texture, resorption, convolute zoning in plagioclase: Blackerby, Bruce A. 06441
- Washington, Wenatchee Mts., Yakima Basalt, stratigraphy, structure: Rosenmeier, Frederick J. 00397

Igneous rocks—Continued

Basaltic

- Distribution, island arcs, relation to seismic activity: Sugimura, Arata. 04642
 General description, Triassic plugs, extrusive rocks, Massachusetts, Mt. Tom Range: Foose, Richard M. 04280
 Physical properties: Nafe, John E. 04640

Basic

- General description, Virginia, Buckingham County: Ern, Ernest H. 10298

Calc-alkalic

- Absolute age, White Creek batholith, British Columbia: Wanless, R. K. 01973
 Genesis, anatexis vs. differentiation, Ontario: Heimlich, R. A. 03002
 Genesis, anatexis vs. differentiation, Ontario: Johnston, W. G. Q. 03001

Carbonatite

- Experimental phase equilibria: Koster van Groos, A. F. 05215
 Genesis, experimental study: Franz, Gilbert W. 10102
 Genesis, experimental study: Koster van Groos, A. F. 05215
 Geochemistry, C, O isotopes, Quebec: Deines, Peter. 03037
 Geochemistry, iodine, uranium contents: Becker, V. 03797
 Magnetic anomalies, Ontario, complexes: Satterly, J. 00347

Composition

- Almandine and spessartine, equilibria, experimental: Hsu, L. C. 01933
 Fluorine, analysis technique, spectrophotometry: SenGupta, J. G. 03566
 Greenland, southern, Lillianmine area, mineralization: Ghisler, Martin. 07700
 Intrusives, effect of sediment assimilation: Lee, Donald E. 05195
 Montana, Highwood Mountains, analcime-rich: Wilkinson, J. F. G. 05298
 Neutron activation analyses: Gordon, Glen E. 11290
 Nevada, Nye County, Miocene: Anderson, R. Ernest. 06807
 Ontario, Sudbury nickel irruptive, electron-probe analysis: Naldrett, A. J. 03597
 Oxygen, X-ray fluorescence analysis, ultra-soft: Fabbri, B. P. 05549
 Precambrian plutonic rocks, rare-earth geochemistry: Goles, Gordon G. 06056
 Rare earths, abundances: Haskin, Larry A. 08027
 Standard reference samples, cesium, U.S.G.S.: Mountjoy, Wayne. 00777
 Standard rocks, wet chemical and X-ray fluorescence analysis: Carmichael, I. S. E. 02511
 Standard rocks, worldwide, chemical analyses: Pendias, Henryk. 06746
 Standard samples, Cu, Sr, Zn, U.S.G.S.: Huffman, Claude, Jr. 00795
 Standard samples, U.S. Geol. Survey, absorption method, major elements: Belt, Charles B., Jr. 07819
 Utah, Desert Mountain intrusives: Kattelman, Donald F. 06139
 Variations, X-ray fluorescence: Laidley, Richard A. 04273
 Virginia, Martinsville West quadrangle: Conley, James F. 05572

Igneous rocks—Continued

Diabase

- Composition, rare earth abundances: Frey, Fred A. 04359
 Differentiation: Davidson, A. 07640
 Geochemistry, atomic absorption, hydrofluoric acid technique: Langmyhr, F. J. 06738
 Geochemistry, genesis, rare earths, Ba abundances: Philpotts, J. A. 08019
 Geochemistry, New Jersey, Palisade sill: Philpotts, John A. 07841
 Petrology, composition, North Carolina Piedmont: Ragland, Paul C. 07069
 Petrology, Nipissing sill, Ontario, Cobalt area: Hriskevich, M. E. 03829
 Petrology, North Carolina, dikes: Justus, Philip S. 08537
 Physical properties, strength, water effect on compressive: Simpson, Dale R. 09466
 Textures, North Carolina, Deep River basin, dikes: Justus, Philip S. 08756
 Weathering, clay minerals, Oklahoma, Kiowa County: Nichols, Clayton R. 02501
Diabase-granophyre suite
 Geochemistry, trace-elements, Pennsylvania: Gottfried, David. 03928

Differentiation

- Basalt and andesite, experimental: Green, Trevor H. 00166
 British Columbia, Cooper Mtn. intrusions: Montgomery, Joseph Hilton. 07154
 California, Emigrant Gap area, ultramafic intrusions: James, Odette Francine Brimont. 09846
 Continental, sedimentary processes as cause: Barth, T. F. W. 09352
 Greenland, Ilmaussaq alkaline intrusion: Sorensen, H. 02959
 Hawaii: Macdonald, Gordon A. 07937
 K-Rb fractionation trends, covariance analysis: Shaw, D. M. 08878
 Layered intrusions, Greenland, Skaergaard, and others: Wager, L. R. 00366
 Maine, Tunk Lake granite pluton: Karner, Frank R. 00458
 Mechanisms, variable factors, checklist: Middlemost, Eric A. K. 05647
 Montana, Little Belt Mountains, Yogo Peak pluton: Woodward, Lee A. 10278
 Nevada, Santa Rosa Range: LeMasurier, Wesley E. 02695
 New York, Adirondack Mts., anorthosite-charnockite series: Letteney, Cole DeWitt. 01752
 Quebec, Monteregian Hills, Mt. Johnson: Philpotts, A. R. 05481
 Texas, Enchanted Rock batholith, mobile elements, trends: Ragland, Paul C. 08098
 Utah, Desert Mountain intrusives: Kattelman, Donald F. 06139

Diorite

- General description, Manitoba, Watt Lake area: Cranstone, Donald A. 07865
 Petrology, Massachusetts, postmetamorphic: Schnabel, R. W. 09932

Dunite

- Physical properties, deformational characteristics: Byerlee, James D. 02364

Experimental studies

- Alkalic, melting relations, crystallization sequences: Edgar, A. D. 08670
 Composition, granitic, eutectic liquids, pressure effects: Luth, W. C. 01573

Igneous rocks—Continued*Experimental studies—Continued*

- Diopside-albite-anorthite system, boundary curve, pressure effect: Lindsley, D. H. 01572
 Granite, melting, presence of water: Brace, W. F. 08618
 Hybridization, rapakivi texture: Elders, Wilfred A. 08673
 Melting, granodiorite and tonalite: Piwinski, A. J. 00462

Gabbro

- Alteration, Maine, Cape Neddick, contact: Woodward, H. H. 00461
 Composition, rare earth abundances: Frey, Fred A. 04359
 Composition, rare earths, Skaergaard intrusion, Greenland: Haskin, Larry A. 01977
 Differentiation, Ontario, Great Lakes Nickel intrusion: MacRae, N. D. 07789
 General description, Manitoba, Watt Lake area: Cranstone, Donald A. 07865
 Geochemistry, Lake Superior region, Duluth complex, rare-earth: Haskin, Larry. 07813
 Petrology, Greenland, Kialineq area: Brown, P. E. 06952
 Petrology, Mecklenburg complex, North Carolina: Hermes, O. Don. 01732
 Petrology, North Carolina, Mecklenburg complex: Hermes, O. Don. 05296
 Physical properties, deformational characteristics: Byerlee, James D. 02364
 Structural features, crystallization, Greenland, Sarqata qaa: Thompson, R. N. 06709

General

- Absolute age, Arizona, Santa Rita Mountains: Drewes, Harold. 04108
 Absolute age, British Columbia, Cooper Mtn. intrusions: Montgomery, Joseph Hilton. 07154
 Absolute age, California, southeastern: Adams, J. A. S. 07742
 Absolute age, Colorado, Black Canyon: Hansen, Wallace R. 02717
 Absolute age, Colorado, Needle Mountains: Bickford, M. E. 08610
 Absolute age, Colorado, Utah, Uncompahgre Plateau: Hedge, Carl E. 02685
 Absolute age, Idaho, St. Joe area: Reid, Rolland R. 11075
 Absolute age, Massachusetts, northeastern: Fairbairn, H. W. 09771
 Absolute age, Texas, Trans-Pecos area, Vieja Group: Twiss, Page C. 10090
 Absolute age, Utah, Cottonwood area: Crittenden, M. D., Jr. 08258
 Absolute age, Washington, Glacier Peak-Lake Chelan area: Cater, Fred W. 07785
 Composition, North Carolina, Virginia, Blue Ridge, magma series: Rankin, D. W. 08849
 Composition, petrology, Puerto Rico, intrusives: Nelson, Arthur E. 00799
 Crystallization, terminology questioned: Wagener, H. D. 03852
 Earth, similarity to Moon, spacecraft evidence: Wood, John A. 00001
 General description, absolute age, Oklahoma, basement rocks: Denison, Rodger E. 10069
 General description, Colorado, North-Middle Parks area: Hail, William J., Jr. 05982
 General description, Colorado, Puma Hills: Wobus, Reinhard A. 10277
 General description, Colorado, San Juan Mts.: Calkin, William S. 10214

Igneous rocks—Continued*General—Continued*

- General description, Colorado, Summer Coon Volcanic center: Lipman, Peter W. 05118
 General description, Guatemala, western: Bradford, Douglas E. 08619
 General description, Idaho, Pioneer Mountains: Dover, James H. 10831
 General description, Idaho, Seven Devils Mts., plutons: White, Willis Harkness. 07205
 General description, Manitoba, Halfway Lake area: Godard, J. D. 08058
 General description, New York, Connecticut, Hudson Highlands, Manhattan prong, parts: Prucha, John James. 11174
 General description, North Carolina, Chapel Hill quadrangle: Mann, V. I. 10908
 General description, North Carolina, Piedmont, eastern: Parker, John M., 3d. 04101
 General description, North Carolina, South Carolina, plutons: Butler, J. Robert. 08513
 General description, Saskatchewan, Wapaweka Lake area: Padgham, W. A. 10674
 General description, Washington, Glacier Peak volcano: Tabor, R. W. 10047
 General description, Washington, Lake Tapps quadrangle: Gard, Leonard M., Jr. 00313
 Geochemistry, general description, Idaho, Alder Creek district: Nelson, W. H. 04109
 Geochemistry, New Mexico, Sierra Blanca area: Thompson, Tommy B. 10089
 Geochemistry, Washington, Okanogan Range, compositional trends: Hawkins, James W., Jr. 08724
 Hydrogeology, Pennsylvania, Chester County: Poth, Charles W. 03192
 Petrology, absolute age, Washington, Okanogan Range: Hawkins, James W., Jr. 05261
 Petrology, Alaska, Clearwater Mts.: Glavinovich, Paul Stephen. 09833
 Petrology, California, Mt. Eden area: Taylor, Bruce E. 09306
 Petrology, Colorado, Spanish Peaks region: Johnson, Ross B. 01702
 Petrology, Idaho, Silver City area, northern: Asher, R. R. 03164
 Petrology, Michigan, Marquette-Sands quadrangles: Cair, Jacob E. 04113
 Petrology, mid-Tertiary events, Colorado, Front Range: Taylor, Richard B. 05126
 Petrology, Montana, Big Timber stock: Tappe, John. 10268
 Petrology, New Brunswick, Woodstock-Millville-Coldstream map-areas: Anderson, F. D. 02400
 Petrology, New York, Ohio quadrangle: Nelson, Arthur E. 04003
 Petrology, Saskatchewan, Hanson Lake area: Gaskarth, Joseph William. 01745
 Petrology, Wyoming, Grand Teton Natl. Park: Reed, John C., Jr. 07514
 Petrology, Wyoming, Medicine Bow Mts.: Houston, R. S. 10680
 Physical properties, effective stress law, test: Brace, W. F. 03804
 Physical properties, thermal conductivity, Canada: Mirkovich, V. V. 02354
 Textbook, introductory: Bayly, Brian. 00727
- Genesis*
 Mechanisms, variable factors, checklist: Middelemoest, Eric A. K. 05647
- Geochemistry*
 Canadian impact(?) craters: Currie, K. L. 01633

Igneous rocks—Continued*Geochemistry—Continued*

- Europium, anomalies, partition coefficients: Schnetzler, Charles C. 08871
- K-Rb fractionation, covariance analysis: Shaw, D. M. 02355
- Melting, phase relations, basanite, experimental: Ito, Keisuke. 05344
- Melting relations of series: Tilley, C. E. 01566
- Mn distribution, in biotite and hornblende: Greenland, L. Paul. 05293
- Molecular norm calculation, FORTRAN IV program: Creven, J. F. 10871
- Nickel-cobalt ratios, variations: Fleischer, Michael. 09282
- Oxygen isotopes, analyses, ratios: Taylor, Hugh P., Jr. 05353
- Physical, textbook: Smith, F. Gordon. 05611
- Primary oxidation variations, cooling history: Watkins, N. D. 10353
- Rare earths, barium, partition coefficients between matrix and phenocrysts: Schnetzler, C. C. 08900
- Rare earths, meteorite-eclogite-basalt, genetic sequence: Philpotts, John A. 08844
- Zircon, relation to P-T conditions: Dietrich, R. V. 00330

Granite

- Classification, Ontario, Lake Huron, North Shore, zircon studies: Robertson, James A. 07324
- Composition, New England: Liese, Homer C. 05049
- Composition, textures, structures, Wisconsin, Mellen area: Katzman, Michael M. 07792
- General description, Massachusetts, Hardwick Granite: Mook, Anita L. 09805
- General description, Rhode Island-Connecticut, Westerly and Narragansett Pier: Feininger, Tomas. 05192
- Geochemistry, atomic absorption, hydrofluoric acid technique: Langmyhr, F. J. 06738
- Geochemistry, indium abundances: Schmitt, R. A. 08042
- Geochemistry, New Hampshire, Conway Granite: Brimhall, Willis H. 07804
- Geochemistry, Rb and Sr isotopes, post-crystallization movement: Brooks, C. 02365
- Melting, experimental studies: Unger, J. D. 09722
- Melting, experimental study: Boettcher, A. L. 00463
- Petrology, composition, Wyoming, Laramie batholith: Condie, Kent C. 00008
- Petrology, Greenland, Kialineq area: Brown, P. E. 06952
- Petrology, Ontario, Cutler batholith: Cannon, William Francis. 07186
- Petrology, Ontario, Grenville and Lewisian granites: Chesworth, Ward. 09054
- Petrology, Texas, Buchanan massif, crystallization history: Cook, Beverly Gatlin. 07462
- Petrology, Wisconsin, Mellen Granite: Katzman, Michael M. 10973
- Physical properties, in place, cf. laboratory measurement: Simmons, Gene. 09465
- Physical properties, permeability at high pressure: Brace, W. F. 00571
- Physical properties, resistivity changes during fracture: Brace, W. F. 00279
- Physical properties, strength, experimental: Kumar, A. 01503
- Physical properties, strength, failure, experimental: Cherry, J. T. 11414

Igneous rocks—Continued*Granite—Continued*

- Textures, Maine, rapakivi: Elders, Wilfred. 07710
- Textures, rapakivi, Wisconsin, genesis: Elders, W. A. 00528

Granitic

- Absolute age, Minnesota, Precambrian intrusives, K-Ar: Hanson, G. M. 00581
- Absolute age, petrology, Washington, Pasayten River area: Tabor, R. W. 02713
- Absolute age, Wisconsin, northeastern: Banks, Philip O. 08608
- Alteration, Montana, Castle Mtn. mining district: Winters, Allen S. 02560
- Classification, British Columbia, Coast Mts.: Armstrong, J. E. 09088
- Composition, absolute age, Alaska: Reed, Bruce L. 00010
- Composition, anorthite component, effects in crystallization: Yoder, H. S., Jr. 01571
- Composition, California, Cartridge Pass pluton: Dodge, F. C. W. 00797
- Composition, eutectic liquids, pressure effects, experimental studies: Luth, W. C. 01573
- Differentiation, Maine, Tunk Lake pluton: Karner, Frank R. 00458
- Differentiation, metallogenic concentrations, California: Putnam, George W. 00816
- Differentiation, Utah: Moore, W. J. 04239
- Engineering properties, Nevada, Yucca Flat: Ege, John R. 06812
- General description, Manitoba, Watt Lake area: Cranstone, Donald A. 07865
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Igneous rocks—Continued

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 General description, Nevada, Nye County, Hot Creek Range: Cook, Harry E. 06495
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 Petrology, Arizona, Peloncillo Mts.: Gillerman, Elliot. 02643
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Igneous rocks—Continued

Methods—Continued

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 Volcanic ash, vesicular pore-size distribution curves, source indicator: Borchardt, G. A. 04810

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 Textures, Canada, plutons, genesis, mobility: Wynne-Edwards, H. R. 11132

Myrmekite

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 Geochemistry, Oregon, Newberry Volcano: Laidley, R. A. 08772
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Igneous rocks—Continued*Peridotite—Continued*

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 Melting, high pressure experiment: Kushiro, Ikuo. 11313
 Petrology, spinel-bearing in basalt, Hawaii, Oahu: Sakhno, V. G. 10942

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 Thermoluminescence, syenite, effect of pressure: Morency, Maurice. 03966

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Pumice

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 Petrology, Haiti, Meme mine: Kesler, Stephen E. 10956
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Rhyolite

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 Geochemistry, comendite, pantellerite, major-element variation: Noble, Donald C. 02674
 Geochemistry, Eu anomalies: Beeson, M. H. 11120

Igneous rocks—Continued*Rhyolite—Continued*

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 Petrology, differentiation, Central America: McBirney, Alexander R. 07875
 Structural features, Missouri, St. Francois Mts.: Zimmerman, R. A. 01452
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Silicic

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Textures

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 Alteration, serpentinization, California, Burro Mtn.: Page, Norman J. 10696
 Composition, Cl and F abundances: Stueber, A. M. 00903
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Igneous rocks—Continued

Ultramafic—Continued

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Igneous rocks—Continued

Volcanics—Continued

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Igneous rocks—Continued**Volcanics—Continued**

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Igneous rocks—Continued**Volcanics—Continued**

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Illinois—Continued

Geophysical surveys—Continued

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Fishhook gas field, Silurian limestone: Meents, Wayne F. 07841

Gard's Point oil field, Ste. Genevieve Limestone: Sparks, Jackson B. 07842

Illinois basin, base of New Albany black shale: Illinois Geological Society. 07826

Iola Consolidated oil field, Barlow lime: Luttrell, Homer. 07847

New Baden East oil field, Niagaran reef: Bristol, Hubert M. 07852

Oak Point oil field, Aux Vases Fm.: Loveless, Ernest, Jr. 07854

Patoka East oil field: Lester, John L. 11316

Illinois—Continued*Maps, structure—Continued*

Richview oil pool, Cypress Fm.: Williamson, A. D. 07951

Saint James oil field: Buehner, J. H. 07952

Southern, Beech Creek Limestone: Bristol, Hubert M. 00808

Wapella East oil field, Silurian: Harris, Lloyd A. 07957

Mineralogy

Collecting, north-central sites: Scheffel, Mildred D. 01847

Heavy minerals, southern, occurrence, cf. Florida: Hunter, Ralph E. 02826

Paleontology

Anthozoa, Silurian, Niagaran dolomite, Chicago area: Stumm, Erwin C. 06898

Asterozoa, Mississippian, Golconda Formation, new ophiuroid: Bjork, Philip R. 00489

Brachiopoda, Mississippian, Glen Dean Limestone, shell color patterns: Nitecki, Matthew, H. 02193

Bryozoa, Ordovician, Champlainian limestones, northwestern: Bork, Kennard B. 05771

Bryozoa, Ordovician, Champlainian limestones, northwestern: Bork, Kennard B. 09357

Cephalopoda, Pennsylvanian, Middle, squid: Johnson, Ralph Gordon. 00087

Crinoidea, Mississippian, Burlington Limestone, west-central: Good, Donald L. 01846

Crinoidea, Mississippian, Chester Series, southern, allagecrinids: Gutschick, Raymond C. 05674

Crinoidea, Pennsylvanian, LaSalle Formation, Livingston County, colony: Earth Science. 01844

Crustacea, Pennsylvanian, Mazon Creek area: Schram, Frederick R. 11004

Devonian, Cedar Valley Formation, correlation, Tully Formation: Cooper, G. Arthur. 02886

Fauna, Pennsylvanian, Francis Creek Shale, Braidwood and Essex concretions: Duluk, Cecilia E. 01845

Foraminifera, Mississippian, Chouteau Group limestones: Conkin, James E. 02523

Fossils, problematic, Pennsylvanian, Francis Creek Shale, northern: Johnson, Ralph Gordon. 10698

Gymnosperms, Pennsylvanian, Mattoon Formation, seed fern roots: Dennis, Robert L. 03135

Gymnosperms, Pennsylvanian, McLeansboro Formation, seed: Taylor, T. N. 02323

Gymnosperms, pteridophytes, Carboniferous, coal beds: Delevoryas, Theodore. 07920

Insecta, Pennsylvanian, Francis Creek Shale, megasecopterous nymphs: Carpenter, F. M. 11183

Invertebrata, Devonian, Pennsylvanian, Normal-Peoria area, collecting sites: Scheffel, Mildred D. 01656

Mammalia, Pleistocene, geographic distribution: Ray, Clayton E. 04379

Mississippian, Glen Dean to Kinkaid Formations, paleoecology: Carozzi, Albert V. 03136

Palynology, Pennsylvanian, Carbondale Formation, coal: Peppers, Russel A. 08839

Pisces, Pennsylvanian, lamprey: Bardack, David. 05254

Pteridophyte, Pennsylvanian, Kewanee Group, Sahara Coal Mine, new: Darrah, Elsie Louise. 02552

Pteridophytes, Pennsylvanian, Calhoun coal, Berryville area: Phillips, Tom L. 00622

Illinois—Continued*Paleontology—Continued*

Pteridophytes, Pennsylvanian, coal balls: Frankenberg, J. M. 02314

Pteridophytes, Pennsylvanian, Mattoon Formation, new: Dennis, Robert L. 04495

Sedimentary petrology

Black roof shale, fissile, fabric, electron micrograph: O'Brien, Neal R. 04784

Borden Siltstone, turbidites: Lineback, Jerry A. 02532

Chester area, Glen Dean to Kinkaid carbonate microfacies: Carozzi, Albert V. 03136

Illinois basin, Ste. Genevieve Formation, diagenesis: Choquette, Philip W. 03167

McHenry County, surficial deposits: Smith, W. Calhoun. 00072

Oolites, Mississippian, allochthonous, autochthonous: Lacey, James Edward. 01347

Pleasantview Sandstone, channel and sheet sands: Laury, Robert L. 03563

Underclays, Pennsylvanian: Odom, I. E. 02825

Woodfordian loesses, mineral zonation, age: Frye, John C. 02533

Stratigraphy

Devonian, Cedar Valley Formation, correlation, Tully Formation: Cooper, G. Arthur. 02886

Devonian, southern, Middle shales: Grimmer, John C. 06723

Devonian-Mississippian, boundary, western: Conkin, James E. 08649

Mississippian, Glen Dean to Kinkaid Formations, paleoecology: Carozzi, Albert V. 03136

Pennsylvanian, Carbondale Formation, Dykersburg Shale Member: Hopkins, M. E. 05040

Pennsylvanian, coal measures, north-central: Smith, W. H. 01521

Pennsylvanian, Illinois basin, cyclothems, cf. Europe: Westoll, T. S. 05870

Pennsylvanian, Pleasantview Sandstone, facies: Laury, Robert L. 03563

Pleistocene, Iowan drift, lower Wisconsinan sub-stages: Leighton, Morris M. 03449

Pleistocene, late-Altonian sequence, northern: Kempton, J. P. 03979

Pleistocene, Wisconsinan Stage, definition, sub-stages: Frye, John C. 04839

Structural geology

Cave-in-Rock district, mineral deposits, controls: Pinckney, D. M. 11242

Impact phenomena*Cratering*

Deformational microstructures, cf. cryptoexplosion structures: Bunch, T. E. 07457

Meteorite, characteristic features, world inventory: Short, N. M. 07497

Stages of development: Gault, Donald E. 07406

Deformation

Quartz, brittle fracture, Arizona, Meteor Crater: Sclar, Charles B. 07458

Quartz, experimental study: Christie, J. M. 07471

General

Diagnostic features: French, Bevan M. 07507

Metamorphism

Arizona, Meteor Crater: Brett, Robin. 05191

Products

Impactite, metallic spherule content: Brett, Robin. 07469

Throw-out particles, size-frequency distribution: Fielder, G. 05097

Impact phenomena—Continued*Shatter cones*

Diagnostic of meteor impact: Dietz, Robert S. 07498

Shock metamorphism

Conference papers, 1966: French, Bevan M. 07404

Crystalline damage and other deformation: Dachille, Frank. 07464

Diagnostic features: French, Bevan M. 07409

Evidence, Cretaceous strata, Alberta: Carrigy, Maurice A. 07505

Feldspar, potash, structural state as evidence: Aitken, F. K. 07463

Meteor crater rocks, P-T histories: Chao, E. C. T. 07491

Phase equilibria, P-T conditions: Bell, Peter M. 07412

Quebec, Clearwater Lake islands, granitic rocks: McIntyre, Donald B. 07504

Zoning, Canada, Brent, East Clearwater Lake: Dence, M. R. 07492

Inclusions*Basalt*

Hawaii, petrology, genesis: Jackson, Everett D. 07903

Mafic and ultramafic, depth of magma origin: MacGregor, Ian D. 01948

Chert

Algal filaments, Animikie cherts, Lake Superior region: Moorhouse, W. W. 07803

Diamond

Mineral, descriptions: Meyer, Henry O. A. 01565

Eclogite

Alaska, Nunivak Island, volcanic ash: Hoare, J. M. 07889

Kimberlite host: Kushiro, Ikoo. 06753

Forsterite

Orientation relation in diamond, precession camera study: Meyer, H. O. A. 01579

Kimberlite

General: Dawson, J. B. 04228

Peridotite

Alaska, Yukon-Tanana Upland, Prindle Volcano: Foster, Helen L. 08272

Phlogopite

Gold content: Linn, T. A., Jr. 09424

Ultramafic

Alaska, Nunivak Island, volcanics, genesis: Hoare, J. M. 08280

Hawaii, He and Ar isotopes: Funkhouser, John G. 02361

Indiana*Areal geology*

Illinois basin: Swann, David H. 07827

Washington County: Sunderman, Jack A. 07025

Economic geology

Coal, composition, proximate and ultimate analyses: Miller, Louis V. 06917

Coal, reserves, lithofacies variations, effects: Friedman, S. A. 10104

Gravel, Big Blue River reservoir site: Renick, Abbott. 06096

Limestone, Devonian, Silurian, resources: French, Robert R. 04483

Limestone, Downeyville Reservoir site: Renick, Abbott. 06097

Limestone, gravel, Big Walnut Reservoir site: Heising, Leonard F. 06095

Mineral resources, Washington County: Sunderman, Jack A. 07025

Indiana—Continued*Economic geology—Continued*

Natural gas, Illinois basin: Bond, D. C. 03406

Natural gas, storage, Illinois basin: Thomas, Ralph N. 07962

Petroleum, Illinois basin, exploration, future: Miller, D. N., Jr. 07963

Petroleum, Illinois basin, Waltersburg Formation, geochemistry: Mast, R. F. 01519

Petroleum, natural gas, Illinois basin, symposium: Illinois Geological Society. 07826

Petroleum, production, 1966: Carpenter, G. L. 06664

Petroleum, production, 1967: Carpenter, G. L. 06665

Petroleum, southwestern, fields, list: Brownfield, Robert L. 07832

Petroleum, Trenton field and Illinois basin: Dawson, T. A. 07830

Engineering geology

Dams, Decatur County, Sand Creek, site reconnaissance: Indiana Flood Control. 11309

Strip mined lands, use, glaciated vs. non-glaciated land: Guernsey, Lee. 06918

General

Directory, oil and gas information, Illinois basin: Smith, Avery E. 07885

Geochemistry

Coal, proximate and ultimate analyses: Miller, Louis V. 06917

Southern, Waltersburg shale and crude oil, compositional trends: Mast, R. F. 01519

Strip mined lands, spoil banks, pH, relation to glacial till content: Guernsey, Lee. 06918

Geomorphology

Blue Spring Cave, ground-water flow system conduit: Palmer, Arthur N. 06911

Jackson County, Chestnut Ridge, glacial origin: Jacobs, Alan M. 10107

Mitchell Plain, unconsolidated sediments, interpretation: Powell, Richard L. 10116

Ohio Valley, south-central, terraces: Straw, W. Thomas. 06909

Southern, landform evolution: Gray, Henry H. 10105

Wabash River system, topological structure, model test: Ranalli, G. 02989

Wyandotte Cave and Blue River terraces, relationship: Powell, Richard L. 06910

Geophysical surveys

Illinois basin, seismic, gravity, magnetic: Dawson, Woodson H. 07960

Illinois basin, well logging, recommended programs: Neal, Marvin R. 07961

Glacial geology

East-central, Erie lobe margin: Wayne, William J. 06915

Ohio Valley, south-central, Wisconsin outwash: Straw, W. Thomas. 06909

Tinley Moraine: Schneider, Allan F. 06914

Valparaiso area, morainial gap, history: Schneider, Allan F. 10120

Hydrogeology

Big Blue River basin, ground-water resources: Nyman, Dale J. 06091

Big Walnut Creek basin, ground-water resources: Watkins, Frank A., Jr. 06090

Delaware County, water resources: Hoggatt, R. E. 06340

Flatrock River basin and Downeyville Reservoir site, ground water: Nyman, Dale J. 06092

Lake County, aquifers, potential: Rosenshein, J. S. 01608

Indiana—Continued*Hydrogeology—Continued*

- Lost River basin, subterranean drainage routes: Murdock, Stanley H. 06912
 Mitchell Plain, ground-water flow system, Blue Spring Cave conduit: Palmer, Arthur N. 06911
 Porter and La Porte Counties, ground-water potential: Rosenshein, J. S. 01528
 South Bend area and Bartholomew County, ground-water research: Rockaway, J. D. 09500

Maps, geologic

- Lake County: Rosenshein, J. S. 01608
 Porter and La Porte Counties: Rosenshein, J. S. 01528
 Sand Creek reservoir and Westport areas: Indiana Flood Control. 11309

Maps, ground water

- Lake County: Rosenshein, J. S. 01608
 Porter and La Porte Counties: Rosenshein, J. S. 01528

Maps, mineral resources

- Clays, shale, operation locations: Webb, William M. 08985
 Construction materials, crushed stone operations: French, R. R. 08984

Maps, structure

- Heusler oil field, Waltersburg Fm.: Combs, D. J. 07846
 Illinois basin, base of New Albany black shale: Illinois Geological Society. 07826
 Montgomery oil pool, Renault Limestone: Loveless, Ernest. 07851
 Owensville East oil pool, Barlow lime: Eberle, Robert F. 07948
 Plainville pool, Renault Limestone: Loveless, Ernest. 07950
 Saint Meinrad oil field, Tar Springs sand: Smith, Avery E. 07953
 Terre Haute East oil pool, Devonian limestone: Shane, John W. 07955
 Union Chapel oil pool, Golconda Limestone: Reynolds, Doug. 07956

Mineralogy

- Clay minerals, Great Miami River basin, sediments: Huff, Warren D. 01222
 Clay minerals, Pembroke soils, quantitative analysis: Post, Donald F. 06919
 Clay minerals, Pembroke soils, south-central: Post, Donald F. 06903

Paleontology

- Branchiopoda, cladoceran remains in lake sediments, productivity: Harmsworth, Rodney V. 06125
 Conodonts, Devonian, Michigan basin: Orr, Robert William. 01737
 Conodonts, Devonian, Middle-Upper boundary beds, correlation, n.spp.: Orr, R. William. 05772
 Conodonts, Devonian, North Vernon Limestone, Beechwood Member: Orr, R. William. 05761
 Conodonts, Ordovician, Cincinnati region, faunas, species: Kohut, Joseph J. 06030
 Conodonts, Ordovician, Maysville-Richmond strata, Cincinnati region: Kohut, Joseph James. 01733
 Conodonts, Silurian, Brassfield Limestone, Salamonie Dolomite: Nicoll, Robert S. 06701
 Crinoidea, Silurian, Waldron Shale, ontogeny, analysis: Macurda, Donald B., Jr. 05740

Indiana—Continued*Paleontology—Continued*

- Fauna, Ordovician, Tanner Creek Formation, paleoecology: Fox, William T. 05678
 Foraminifera, Silurian, arenaceous, descriptions, zonation: Mound, Michael C. 04550
 Gastropoda, operculum, Devonian(?), Bunker Hill: Solem, Alan. 05676
 Invertebrata, Ordovician, Saluda Formation, southeastern: Hatfield, Craig Bond. 03724
 Pisces, Pennsylvanian, Logan Quarry, shark scales: Zangerl, Rainer. 08943

Sedimentary petrology

- Bethel-Sample Formations, delta distributary, permeability: Hrabar, Stephanie V. 01220
 Great Miami River basin, clay sediments, provenance: Huff, Warren D. 01222
 Illinois basin, Ste. Genevieve Formation, diagenesis: Choquette, Philip W. 03167
 Northern, Detroit Formation, penomosaic texture: Rooney, Lawrence F. 03548
 Northern, Detroit River Formation, evaporites, carbonates: Doheny, Edward John. 01727

Stratigraphy

- Devonian, Beechwood Member of North Vernon Limestone, southern: Orr, R. William. 05761
 Devonian, Detroit River Formation, northern: Doheny, Edward John. 01727
 Devonian-Mississippian, New Albany Shale: Lineback, Jerry A. 03779
 Mississippian, Golconda Fm., Jackson sand member: Fritz, Arthur J. 07828
 Ordovician, Lexington Limestone and Kope Formation, southeastern: Brown, George D. 00929
 Ordovician, Saluda Formation, southeastern, paleoecology: Hatfield, Craig Bond. 03724
 Ordovician, Tanner Creek Formation, paleoecology: Fox, William T. 05678
 Pennsylvanian, classification: Wier, Charles E. 06916
 Silurian, Brassfield Limestone, Salamonie Dolomite: Nicoll, Robert S. 06701

Structural geology

- Tippecanoe County, bedrock surface, computer contouring: Lowell, Brent. 06908

Indiana*Abundance*

- L-group chondrites: Tandon, S. N. 04867
 Meteorites, terrestrial rocks: Schmitt, R. A. 08042

Industrial minerals*Appalachians*

- Abrasives, resources, review: French, Alice E. 01388
 Resources: U.S. Geological Survey. 01408
 Strontium, resources, review: Cox, Dennis P. 01372

British Columbia

- Resources summary, 1967: British Columbia Minister of Mines. 06100

Colorado

- Evergreen area, rutile, occurrence: Sheridan, Douglas M. 01142

Exploration

- Economics: Wimpfen, Sheldon P. 02392
 Methods, principles, new approach: Patton, John B. 07447

Maine

- Exploration, recent activity, review: Young, Robert S. 05421

Industrial minerals—Continued*New Brunswick*

Resources, silica, possibilities: Hamilton, J. B. 07417

New York

Peekskill area, emery: Davis, James F. 01880

Pennsylvania

Franklin County, southeastern, resources: Root, Samuel I. 06744

United States

Symposium, fourth, Texas 1968: Brown, L. F., Jr. 07446

Infrared methods*Applications*

Aerial photography, geologic interpretation: Fischer, W. A. 09665

Engineering studies, terrain: Parker, D. C. 06393

Environmental engineering, aerial surveys: Matalucci, Rudolph V. 04860

Geoscience problems: VanLopik, Jack. 00351

Line-scanning techniques, volcanoes, geothermal fields: Friedman, Jules D. 06389

Mineral exploration: Reeves, R. G. 06883

Minerals, surficial reflectance, solar radiation, measurement: Hovis, W. A., Jr. 11401

Soils and rocks, imagery: McLerran, J. H. 00144

Subsurface coal fires, detection, aerial scanning: Fisher, Wilson. 08689

Terrain analysis, remote: Simonett, David S. 08887

Instruments

Emissivity box, land surface emission measurements: Cronin, John F. 11143

Line scan device, air- or spaceborne: Lowe, D. S. 06397

Line scan device, air- or spaceborne: Stingelin, Ronald W. 06398

Line-scanning system, airborne: Slaney, V. R. 10934

Interpretation

Space photos, Louisiana-Florida coast: Anson, Abraham. 02373

Water-pollution, coal mine areas, Appalachians: Strandberg, Carl H. 02376

Techniques

Desert terrain, radiation attenuation with altitude: Hovis, W. A., Jr. 01680

Interferometric, land surface emission measurements: Cronin, John F. 11143

Interferometry, multiple-scan, minerals, emission measurement: Low, M. J. D. 11140

Solar reflection measurement, surficial minerals: Hovis, W. A., Jr. 11401

Tektites, water content: Sentfle, F. E. 08483

Terrain analysis, imagery, waveform analysis: Witmer, Richard Everett. 07161

Infrared surveys*California*

Mojave Desert, test flights, attenuation of radiation: Hovis, W. A., Jr. 01680

Mono Lake area, thermal anomalies: Friedman, Jules D. 07730

Great Lakes region

Great Lakes, lower, shorelines: Slaney, V. R. 10934

Hawaii

Alae Lava Lake: Decker, Robert W. 07757

Infrared surveys—Continued*Massachusetts*

Merrimack River estuary: Cotton, John E. 09763

New York

Catskill Front, Devonian sandstone, interpretation: Mutch, Thomas A. 01463

Insecta*Coleoptera*

Pleistocene, Ohio, Garfield Heights area: Coope, G. R. 01886

Cotrachechites lithinus, n.gen., n.sp.

Paleocene, upper, North Dakota, Dickinson area: Fennah, R. G. 00325

Enallagma kirkbyae

Pleistocene, California, Bautista Formation, formerly *Sobobapteron*: Carpenter, F. M. 06335

Eriocampa

Eocene, British Columbia, Princeton Group, central: Rice, H. M. A. 01611

Hemiptera

Pleistocene, Ohio, Garfield Heights area: Coope, G. R. 01886

Jurassic

New Mexico, Todilto Formation, northern: Bradbury, John P. 07754

Megasecoptera

Pennsylvanian, Illinois, Francis Creek Shale, nymphs, concretions: Carpenter, F. M. 11183

Protoreisma

Permian, Oklahoma and Moravia, nymphs: Kukulova, Jarmila. 11182

Pseudosiohla

Eocene, British Columbia, Princeton Group, central: Rice, H. M. A. 01611

Rhyncolus kathrynae, n.sp.

Pliocene, Nevada, Fernley area, in pine branch: Sleeper, Elbert L. 04179

Sobobapteron Pierce

Taxonomy, reassigned as junior synonym of *Enallagma*: Carpenter, F. M. 06335

Taxonomy

Ulmeriella, revision: Emerson, Alfred E. 03871

Tertiary

Utah, Green River Formation, larval(?) tracks: Moussa, Mounir T. 06007

Ulmeriella

Revision of genus: Emerson, Alfred E. 03871

Intrusions*Absolute age*

Washington, Glacier Peak-Lake Chelan area: Cater, Fred W. 07785

Breccia

Arizona, Bisbee area: Bryant, Donald G. 00540

Concordant

Depth control: Mudge, Melville R. 01087

Diatremes

Petrology, Montana: Hearn, B. Carter, Jr. 00123

Wyoming-Colorado, sedimentary inclusions: Chronic, John. 00019

Domes

New Hampshire, Oliverian domes, regional relations: Naylor, Richard S. 07244

General

Arizona, Dos Cabezas Mountains, absolute age: Erickson, Rolfe C. 08265

Colorado, Spanish Peaks region: Johnson, Ross B. 01702

Greenland, Tasiussaq area, Precambrian alkalic: Dawes, Peter R. 01660

Guatemala, serpentinite, emplacement, age: Bonis, Samuel B. 08613

Intrusions—Continued*General—Continued*

- Mexico, Baja California, Concepcion Bay area: McFall, C. Carew. 02556
 North Carolina, Piedmont, eastern: Parker, John M., 3d. 04101
 Northwest Territories, Benjamin Lake map-area: Davidson, Anthony. 00849
 Quebec, Matagami area: Sharpe, John I. 07859
 Texas, Jeff Davis County, emplacement: Anderson, Jay Earl, Jr. 10061
 Virginia, Buckingham County, basic: Ern, Ernest H. 10298
 Washington, Carlton area, Methow Valley: McKee, Bates. 00399

Layered

- Crystal fractionation in magmas, various examples: Wager, L. R. 00366
 Differentiation, Muskox intrusion, granophyre, Northwest Territories: Pouliot, Gaston. 06930
 Greenland, Sarqata qaqa gabbro, folding and slumping: Thompson, R. N. 06709
 Greenland, Skaergaard, layering mechanism: Wager, L. R. 04643
 Greenland, Skaergaard, rare earths: Haskin, Larry A. 01977
 Labrador, Kiglapait complex, K-Rb fractionation: Morse, S. A. 07830
 Minnesota, Fort Williams area, Great Lakes Nickel body: MacRae, N. D. 07789
 Northwest Territories, Muskox intrusion, sulfur isotopes: Sasaki, Akira. 08080
 Ontario, Thunder Bay district, Great Lakes Nickel body: Mainwaring, P. R. 07790
 Petrology, Ontario, Sudbury irruptive: Stevenson, John S. 05079

Lenses

- Ontario, Porcupine district, origin, supercooling: Naldrett, A. J. 02176

Lopoliths

- Mechanism, Nevada, Lovelock area: Speed, Robert C. 08044

Mechanism

- Assimilation, dispersal, Haiti, Terre-Neuve stock, marble: Kesler, Stephen E. 05651
 California, Clark Mountains, pluton, salt-dome tectonics analog: Burchfiel, B. C. 10829
 California, Emigrant Gap area, ultramafic bodies: James, Odette Francine Bricmont. 09846
 Colorado, Elk Mountains, Snowmass Mtn. pluton: Allen, Jack C. 10199
 Concordant intrusives, depth control, magma pressure: Mudge, Melville R. 01087
 Georgia, Columbia County, ultra-basic bodies, diapires: McLemore, William H. 00893
 Michigan, Keweenaw fault area: Chaudhuri, S. 07816
 Nevada, Lovelock area, lopolith: Speed, Robert C. 08044
 Pegmatite, Wyoming: Proctor, Paul Dean. 10940
 Peridotite-gabbro complexes, alpine dunites, model study: Bhattacharji, Somdev. 07825
 Quebec, Monteregian Hills, Mt. Johnson: Philpotts, A. R. 05481
 Salt domes, gneiss domes, model study: Fletcher, Raymond Charles. 01343
 Tectonic, Burro Mountain ultramafic body, California: Burch, Stephen H. 01124

Metalliferous

- Distribution, mineral belts: Landwehr, W. R. 07687

Intrusions—Continued*Pipes*

- Breccia, New Mexico: Thompson, Tommy B. 07639
 Diamond, mechanism: Kennedy, George C. 04229
 Kansas, Riley County, kimberlite: Brookins, Douglas G. 07805
 Kansas, Riley County, kimberlite: Brookins, Douglas G. 10066
 Kimberlite, surficial expression: Mannard, G. W. 04716
 Ontario, Batchawana Bay, Tribag mine: Armbrust, George Aime. 03023

Plugs

- Massachusetts, Mount Tom Range: Foose, Richard M. 04280

Plutons

- Arizona, Ajo area, Cornelia porphyry copper complex: Wadsworth, William B. 10992
 British Columbia, Adamant monzonite, petrology: Fox, Peter Edward. 00851
 British Columbia, Kootenay arc, central: Crosby, Percy. 06321
 California, northern, Bucks pluton, magnetic reversals: Merrill, Ronald Thomas. 01754
 California, Sierra Nevada, reverse-zoned, evolution: Turner, George D. 10052
 California-Nevada, White Mts., Inyo batholith: Krauskopf, Konrad B. 03057
 California-Nevada, White Mts., Inyo batholith: Shea, James H. 03056
 California-Nevada, White Nts., Inyo batholith, classification: Krauskopf, Konrad B. 00549
 Canada, Frontenac axis, genesis, mobility: Wynne-Edwards, H. R. 11132
 Colorado, Front Range, Precambrian geochronology: Hutchinson, Robert M. 10234
 Colorado, Mesquite Range, Buckskin Gulch complex: Kuntz, Mel A. 08770
 Idaho, Beaverhead pluton: Scholten, Robert. 07899
 Idaho, porphyry belt, structural controls: Olson, Harry J. 07199
 Maine, Moxie complex, petrology, structure: Espenshade, Gilbert H. 09770
 Maine, Tunk Lake Granite, crystallization: Karner, Frank R. 07907
 Mechanism, Maine, coastal plutons, cf. New Hampshire: Chapman, Carleton A. 07256
 Mexico, Baja California, El Pinal tonalite: Duffield, Wendell A. 10950
 New England, Devonian events: Page, Lincoln R. 07255
 New York, Stony Point area, Cortlandt complex: Ratcliffe, Nicholas M. 01905
 New York, Stony Point area, post-tectonic intrusion: Ratcliffe, Nicholas M. 09818
 North Carolina, Piedmont, Mecklenburg complex: Hermes, O. Don. 05296
 North Carolina, South Carolina, petrology: Butler, J. Robert. 08513
 Ontario, Lake Township: Laakso, R. K. 00582
 Quebec, Mongowin pluton: Card, K. D. 07866
 Quebec, Monteregian, magnetic anomaly: Kumarapeli, P. S. 01958
 South Carolina, Winnsboro complex, contact relations: Wagoner, H. D. 08563
 Vermont-Massachusetts, ultramafic: Chidester, Alfred H. 07253

Intrusions—Continued

Plutons—Continued

- Virginia, Grayson County, Striped Rock granite, emplacement level: Riecken, Charles C. 08555
- Washington, Pasayten River area, granitic: Tabor, R. W. 02713

Sheet

- Greenland, Kap Farvel area: Sutton, J. 01861

Sills

- New Jersey, Palisade diabase, rare earths, barium: Philpotts, John A. 07841
- Ontario, Cobalt area, Nipissing diabase: Hriskevich, M. E. 03829
- Ontario, Porcupine district, Dundonald sill: Naldrett, A. J. 02176

Structure

- British Columbia-Washington, coast crystalline belt: White, William H. 09086
- Colorado, Treasure Mountain: Mutschler, Felix Ernest. 07196
- Gravity data, use in prediction: Bonini, W. E. 06830
- Idaho, Seven Devils Mts., controls, emplacement: White, Willis Harkness. 07205
- Manitoba, Guay Lake area: Kornik, L. J. 08059
- New England, intersecting belts: Chapman, Carleton A. 00583
- Ontario, Denison-Waters area: Card, K. D. 01007
- Ontario, Kashabowie area: Hodgkinson, J. M. 00586
- Plagioclase zoning, Mount Pilchuk, Washington: Wiebe, Robert A. 04499
- Utah, Juab County, Desert Mountain peaks: Kattelman, Donald F. 06139
- Virginia, Martinsville West quadrangle: Conley, James F. 05572

Zoned

- California, Cartridge Pass pluton, biotite, composition: Dodge, F. C. W. 00797

Invertebrata

Atlas

- Illustrated, selected specimens: Case, Gerard R. 04347

Catalogs

- Canada Geological Survey collection, type fossils: Bolton, Thomas E. 06184

Cretaceous

- Kansas, Niobrara Formation: Miller, Halsey W. 09887
- Mexico, San Luis Potosi, Cardenas Fm.: Myers, Ralph L. 07967
- Texas, Woodbine-Eagle Ford transition, Tarrant Member: Powell, J. Dan. 07780
- United States, Colorado Group, paleoecology: Kauffman, Erle G. 10877

Devonian

- Appalachians, Oriskany Sandstone, environment indicators: Seilacher, Adolf. 09611
- Georgia, Frog Mountain Sandstone, list: Nunan, Walter Edward. 00890
- Illinois, Cedar Valley Formation, Milan area, collecting: Scheffel, Mildred D. 01656

General

- Developments, trends, outlooks: Moore, Raymond C. 06031

Geographic distribution

- Ordovician, marine provinces, regional faunas: Fell, Barraclough H. 10862

Mesozoic

- General, associated with dinosaurs: Kurten, Bjorn. 06166

Invertebrata—Continued

Mississippian

- Kentucky, Salem Limestone, list: Taylor, Ronald S. 09309
- New Mexico, Lake Valley Formation, bioherms: Ruedisili, Lon Chester. 02042

Paleozoic

- Evolution of marine communities: Bretsky, Peter W. 00178
- Mexico, Oaxaca, Lower: Robison, Richard A. 11003

Pennsylvanian

- Illinois, Normal-Peoria area, collecting sites: Scheffel, Mildred D. 01656
- Ohio, Upper Brush Creek Limestone, affinity indices: Boreske, John R., Jr. 08115

Permian

- Nevada, Loray Formation: Mayou, Taylor V. 10243

Quaternary

- California, Pleistocene terraces, collecting: Frazier, Kenneth. 00019
- Quebec, check list, marine: Wagner, Frances J. E. 06905
- Quebec, Lake Saint Jean, marine beds: Dionne, Jean-Claude. 06904

Silurian

- Ontario, Manitoulin Island, assemblages: Bolton, Thomas E. 05275

Taxonomy

- Phyla, general morphology, elementary discussion: Walters, George. 09585

Iodine

Abundance

- Sediments, deep-sea: Bennett, J. H. 00651
- Terrestrial, cf. chondrites: Bennett, J. H. 08500

Analysis

- X-ray fluorescence method: Wahlberg, J. S. 05233

Geochemistry

- Ultrabasic rocks, carbonatites, analyses: Becker, V. 03797

Isotopes

- I-129, galactic nucleosynthesis: Reynolds, J. H. 05989

Iowa

Absolute age

- Lake Okoboji, post-glacial sediments, C-14: Dodd, John D. 07590

Economic geology

- Lead-zinc, Upper Mississippi Valley district: Heyl, Allen V. 05408

Engineering geology

- Dam site, Skunk River: Backsen, Lee B. 03635
- Foundations, loess-mantled areas: Williams, Wayne W. 09738
- Highways, design, effect of peat deposits: Blatter, Robert E. 04146
- Materials, properties, limestone: Tinoco, Fernando H. 11011
- Materials, properties, loess, Omaha-Council Bluffs area: Benak, Joseph Vincent. 01337
- Materials, properties, loess strength, Harrison County: Fox, N. S. 03636
- Materials, properties, rock cores, evaluation: Michael, Robert D. 04145
- River channels, Ames area, meander growth: Noble, Calvin A. 07690
- Slope stability, loess, test method, in situ: Lohnes, R. A. 09577
- Slope stability, loess, western: Lohnes, R. A. 03458

Iowa—Continued

Engineering geology—Continued

Soils, Pleistocene, Holocene, properties: Handy, R. L. 07591

General

Current research, bedrock topographic mapping: Sendlein, Lyle V. A. 07589
Education, earth science in secondary schools, growth: Schirner, Silas W. 03745

Geochemistry

Dubuque area, ground water, dolomite cave, sulfuric acid: Morehouse, David F. 01492
Soils, loess-derived, Mg, nonexchangeable: Protz, R. 05965

Geomorphology

Adair and Harrison Counties, hillslope models and soil formation: Ruhe, R. V. 07440
Cary drift areas, hillslope models, soil formation, closed systems: Walker, P. H. 07438
Dubuque area, cave in Galena dolomite, sulfuric acid: Morehouse, David F. 01492
Erosion surfaces, bedrock configuration, buried valley systems: Sendlein, Lyle V. A. 07589
Glacial drift differentiation, slope data, variance analysis: Thomas, Barbara. 06643
Investigations, 1943-68, annotated bibliography: Tuttle, Sherwood D. 07575
River channels, Ames area, meander growth: Noble, Calvin A. 07690
Western, loess deposits, slope angles: Lohnes, R. A. 03458
Western, loess topographies, quantitative variations: Lohnes, R. A. 06644

Geophysical surveys

Keota dome, gravity, magnetic: Hase, D. H. 01994

Glacial geology

Iowan drift sheet, lower Wisconsinan substages: Leighton, Morris M. 03449
Northeastern, Iowan drift: Ruhe, R. V. 03518

Hydrogeology

Ames area, buried channel: Backsen, Lee B. 03635
Des Moines County, Sperry mine, ground-water conditions: Sendlein, Lyle V. A. 03637
East-central, Four Mile Creek, base flow, reservoir contributions: Kunkle, George R. 00375
Tama County, Four-mile Creek watershed, loess, moisture: Vreeken, W. J. 07592

Maps, ground water

East-central, Four Mile Creek basin: Kunkle, George R. 00375

Mineralogy

Raymond area, Pint's quarry, collecting: Menzel, Muriel. 00010

Paleontology

Bryozoa, Ordovician, Champlainian limestones, eastern: Bork, Kennard B. 05771
Cephalopoda, Pennsylvanian, Cherokee Group, Greene County: Furnish, W. M. 03631
Cephalopoda, Pennsylvanian, Cherokee Group, Marion County: Davis, Richard Arnold. 03629
Cephalopoda, Pennsylvanian, Cherokee Group, Marion County: Mikesch, David L. 03628
Collecting, Rockford area: Jacobson, Russell. 08110
Conodonts, Devonian, Sheffield Formation, Franklin County: Anderson, Wayne I. 03627
Conodonts, Mississippian, Kinderhook Series, Washington County: Straka, Joseph J., 2d. 01825

Iowa—Continued

Paleontology—Continued

Conodonts, Pennsylvanian, Desmoinesian rocks: Stone, Dwayne David. 07129
Crinoidea, Mississippian, Burlington Limestone, southeastern: Good, Donald L. 01846
Cystoidea, Devonian, Shell Rock Formation, new: Koch, Donald L. 09847
Devonian, Cedar Valley Formation, correlation, Tully Formation: Cooper, G. Arthur. 02886
Diatoms, Quaternary, Lake West Okoboji: Stoermer, E. F. 02408
Echinodermata, Mississippian, Pella beds, edriasteroid: Strimple, H. L. 03632
Echinoidea, Devonian, Lime Creek Shale, cidarid: Kier, Porter M. 05711
Fossils, problematic, Devonian, Maple Hill Shale, southeastern: Davis, Richard Arnold. 10893
Gymnosperms, Pennsylvanian, Cherokee Group: Eggert, D. A. 02303
Microfossils, Cretaceous-Recent, postglacial sediments, Lake Okoboji: Dodd, John D. 07590
Palynomorphs, Devonian, Cedar Valley Formation, Winnesiek County: Urban, James B. 05017
Porifera, Ordovician, Maquoketa Formation: Rigby, J. Keith. 10255
Trilobites, Ordovician, Maquoketa Formation, asaphids: Rose, J. N. 06646

Sedimentary petrology

Cary drift areas, sediments, soils, properties, trend analysis: Walker, P. H. 07438
Cedar County, Gower Dolomite, bioherms facies: Hinman, Eugene E. 03641
East-central, Wapsipinicon Formation, Bertram Member: Church, Norman K. 06645
Loess, Harrison County: Fox, N. S. 03636
Maquoketa Formation, phosphatic beds, genesis: Bromberger, Samuel H. 11264
Mississippian, Pella Beds, lithofacies: Johnson, Gary D. 08750
Northeastern, Maquoketa Formation, phosphatic beds: Bromberger, S. H. 10097
Northeastern, Platteville Formation: Rassam, Ghassan Noel. 02624
Pleasantview Sandstone, channel and sheet sands: Laury, Robert L. 03563
Soils, aggregates, physical and chemical properties: Tabatabai, M. A. 04190
Soils, properties, relation to landforms, multiple regression analysis: Walker, P. H. 00898
Soils, variability, trend analyses: Walker, P. H. 00902
Southeastern, tills, mineral composition: Milling, Marcus Eugene. 06555
Tama County, Four-mile Creek watershed, loess: Vreeken, W. J. 07592

Stratigraphy

Cambrian-Permian, Forest City basin: Anderson, K. H. 00265
Devonian, Cedar Valley Formation, correlation, Tully Formation: Cooper, G. Arthur. 02886
Devonian, Lime Creek Shale, Springville quarry, cavern fill: Dorheim, Fred H. 06642
Devonian, Wapsipinicon Formation, Bertram Member: Church, Norman K. 06645
Mississippian, Kinderhook Series, Washington County, correlation: Straka, Joseph J., 2d. 01825

Iowa—Continued*Stratigraphy—Continued*

- Pennsylvanian, Missouri-Virgil series, Madison-Adair Counties, Middle River field trip: Welp, T. L. 02557
- Pennsylvanian, Pleasantview Sandstone, facies: Laury, Robert L. 03563
- Pleistocene, Iowan drift, loess, northeastern: Ruhe, R. V. 03518
- Pleistocene, Iowan drift, lower Wisconsinan sub-stages: Leighton, Morris M. 03449
- Silurian, Gower Dolomite, bioherms facies: Hinman, Eugene E. 03641

Structural geology

- Forest City basin, history: Anderson, K. H. 00265
- Washington, Keokuk Counties, Keota dome: Hase, D. H. 01994

Weathering

- Loess, montmorillonite:kaolinite ratio, Mg distribution: Protz, R. 05965
- Loess-derived soils, clay crystallite size distribution: Arnold, R. W. 06641
- Southeastern, tills, profiles: Milling, Marcus Eugene. 06555

Iridium*Abundance*

- Deep-sea sediments, cosmic matter accretion rate: Barker, John L., Jr. 02338
- L-group chondrites: Tandon, S. N. 04867
- Manganese nodules: Harriss, Robert C. 04893

Geochemistry

- Meteorites, Canyon Diablo and others: Wasson, John T. 00952
- Meteorites, kimberlite and xenoliths, distribution: Ehmann, William D. 08043

Iron*Abundance*

- Carbonaceous chondrites type I: Suess, Hans E. 08039

Alabama

- Birmingham district, occurrence, genesis, reserves: Simpson, Thomas A. 05384

Analysis

- Chemical, ferrous iron in lake sediments, Lake Erie: Ross, Curtis. 07093
- Chromatographic, PAQH complexes: Frei, R. W. 03436
- Spectrophotometry, di-2-pyridylketoxime: Holland, William J. 06741
- X-ray background intensity method: Hood, William C. 06452

Appalachians

- Resources, review: Wright, Wilna B. 01380

British Columbia

- Queen Charlotte Islands, occurrence: Brown, A. Sutherland. 07615
- Tasu deposit, occurrence: Wade, E. J. 01096

California

- Eagle Mountain mine area, occurrence, genesis: DuBois, Robert L. 11276

Exploration

- Magnetic methods, airborne: Labarthe, Guillermo. 09524

Geochemistry

- Achondrites: Deuser, W. G. 03105
- Diabase, system Fe-Ti: Davidson, A. 07640
- Fe-Ni alloys, isothermal compression to 300 kb: Takahashi, Taro. 02352
- Ferrous ion-ferric oxide Nernst potential, genesis: Doyle, Roger W. 05229
- Formation temperatures, Ontario, Labrador: Seguin, Maurice. 06926

Iron—Continued*Geochemistry—Continued*

- Hydrous oxides, heavy metals fixation, soils, waters: Jenne, E. A. 03751
- Igneous and sedimentary rocks, cf. Sc and rare-earth: Norman, Jack C. 00293
- Lake sediments, distribution, Wisconsin, Lake Mendota: Nriagu, Jerome O. 02250
- Lake sediments, sulfide: Doyle, Roger W. 05337
- Metamorphic rocks, garnet-biotite pairs: Grant, James A. 10900
- Mineral stability: Curtis, C. D. 01916
- Sediments, fractionation: Angino, Ernest E. 07749
- Sphalerite, behavior: Keys, J. D. 03753
- System Zn-Fe-S: Campbell, F. A. 06975
- System Zn-Fe-S: Chernyshev, L. V. 06979
- System Zn-Fe-S: Einaudi, Marco T. 06976

Greenland

- Southern, Lilianmine area, occurrence: Ghisler, Martin. 07700

Labrador

- Carol mining district, reserve estimation and grade control: Dagenais, J. E. 05309
- Labrador geosyncline, occurrences, resources: Gross, G. A. 11113
- Schefferville district, genesis: Seguin, Maurice. 06926
- Smallwood mine, magnetite distribution, statistical analysis: Zodrow, Erwin L. 07764

Lake Superior region

- Occurrence, genesis: Marsden, Ralph W. 05410

Mexico

- Colima, Cerro Nahuatl, occurrence, genesis: Neilson, James M. 04132

Michigan

- Iron River-Crystal Falls district, occurrence, genesis: James, H. L. 01692
- Marquette district, occurrence, genesis: Anderson, Gerald J. 05411
- Menominee district, occurrence, genesis: Dutton, Carl E. 05413

Minnesota

- Animikie basin, Precambrian, cf. Australia, South Africa: Trendall, A. F. 04294
- Geochemistry, Mn distribution: Lepp, Henry. 00472
- Mesabi Range, occurrence, genesis: Marsden, R. W. 05412
- Mesabi Range, taconite, exploration, production: Owens, John S. 06881
- Vermilion district, Zenith mine, genesis: Machamer, Jerome F. 01689

Missouri

- Iron Mountain mine, occurrence, genesis: Murphy, John E. 05414
- Pea Ridge deposit, occurrence, genesis: Emery, John A. 05405

New Jersey

- Geochemistry, trace elements: Collins, Lorence G. 01900

New York

- Benson mines, Saint Lawrence County, occurrence: Crump, Robert M. 05417
- Benson mines, titanium abundance: Hagni, Richard D. 01883
- Sanford Lake district, titaniferous, occurrence, genesis: Gross, Stanford O. 05422

Northwest Territories

- Hudson Bay, Nasatapoka Islands off New Quebec, occurrence: Stevenson, I. M. 09117

Ontario

- Boston Township, Adams mine: Drury, John J. 10148

Iron—Continued*Ontario*—Continued

- Deposits, classification, descriptions: Shklanka, Roman. 11114
 Michipicoten district, genesis: Seguin, Maurice. 06926
 Superior Province, metallogenic patterns: Kalliokoski, J. 05434

Oregon

- Portland area, Prosser limonite mine, field trip: Nafziger, Ralph H. 09586

Pennsylvania

- Berks County, Grace mine, genesis: Sims, Samuel J. 05420
 Cornwall deposit, occurrence, genesis: Lapham, Davis M. 05418

Properties

- Electrical resistivity, new high pressure phase: Wong, J. Y. 03918

Quebec

- Knob Lake area, reserve estimation and grade control: Dagenais, J. E. 05309
 LaBlache Lake deposit, geochemistry, genesis: Anderson, A. T. 04432
 Labrador geosyncline, occurrences, resources: Gross, G. A. 11113
 Leaf River area, deposits, possibilities: Stevenson, I. M. 09117
 Schefferville area, Precambrian, exploration, geophysical surveys: Seguin, Maurice. 05669
 Superior Province, metallogenic patterns: Kalliokoski, J. 05434

Tennessee

- Cumberland City quadrangle, occurrence: Wilson, Charles W., Jr. 03073
 Ducktown district, occurrence, genesis: Magee, Maurice. 05415
 Needmore quadrangle, occurrence: Wilson, Charles W., Jr. 03578
 Perryville quadrangle, occurrence: Wilson, Charles W., Jr. 03689

United States

- Midcontinent ore district, general: Snyder, Frank G. 05385
 Western, trace-element abundances, distribution: Radtke, Arthur Sears. 00861

Utah

- Iron Springs district, occurrence, genesis: Mackin, J. Hoover. 05372

Virginia

- Buckingham quadrangle, resources: Ern, Ernest H. 03194

Wyoming

- Albany County, Iron Mountain deposit, genesis: Reinking, Robert Louis. 01353
 Atlantic City district, occurrence, reserves: Bayley, Richard W. 05399
 Iron Mountain, titaniferous: Hagner, Arthur F. 05402

Island arcs*Earthquakes*

- Seismicity, Pacific region, relation to tectonics: Miyamura, Setumi. 04672

Genesis

- Sea-floor spreading: Donnelly, Thomas W. 07926

Heat flow

- Dip-slip fault zones, theoretical study: Turcotte, D. L. 06332

Petrology

- Basaltic magmas, distribution, relation to seismic activity: Sugimura, Arata. 04642

Puerto Rico

- Strike-slip faults: Briggs, Reginald P. 08623

Island arcs—Continued*Volcanology*

- Dip-slip fault zones, theoretical study: Turcotte, D. L. 06332

West Indies

- Lesser Antilles, evolution from lava composition: Baker, P. E. 07014

Isostasy*Geomorphologic effects*

- Ontario, Manitoulin Island, emergence, shorelines: Lewis, C. F. M. 05304
 Quaternary warping, United States, northeastern coast: Newman, Walter S. 01924
 Quebec, postglacial rebound: McDonald, Barrie C. 05677

M-discontinuity

- Adjustment, calculation as function of time: O'Connell, Richard J. 03922
 Adjustment, calculation as function of time: van der Lindt, W. J. 03923

New England

- Postglacial tilt, profiles: Koteff, Carl. 11240

Northwest Territories

- Baffin Island, postglacial rebound, curves: Andrews, J. T. 01133

Processes

- Flow in mantle, glacial loading: McConnell, Robert K., Jr. 04186
 Media of variable viscosity, mathematical model: Danes, Z. F. 03006
 Media of variable viscosity, spherical geometry: Danes, Z. F. 03007

Quebec

- Hudson Bay, Little Whale River area: Archer, David R. 05035

Theoretical studies

- Time-dependent vertical loading: Campbell, David L. 10632

United States

- Compensation, southeastern, Tertiary: Tanner, William F. 04008

Wyoming

- Western, overthrust belt, gravity data: Crosby, Gary W. 04512

Isotopes*Aluminum*

- Terrestrial rock, Al-26 induced by cosmic-ray: Tanaka, S. 01062

Argon

- Analysis, methods, Ar-39, mass spectrometry: Mitchell, J. G. 02993
 Basalt, deep-sea, Ar-40 excess: Funkhouser, John G. 05098
 Lava, historic flows, ratios: Dalrymple, G. Brent. 10742
 Ultramafic inclusions, Hawaii: Funkhouser, John G. 02361

Boron

- Ratios, B-11:B-10, absolute: Ageyi, E. K. 02728

Calcium

- Fractionation, metabolic: Corless, James T. 09367

Carbon

- C-14 transfer in nature: Nydal, Reidar. 01953
 C-13:C-12, water systems, Texas, pollution index: Calder, John A. 01774
 Carbonate rocks, metamorphism, composition, changes: Deines, P. 08660
 Carbonate, composition, Quebec: Deines, Peter. 03037
 Copper ores, British Columbia: Chrisman, L. 09363

Isotopes—Continued

Carbon—Continued

- Cosmogenic, C-14 in atmosphere, variations: Suess, Hans E. 04173
- Echinoid calcite, C-O ratios, Devonian-Holocene: Weber, Jon N. 00493
- Fluid inclusions: Rye, Robert O. 01914
- Fractionation, calcareous marine invertebrates: Weber, Jon N. 00299
- Grasses, variations: Bender, Margaret M. 03121
- Inorganic, fossil bone and enamel, C-14: Haynes, Vance. 03059
- Interstitial water, near-shore sediments: Presley, B. J. 04865
- Marine plankton, composition: Degens, E. T. 04440
- Marine plankton, metabolic fractionation: Degens, E. T. 04439
- Metamorphic rocks, ratios, Vermont, Ontario: Sheppard, Simon M. F. 10800
- Methane, composition: Sackett, William M. 03867
- Organic matter, aquatic, composition: Scalan, Richard S. 08867
- Peridotite, carbonate, Pennsylvania: Deines, P. 02357
- Peridotite, composition, Pennsylvania: Deines, P. 07758
- Petroleum, abundance, Ponca City reference oil: Ferguson, William S. 08683
- Petroleum, composition, Ellenburger Formation: Kvenvolden, Keith A. 07925
- Petroleum, fractionation, Permian basin: Meister, Frederic H. 01180
- Plankton-sea water relationship: Deuser, W. G. 02341
- Sediments, marine, C-13: Choquette, Philip W. 03167
- Shells, composition, equilibrium with environment: Mook, W. G. 00173
- Travertine, composition, Colorado, Creede Formation: Steven, T. A. 00801

Cesium

- Clay suspensions, transport, model river system: Purushothaman, Krishnier. 09853

Fractionation

- Bacterial reduction, sulfate and sulfite: Kemp, A. L. W. 00270
- Calcite-graphite-carbon dioxide-methane-hydrogen-water: Bottinga, Yan. 04545
- Carbon, oxygen, calcareous marine invertebrates: Weber, Jon N. 00299

Ground water

- Tracer experiments in model aquifer: Champlin, J. B. F. 11269
- Tracer experiments, point dilution: Drost, Walter. 00151

Helium

- He-3, stony meteorites, cosmic-ray-produced: Kruger, S. T. 02358
- Ultramafic inclusions, Hawaii: Funkhouser, John G. 02361

Hydrogen

- Copper, porphyry deposits, ratios: Sheppard, Simon M. F. 09684
- H-3, stony meteorites, cosmic-ray-produced: Kruger, S. T. 02358
- Movement in environment, fission hazards: Jacobs, D. G. 11201
- Ores, British Columbia: Ohmoto, Hiroshi. 04153
- Sedimentary rocks, minerals, ratios: Savin, Samuel M. 10799

Isotopes—Continued

Hydrogen—Continued

- Sedimentary rocks, minerals, ratios: Savin, Samuel Marvin. 01668
- Sediments, ocean, abundance: Savin, Samuel M. 08866

Iodine

- Achondritic meteorites, I-129:Xe, galactic nucleosynthesis: Reynolds, J. H. 05989

Krypton

- Leighton chondrite, abundance: Meason, J. L. 00388

- Meteorites, composition: Eugster, O. 08487

Lake sediments

- Dolomite formation, California, Deep Springs Lake: Clayton, Robert N. 01524

Lead

- Abundance ratios, Pb isotope standards: Catanzaro, E. J. 10739
- Analysis, methods, double spike technique: Oversby, V. M. 10740
- Crust and mantle, evolution, recycling model: Armstrong, Richard Lee. 01102
- Galena, Cambrian-Devonian rocks, Montana: Zartman, R. E. 04111
- Interpretation, single- and multi-stage development models: Kanasewich, E. R. 04707
- Iron sulfides, Great Slave Lake area, Northwest Territories: Robertson, D. K. 05431
- Lead-zinc ores, Mississippi Valley: Cannon, R. S. 06868
- Meteorite, ratios: Marshall, Royal R. 03929
- Mineral deposits, earth history, metallogenetic periodicity: Pierce, Arthur P. 07842
- Montana, Boulder batholith: Doe, B. R. 07636
- Ore deposit, ratios, New York, Balmat area: Reynolds, P. H. 05471
- Ratios, Cenozoic volcanics, Rocky Mountains: Doe, Bruce R. 05115
- Ratios, oceanic basalts, independent age of Earth: Ulrych, T. J. 07304
- Rocks, abundance, concordia plots: Russell, R. D. 00372
- Standard samples, ratios: Catanzaro, E. J. 00317
- Ultramafic rocks, ratios: Marshall, Royal R. 07941
- Volcanic rocks, ratios, Hawaii: Tatsumoto, M. 08029
- Volcanics, ratios, Colorado: Doe, B. R. 07762

Lithium

- Holbrook meteorite, ratios, distribution: Gradsztajn, Eli. 00212
- Meteorites, stony, abundance: Balsiger, H. 10692

Meteorites

- Cosmic-ray produced: Matsuda, Hideki. 07925
- Pu-244 fission tracks, cooling rate: Fleischer, R. L. 00298
- Rare gas chronology, achondrites, pallasites: Megrue, G. H. 00649

Mineral deposits

- General: Smirnov, V. I. 04219

Nickel

- Ice, abundance, Greenland: Fireman, Edward L. 08498

Ore-forming fluids

- Ratios: White, Donald E. 04224

Oxygen

- Carbonates, silicates, fractionation, California: Clayton, R. N. 05269
- Carbonatite, composition, Quebec: Deines, Peter. 03037

Isotopes—Continued*Oxygen—Continued*

- Chert, ratios, Precambrian: Perry, Eugene C., Jr. 08840
- Copper ores, British Columbia: Christmas, L. 09363
- Copper, porphyry deposits, ratios: Sheppard, Simon M. F. 09684
- Deep-sea cores, paleotemperatures: Lidz, Barbara. 00115
- Echinoid calcite, C-O ratios, Devonian-Holocene: Weber, Jon N. 00493
- Fluid inclusions: Rye, Robert O. 01914
- Foraminifera, Pacific, temperature analysis: Smith, P. B. 01881
- Fossil marine organisms, O-18:O-16, in phosphate: Longinelli, A. 01506
- Fractionation in lithosphere: Volborth, Alexis. 08025
- Glaucophane schists, fractionation: Taylor, Hugh P., Jr. 05054
- Greenland Icecap, core, ratios: Hamilton, W. L. 00321
- Iron-titanium oxides, anorthosite host, fractionation: Anderson, A. T. 04432
- Liquid-water fractionation factors, geothermal steam: Bottinga, Y. 10761
- Marls, mollusks, Great Lakes region, postglacial: Stuiver, Minze. 04062
- Metamorphic rocks, ratios, Vermont, Ontario: Sheppard, Simon M. F. 10800
- O-18:O-16, igneous rocks, worldwide: Taylor, Hugh P., Jr. 05353
- Ores, British Columbia: Ohmoto, Hiroshi. 04153
- Peridotite, carbonate, Pennsylvania: Deines, P. 02357
- Peridotite, composition, Pennsylvania: Deines, P. 07758
- Phosphorites, composition, marine formations: Longinelli, A. 04525
- Quartz, techniques, separation from matrix for analysis: Syers, J. K. 03926
- Sedimentary rocks, minerals, ratios: Savin, Samuel M. 10799
- Sedimentary rocks, minerals, ratios: Savin, Samuel Marvin. 01668
- Sediments, marine, O-18, diagenesis: Choquette, Philip W. 03167
- Sediments, ocean, abundance: Savin, Samuel M. 08866
- Shells, equilibrium with environment: Mook, W. G. 00173
- Sulfate-water system, behavior: Lloyd, R. M. 04360
- Travertine, composition, Colorado, Creede Formation: Steven, T. A. 00801

Plutonium

- Achondritic meteorites, Pu-244:Xe, galactic nucleosynthesis: Reynolds, J. H. 05989
- Meteorites, Pu-244 fission tracks: Fleischer, R. L. 00298

Potassium

- Ultramafic minerals, abundance, North Carolina: Stueber, Alan M. 09709

Radionuclides

- Role in weathering: McCrone, Alistair W. 01461

Radium

- Sea water, Ra-228: Moore, Willard S. 00020

Rubidium

- Granite, post-crystallization movement: Brooks, C. 02365
- Sedimentary rocks, Rb-Sr, Kansas, Permian rocks: Chaudhuri, S. 08642

Isotopes—Continued*Rubidium—Continued*

- Ultramafic minerals, abundance, North Carolina: Stueber, Alan M. 09709
- Ultramafic rocks, Sr-Rb-K relations, Alaska: Lanphere, Marvin A. 02813

Strontium

- Basalt, disequilibrium, bearing on magmatic processes: Dasch, E. Julius. 00045
- Carbonates with kimberlite, ratios, Kansas: Brookins, Douglas G. 07806
- Clay suspensions, transport, model river system: Purushothaman, Krishnier. 09853
- Crust and mantle, evolution, recycling model: Armstrong, Richard Lee. 01102
- Granite, post-crystallization movement: Brooks, C. 02365
- Montana, Boulder batholith: Doe, B. R. 07636
- Ocean water, marine sediments: Murthy, V. Rama. 04869
- Ratios, alkaline rocks, origin: Hamilton, E. I. 04698
- Ratios, Cenozoic volcanics, Rocky Mountains: Doe, Bruce R. 05115
- Ratios, vein deposits: Reesman, R. H. 06990
- Sea water, ratios, Phanerozoic time: Peterman, Zell E. 08841
- Sedimentary rocks, ratios, Oregon: Hedge, Carl E. 08589
- Sedimentary rocks, Rb-Sr, Kansas, Permian rocks: Chaudhuri, S. 08642
- Sediments, deep-sea, ratios, clay mineral diagenesis: Dasch, E. Julius. 08654
- Sediments, deep-sea, ratios, established weathering profiles: Dasch, E. Julius. 07770
- Shale, ratios, Pierre Shale: Peterman, Zell E. 07848
- Ultramafic minerals, abundance, North Carolina: Stueber, Alan M. 09709
- Ultramafic rocks, Sr-Rb-K relations, Alaska: Lanphere, Marvin A. 02813
- Uranium minerals and salts, spontaneous fission of U-238: Arino, H. 02579
- Volcanic rocks, ratios, island arcs: Pushkar, Paul. 00518

Sulfur

- Copper ores, British Columbia: Christmas, L. 09363
- Iron sulfides, Great Slave Lake area, Northwest Territories: Robertson, D. K. 05431
- Lead-zinc deposits, ratios, Northwest Territories: Folinsbee, R. E. 07724
- Metamorphic rocks, ratios, fractionation, Ontario: Speelman, Edwin L. 08045
- Muskox intrusion, ratios, Northwest Territories: Sasaki, Akira. 08080
- Polymetallic ores, ratios, Utah, Bingham district: Field, Cyrus W. 08584
- Ratios, Canada, western: Evans, T. L. 04222
- Salt deposits, genesis: Jensen, Mead LeRoy. 01113
- Strata-bound deposits, ancient sea water, abundances: Sangster, D. F. 04714
- Sulfate and sulfite, fractionation, bacterial reduction: Kemp, A. L. W. 00270

Tellurium

- Natural tellurides, fractionation: Smithers, R. M. 09071

Thorium

- Basalt, ratios, Hawaii: Rosholt, John N. 08057
- Sea water, Th-228: Moore, Willard S. 00020

Tracer experiments

- C-14-labeled CO₂, calcite grains, surface area measurement: Anderson, Thomas F. 05291

Isotopes—Continued*Tracer experiments—Continued*

Ground-water movement: Jennings, A. Ray. 03156

Sulfur, partial pressure: Giletti, B. J. 04137
Tritium and C-14, adsorption and flow in porous media: Deem, Richard L. 02602

Uranium

Analysis, methods, activation, natural waters: Edwards, Kenneth W. 04326
Basalt, ratios, Hawaii: Rosholt, John N. 08057
Ground water, isotope dilution approach: Osmond, J. K. 04077
Ground water, ratios, disequilibrium, Florida: Kaufman, M. I. 08415
Ground water, ratios, Florida: Rydell, H. S. 10342

Volcanic gases

Fractionation, Hawaii: Moore, Larry Joe. 04453

Xenon

Chondrites, fissiogenic: Sabu, D. D. 01998
Leighton chondrite, abundance: Meason, J. L. 00388
Meteorites, composition: Eugster, O. 08487
Meteorites, decay of I-129, Pu-244, formation interval: Reynolds, John H. 08048
Meteorites, sources in achondrites: Munk, Miner N. 00206

Jamaica*Economic geology*

Copper, Barbecue prospect, exploration: Black, C. D. G. 07175

Geochemistry

Barbecue copper prospect, geochemical prospecting: Black, C. D. G. 07175

Geomorphology

Central inlier, northern margin, karst: Brown, M. C. 07749
Karst areas, research: Smith, D. Ingle. 07362
Karst evolution, haystack-doline: Birot, P. 07984
Karst, solution rate: Birot, Pierre. 10917
Offshore, dwarf atolls, genesis: Burke, Kevin. 00267

Geophysical surveys

Queen of Spain's Valley, resistivity, limestone aquifers: Vincenz, S. A. 05301

Hydrogeology

Central inlier, northern margin, karst investigations: Brown, M. C. 07749

Maps, geologic

Barbecue Valley-Bloxburgh area: Black, C. D. G. 07175

Paleontology

Foraminifera, Cretaceous, Upper, new: Robinson, E. 05136

Joints*Patterns*

Texas, central: Boyer, Robert E. 10064

Jurassic*Alabama*

Stratigraphy, facies, depositional environments: Oxley, Marvin L. 09318

Arizona

North-central, San Rafael Group, sedimentation: Johnston, Ian McKay. 08752
Northern, stratigraphy and paleontology, popular account: Breed, William J. 04337

Arkansas

Gulf Coast embayment, Buckner Formation: Dickinson, Kendell A. 03524
Sedimentation, Upper, mudstones: Dickinson, Kendell A. 01238

Jurassic—Continued*Arkansas—Continued*

Southwestern, Upper, stratigraphy: Dickinson, Kendell A. 01693

British Columbia

Fernie Basin, Natal area, Balmer coal seam: Cameron, A. R. 02821
Metamorphic events, Shuswap complex: Hyndman, Donald W. 01166
Taseko Lakes map-area, stratigraphy: Jeletzky, J. A. 09409

California

Eastern, Cephalopoda, Lower: Imlay, Ralph W. 00933
Klamath Mountains, metamorphism, granitic plutons, absolute age: Lanphere, Marvin A. 02688
Sacramento Valley, *Buchia* zones, stratigraphy: Jones, D. L. 07906
Sacramento Valley, Protista, biostratigraphy: Warren, John Stanley. 09862
Sacramento Valley, sedimentation: Ojakangas, Richard W. 07852

Canada

Western, stratigraphy: Carlson, C. E. 11230

Colorado

Canon City area, Morrison Formation: Brady, Lawrence L. 10065
Dominguez Creek canyon, Reptilia, Morrison Formation: Jensen, James A. 00089

Connecticut

Connecticut Valley, basalt: deBoer, Jelle. 05927

Correlation

Oregon, California: Imlay, Ralph W. 00933

Dinosaurs

General: Kurten, Bjorn. 06166

Florida

Panhandle, stratigraphy, facies, depositional environments: Oxley, Marvin L. 09318

Gulf Coastal Plain

Central, depositional history, summary: Rainwater, E. H. 09324
Louann Salt, paleoclimatologic and paleobiologic implications: Bowen, Richard L. 09316

Louisiana

Gulf Coast embayment, Buckner Formation: Dickinson, Kendell A. 03524
Northwestern, Upper, stratigraphy: Dickinson, Kendell A. 01693
Sedimentation, Upper, mudstones: Dickinson, Kendell A. 01238

Mexico

Oaxaca area, pteridophytes, glossopterid: Delevoryas, T. 02304
Porifera, *Rhaxella*, distribution, correlation: Trejo, M. 09226

Michigan

Michigan basin, stratigraphy, palynology: Shaffer, Bernard L. 10083

Mississippi

Central and southern, stratigraphy, correlation: Dinkins, Theo H., Jr. 05272
Rankin County, Norphlet Sandstone, porosity, permeability: Hartman, J. A. 09310
South-central, Smackover, Haynesville, and Cotten Valley Formations: Oxley, Marvin L. 05424
Thickness and distribution: Dinkins, Theo H., Jr. 05272

Montana

Southwestern, Morrison Formation: Suttner, Lee J. 06947
Stratigraphy: Carlson, C. E. 11230

Jurassic—Continued*Montana—Continued*

West-central, Morrison-Kootenai rocks, sedimentation: Silverman, Arnold. 08000

New Mexico

Laguna district, Morrison Formation: Nash, J. Thomas. 06991

Northern, Insecta, Todilto Formation: Bradbury, John P. 07754

Rio Arriba County, Morrison Formation: Tanner, William F. 01201

Rio Arriba County, Morrison Formation, sedimentation: Tanner, William F. 06039

North America

Western, transition beds with Cretaceous: Jeletzky, J. A. 07904

North Dakota

Stratigraphy: Carlson, C. E. 11230

Oregon

Eastern, Cephalopoda, Lower: Imlay, Ralph W. 00933

Paleogeography

General: Kurten, Bjorn. 06166

Paleontology

General: Kurten, Bjorn. 06166

Texas

Gulf Coast embayment, Buckner Formation: Dickinson, Kendall A. 03524

Northeastern, Upper, stratigraphy: Dickinson, Kendall A. 01693

Sedimentation, Upper, mudstones: Dickinson, Kendall A. 01238

Utah

Dinosaur National Monument, Reptilia: White, Theodore E. 04796

Wyoming

Big Horn Mountains, Gypsum Spring and Sundance Formations: Furlong, Robert B. 06946

Northwestern, Sundance Formation, sedimentation: Stone, Randolph. 09706

South-central, stratigraphy, correlation, nomenclature: Pipiringos, George N. 00113

Kansas*Absolute age*

Atchison County, Muscotah marsh, conifer needles, C-14: McGregor, Ronald L. 07686

Riley County, kimberlite pipes, K-Ar: Brookins, Douglas G. 10066

Areal geology

Miami-Picher lead-zinc field: Underwood, Roger. 00159

Economic geology

Clays, properties, tests for nonceramic uses: Huh, John M. 06372

Clays, thermal expansion studies, Dakota Formation: Bauleke, Maynard P. 06371

Lead, zinc, Miami-Picher field: Underwood, Roger. 00159

Lead-zinc, Tri-State district: Brockie, Douglas C. 05407

Natural gas, Glick field: Euwer, Robert M. 03416

Natural gas, Greenwood field: Wingerter, H. R. 04464

Natural gas, Hardtner field: Young, Robert T. 03414

Natural gas, Hugoton-Panhandle field: Mason, John W. 03422

Natural gas, occurrence, production: Merriam, Daniel F. 03386

Natural gas, Otis-Albert field: Miller, Robert R. 03387

Natural gas, petroleum, Nichols field: Curtis, Graham R. 03417

Kansas—Continued*Economic geology—Continued*

Natural gas, petroleum, Spivey-Grabs field: Frensley, Robert W. 03415

Petroleum and natural gas, Anadarko basin, controlling factors: Swanson, Donald C. 09860

Petroleum and natural gas, Panhandle-Hugoton field, traps: Pippin, L. 00416

Petroleum and natural gas, production, 1966: Oros, Margaret O. 07664

Petroleum and natural gas, western, Las Animas arch: Clair, Joseph R. 07261

Petroleum, eastern, Bartlesville sand: Weirich, T. E. 09069

Petroleum, Hugoton Embayment, exploration, trend analysis: Schramm, Martin W., Jr. 03781

Sand, occurrence, use: Hardy, Ronald G. 06370

Uranium, reconnaissance, 1951-56: U.S. Atomic Energy Commission. 08995

Engineering geology

Highways, applications in construction, review: Burgat, Virgil A. 04143

Highways, north-central, loess subgrade, gleying: Crumpton, Carl F. 10981

Materials, properties, Peoria loess, asphalt-road subgrade: Crumpton, Carl F. 10981

Urban development, waste disposal, Lawrence area, pilot study: Kansas Geological Survey. 09203

Waste disposal, Lyons area, radioactive in salt: Lomenick, Thomas Fletcher. 05521

Waste disposal, Salina basin, potential reservoirs: Edmund, R. W. 05604

General

Academy of Science, history and geologists: Jewett, John Mark. 07678

Geochemistry

Eastern, Permian limestone, strontium isotopes: Brookins, Douglas G. 10506

Eastern, Permian sediments, Rb-Sr isotopic analyses: Chaudhuri, S. 08642

Hutchinson, Permian salt deposits, brine inclusions: Holser, William T. 01024

Kansas River basin, surface water, trace-elements: Galle, O. Karmie. 06369

Kansas River basin, water, trace-element analyses: Angino, Ernest E. 10062

Little Osage Shale, hydrocarbons: Modzeleski, Vincent. 08810

Niobrara Formation, chemical analyses: Miller, Halsey W. 09887

Northwestern, Carlile Shale, bentonite, analyses, correlation: Hostettler, James M. 09285

Riley County, carbonates associated with kimberlite, strontium: Brookins, Douglas G. 07806

Wellington Formation, illite, K-Rb ratio, paleosalinity determination: Gafford, Edward L. 09300

Geomorphology

Loess, origin in High Plains, western: Lugin, A. L. 02330

Geophysical surveys

Eastern, gravity, magnetic: Ball, M. M. 08362

Glacial geology

Northeastern, multiple stades, lower Pleistocene: Bayne, Charles K. 07643

Hydrogeology

Grant and Stanton Counties, ground-water levels, 1939-68: Winslow, John D. 04780

Labette County, ground-water resources: Jungmann, William L. 00824

Kansas—Continued

Hydrogeology—Continued

- Republican River area, ground-water resources: Fader, Stuart W. 04781
- Southwestern, dune area, moisture movement: Prill, Robert C. 05169
- Water resources, development: Kansas Water Resources Board. 09202

Maps, ground water

- Labette County: Jungmann, William L. 00824
- Republican River area: Fader, Stuart W. 04781

Maps, oil and gas

- Anadarko basin, western: Stevens, Curtis. 02930

Maps, tectonic

- South-central, joint patterns: Ward, John R. 06510

Mineralogy

- Allophane-halloysite transition, Pearllette volcanic ash: Swineford, Ada. 10267
- Basaluminite, hydrobasaluminite, Cabaniss Formation: Tien, Pei-Lin. 06465
- Clay minerals, Peoria loess: Crumpton, Carl F. 10981
- Dickite and kaolinite, southeastern, Pennsylvanian limestones: Schroeder, Richard J. 05093
- Dickite, southeastern, Pennsylvanian limestone: Hayes, John B. 07960

Paleontology

- Amphibia, Pennsylvanian, Burlington Limestone, Brown County: Baird, Donald. 07752
- Anthozoa, Pennsylvanian, favositid, n.gen.: Cocke, J. M. 06800
- Anthozoa, Pennsylvanian, Upper, geyerophyllid: Cocke, J. M. 07683
- Cephalopoda, Cretaceous, Graneros-Greenhorn contact, ammonoids: Hattin, Donald E. 05692
- Cephalopoda, Cretaceous, Niobrara Fm., teuthid, sepiid: Miller, Halsey W. 07787
- Conodonts, Mississippian, Warsaw Formation, southeastern: Goebel, Edwin D. 06373
- Conodonts, Mississippian, western, zones: Goebel, Edwin D. 03768
- Cretaceous, Kiowa Formation, paleoecology: Scott, Robert W. 10876
- Flora, Carboniferous to Pleistocene, research history: Leisman, Gilbert A. 07677
- Foraminifera, Permian, Hughes Creek Shale, statistical study: Kaesler, Roger L. 08757
- Foraminifera, Permian, Threemile Limestone, Chase County: Sanderson, George A. 01193
- Gastropoda, Pleistocene, Kansas Cudahy fauna, planorbid: Miller, Barry B. 02599
- Gymnosperms, pteridophytes, Pennsylvanian, coal balls: Otto, David Arthur. 01704
- Invertebrata, Cretaceous, Niobrara Formation: Miller, Halsey W. 09887
- Mammalia, Pleistocene, Manhattan area, mastodon(?) tusk: O'Brien, Patricia J. 07966
- Mollusca, Kiowa Formation, Cretaceous: Scott, Robert W. 01354
- Palynology, Cretaceous, Pierre Shale, northwestern: Lammons, James M. 07926
- Palynomorphs, Pennsylvanian, Bonner Springs Shale, Johnson County: Clendenning, J. A. 02350
- Pisces, Mississippian-Permian, bradyodont, cf. Ohio, Pennsylvanian: Hansen, Michael C. 02486
- Protista, Permian, Fort Riley Limestone, Butler County, chitinozoans: Gafford, Edward L., Jr. 09284

Kansas—Continued

Paleontology—Continued

- Pteridophytes, Pennsylvanian, southeastern, lycopod: Schlanker, C. M. 02351
- Vertebrata, Pliocene, Trego County, WaKeeney local fauna: Wilson, Richard Leland. 06938

Petrology

- Riley County, kimberlite: Brookins, Douglas G. 07805

Sedimentary petrology

- Doniphan County, Pleistocene deposits, differentiation, clay minerals: Tien, Pei-Lin. 05091
- Eastern, Dennis Limestone, algal banks: Frost, Jack Glenn. 06549
- Ellis County, soils, profiles: Zavesky, Larry D. 11053
- Hutchinson Salt, depositional environment: Dellwig, Louis F. 01123
- Manhattan area, Big Blue Series, clays in solution cavities, genesis: Russell, John L. 02484
- Northeastern, tills, clay mineral characterization, computer program: Wahlstedt, Warren C. 05661
- Northern, concretions, loess soils, seasonal changes: Bidwell, O. W. 07437
- Sedimentation rates, Upper Pennsylvanian, computer simulation: Schwarzacher, Walther. 06172
- Southeastern, Stanton Limestone, algal-mound complex, lithofacies: Heckel, Philip H. 07881
- Trego County, Ogallala Fm., soil profiles: Glover, Robert K. 07684

Stratigraphy

- Cambrian-Ordovician, Arbuckle overlap, paleogeography: Chenoweth, Philip A. 03766
- Cambrian-Permian, Forest City basin: Anderson, K. H. 00265
- Cretaceous, Carlile Shale, Greenhorn Limestone and Fairport Chalk Member: Hattin, Donald E. 10106
- Cretaceous, Graneros-Greenhorn contact, correlation: Hattin, Donald E. 05692
- Mississippian, western: Goebel, Edwin D. 03768
- Mississippian-Pennsylvanian, Anadarko basin, western, correlations: Swanson, Donald C. 00415
- Pennsylvanian, Bern Limestone, southeastern: Myers, Dennis. 09286
- Pennsylvanian, Cherokee and Marmaton Groups, Decatur County: Miesner, James F. 09287
- Pennsylvanian, Cherokee Group, Krebs and Cabaniss formations: Branson, Carl C. 10872
- Permian, Council Grove Group, eastern: Avers, Darrell D. 02468
- Pleistocene, northeastern, Nebraskan, Kansas deposits: Bayne, Charles K. 07643
- Pliocene, Ogallala Formation, Trego County: Wilson, Richard Leland. 06938
- Systems, nomenclature, classification: Jewett, John Mark. 07665

Structural geology

- Forest City basin, history: Anderson, K. H. 00265
- South-central, joint patterns: Ward, John R. 06510

Kaolin

Cuba

- Isles of Pines, occurrence: Pokryshkin, V. I. 04703

Kaolin—Continued

Geochemistry

Electron-microprobe analysis: Weaver, Charles E. 07040

Georgia

Occurrence and source, Cretaceous deposits: Grim, Ralph E. 09869

South Carolina

Occurrence and source, Cretaceous deposits: Grim, Ralph E. 09869

Kentucky*Areal geology*

Calloway County: McGrain, Preston. 07398
Elk Valley area: Englund, Kenneth J. 01711
Fayette County: Jillson, Willard Rouse. 03123
Illinois basin: Swann, David H. 07827
Northeastern, guidebook, Ordovician-Mississippian strata: Ohio Geological Society. 01332

Economic geology

Coal, Elk Valley area, occurrence, resources: Englund, Kenneth J. 01711
Coal, Hartford quadrangle, occurrence: Goudarzi, Gus H. 00991
Coal, Leatherwood quadrangle, beds: Prostka, Harold J. 00457
Coal, limestone, Johnetta quadrangle: Gualtieri, J. L. 01111
Coal, natural gas, David quadrangle: Outerbridge, William F. 02947
Coal, natural gas, Dorton quadrangle: Barr, J. L. 00454
Coal, natural gas, Majestic, Hurley, Wharncliffe quadrangles: Outerbridge, William F. 04412
Coal, natural gas, McDowell quadrangle: Rice, Charles L. 00380
Coal, natural gas, sandstone, Jamboree quadrangle: Outerbridge, William F. 07384
Coal, other resources, Riverside quadrangle: Shawe, Fred R. 02916
Coal, petroleum, natural gas, Graham quadrangle: Kehn, Thomas M. 07013
Coal, petroleum, natural gas, Nortonville quadrangle: Palmer, James E. 04770
Construction materials, Cravens quadrangle: Peterson, Warren L. 02950
Construction materials, limestone for aggregate: McGrain, Preston. 10937
Construction materials, Mays Lick quadrangle: Gibbons, A. B. 07385
Construction materials, Moberly quadrangle: Greene, Robert C. 00030
Construction materials, Panola quadrangle: Greene, Robert C. 00450
Fluorite-zinc-lead, Illinois-Kentucky district: Grogan, Robert M. 05406
Fluorspar, barite, Salvisa quadrangle: Cressman, E. R. 04768
Gravel, clays, Hardin quadrangle: Scott, Glenn R. 04159
Gravel, clays, Lovelaceville quadrangle: Finch, Warren I. 05751
Gravel, clays, Oak Level quadrangle: Olive, Wilds W. 04204
Gravel, Johnson Hollow quadrangle: Klemic, Harry. 00456
Limestone and dolomite, Ford quadrangle: Black, Douglas F. B. 06482
Limestone, Appalachian area, resources: McGrain, Preston. 08545
Limestone, Cobb quadrangle, occurrence: Seeland, David A. 00594

Kentucky—Continued

Economic geology—Continued

Limestone, Frankfort East quadrangle, Tyrone
Limestone: Pomeroy, J. S. 00452
Limestone, gravel, Calvert City quadrangle: Amos, Dewey H. 02948
Limestone, Pembroke quadrangle, occurrence: Moore, Samuel L. 00453
Limestone, petroleum, natural gas, Exie quadrangle: Moore, Samuel L. 02913
Limestone, Russellville quadrangle: Miller, Robert C. 00455
Mineral resources, Bee Spring quadrangle: Gildersleeve, Benjamin. 09386
Mineral resources, Calloway County: McGrain, Preston. 07398
Mineral resources, Clintonville quadrangle: MacQuown, W. C., Jr. 00269
Mineral resources, Dundee quadrangle: Goudarzi, Gus H. 00993
Mineral resources, Ezel quadrangle: Pipringos, G. N. 01108
Mineral resources, Hodgenville quadrangle: Moore, Frank B. 04207
Mineral resources, Lexington East quadrangle: MacQuown, William C., Jr. 00031
Mineral resources, Nicholasville quadrangle: MacQuown, W. C., Jr. 06685
Mineral resources, Olney quadrangle, limitations: Trace, Robert D. 01802
Mineral resources, Repton quadrangle: Seeland, David A. 04208
Mineral resources, Shepherdsville quadrangle: Keperle, Roy C. 01100
Mineral resources, Wildie quadrangle: Gualtieri, J. L. 01110
Natural gas, Illinois basin: Bond, D. C. 03406
Natural gas, Illinois basin: Rose, W. D. 03408
Natural gas, Perry County, occurrence, production: Ray, Edward O. 03205
Natural gas, storage, Illinois basin: Thomas, Ralph N. 07962
Petroleum and natural gas, Redbush quadrangle, occurrence: Rice, Charles L. 00335
Petroleum, Illinois basin, exploration, future: Miller, D. N., Jr. 07963
Petroleum, Monroe County, occurrence, possibilities: Perkins, Hunt. 03234
Petroleum, natural gas, Camp Breckinridge, resources, evaluation: Avila, John. 09628
Petroleum, natural gas, coal, limestone, Olaton quadrangle: Johnson, William D., Jr. 00451
Petroleum, natural gas, coal, Pleasant Ridge quadrangle: Goudarzi, Gus H. 06672
Petroleum, natural gas, eastern, central, exploration, 1965-66: Wilson, Edward N. 03235
Petroleum, natural gas, eastern, exploration: McGuire, William H. 03236
Petroleum, natural gas, Greensburg quadrangle, occurrence: Taylor, Alfred R. 02414
Petroleum, natural gas, Illinois basin, symposium: Illinois Geological Society. 07826
Petroleum, natural gas, Rough Creek uplift, possibilities: Rehn, E. E. 03243
Petroleum, natural gas, western, Bethel Sandstone: Reynolds, Douglas W. 09627
Petroleum, natural gas, western, possibilities: Stanonis, Frank L. 03242
Petroleum, Owensboro East quadrangle: Johnson, William D., Jr. 02912
Petroleum, Quality quadrangle, occurrence: Gildersleeve, Benjamin. 00334

Kentucky—Continued*Economic geology—Continued*

Petroleum, western, fields, list: Brownfield, Robert L. 07832

Petroleum, western, occurrence, production: Smith, Avery E. 07831

Uranium, reconnaissance, 1952-56: U.S. Atomic Energy Commission. 08994

Engineering geology

Landslides, Lovelaceville quadrangle: Finch, Warren I. 05751

Materials, properties, Calvert City quadrangle: Amos, Dewey H. 02948

Materials, properties, Calvert City quadrangle: Finch, Warren I. 06081

Materials, properties, geologic hazards, Paducah East quadrangle: Nichols, Thomas C., Jr. 06013

Materials, properties, Paducah West and Metropolis quadrangles: Finch, Warren I. 04004

General

Directory, oil and gas information, Illinois basin: Smith, Avery E. 07885

Geologic maps, new, applications to economic growth: McGrain, Preston. 09626

Geochemistry

Fluorite district, trace-element distribution: Heyl, A. V. 06872

Mercury and trace elements in sphalerite: Jolly, Janice L. 05981

Geomorphology

Caves, Mammoth, genesis: Thrailkill, John. 00545

Central karst area, cave passages, control: Deike, George H., 3d. 07782

Central karst area, landform evolution, controls: Howard, Alan D. 09821

Central karst area, slope retreat, dissection: Quinlan, James F. 08968

Fayette County, drainage, karst features: Mull, D. S. 06586

Mammoth Cave region, caves, genesis: Deike, George Herman, 3d. 03028

South-central, karst depression morphology, analysis: LaValle, Placido. 05165

Geophysical surveys

Camp Breckinridge, seismic, economic evaluation: Avila, John. 09628

Eastern, oil and gas exploration, available data: McGuire, William H. 03239

Illinois basin, seismic, gravity, magnetic: Dawson, Woodson H. 07960

Illinois basin, well logging, recommended programs: Neal, Marvin R. 07961

Jephtha Knob, gravity, magnetic: Seeger, C. Ronald. 04500

Perry County, Big Sandy gas field, radioactivity: Ray, Edward O. 03205

Glacial geology

Boone County, northwestern, drift, relation to vegetation: Keith, John R. 07988

Hydrogeology

Arlington, Wickliffe SW quadrangles, aquifers: Davis, R. W. 04334

Barlow and Cairo (Ill.) quadrangles, ground-water resources: Hansen, Arnold J., Jr. 03687

Blandville quadrangle, Eocene aquifers: Hansen, Arnold J., Jr. 00609

Fayette County, water resources, karst effects: Mull, D. S. 06586

Hardin quadrangle, ground-water resources: Scott, Glenn R. 04159

Kentucky—Continued*Hydrogeology—Continued*

Hickman quadrangle, ground-water resources: Lambert, T. W. 03684

Mammoth Cave area, basal water table, configuration: Cushman, R. V. 08945

Middlesboro area, water resources: Mull, D. S. 01810

Oakton-Wolf Island quadrangles, ground-water resources: Hansen, Arnold J., Jr. 03685

Wickliffe area, ground-water resources: Lambert, T. W. 03686

Maps, engineering geology

Paducah West quadrangle, Metropolis quadrangle, part: Finch, Warren I. 04004

Maps, geologic

Bee Spring quadrangle: Gildersleeve, Benjamin. 09386

Calloway County: McGrain, Preston. 07398

Calvert City quadrangle: Amos, Dewey H. 02948

Clintonville quadrangle: MacQuown, W. C., Jr. 00269

Cobb quadrangle: Seeland, David A. 00594

Cravens quadrangle: Peterson, Warren L. 02950

David quadrangle: Outerbridge, William F. 02947

Dorton quadrangle: Barr, J. L. 00454

Dundee quadrangle: Goudarzi, Gus H. 00993

Exie quadrangle: Moore, Samuel L. 02913

Ezel quadrangle: Pippingos, G. N. 01108

Ford quadrangle: Black, Douglas F. B. 06482

Frankfort East quadrangle: Pomeroy, J. S. 00452

Gracey quadrangle: Nelson, Willis H. 02914

Graham quadrangle: Kehn, Thomas M. 07013

Greensburg quadrangle: Taylor, Alfred R. 02414

Hardin quadrangle: Scott, Glenn R. 04159

Hartford quadrangle: Goudarzi, Gus H. 00991

Hodgenville quadrangle: Moore, Frank B. 04207

Jamboree quadrangle: Outerbridge, William F. 07384

Johnetta quadrangle: Gualtieri, J. L. 01111

Johnson Hollow quadrangle, part: Klemic, Harry. 00456

Ketchen and Jellico West (Tenn.) quadrangles: Englund, Kenneth J. 01711

Leatherwood quadrangle: Prostka, Harold J. 00457

Lexington East quadrangle: MacQuown, William C., Jr. 00031

Lovelaceville quadrangle: Finch, Warren I. 05751

Majestic, Hurley, Wharncliffe quadrangles, parts: Outerbridge, William F. 04412

Mays Lick quadrangle: Gibbons, A. B. 07385

McDowell quadrangle: Rice, Charles L. 00380

Middlesboro area: Mull, D. S. 01810

Moberly quadrangle: Greene, Robert C. 00030

Nicholasville quadrangle: MacQuown, W. C., Jr. 06685

Nortonville quadrangle: Palmer, James E. 04770

Oak Level quadrangle: Olive, Wilds W. 04204

Olaton quadrangle: Johnson, William D., Jr. 00451

Olney quadrangle: Trace, Robert D. 01802

Owensboro East quadrangle: Johnson, William D., Jr. 02912

Panola quadrangle: Greene, Robert C. 00450

Pembroke quadrangle: Moore, Samuel L. 00453

Pleasant Ridge quadrangle: Goudarzi, Gus H. 06672

Kentucky—Continued*Maps, geologic—Continued*

- Pulaski County, pre-Chattanooga: Helton, Walter L. 04182
 Quality quadrangle: Gildersleeve, Benjamin. 00334
 Redbush quadrangle: Rice, Charles L. 00335
 Repton quadrangle: Seeland, David A. 04208
 Riverside quadrangle: Shawe, Fred R. 02916
 Russellville quadrangle: Miller, Robert C. 00455
 Salvisa quadrangle: Cressman, E. R. 04768
 Shepherdsville quadrangle: Kepferle, Roy C. 01100

Wildie quadrangle: Gualtieri, J. L. 01110

Maps, geomorphologic

Central karst area: Howard, Alan D. 09821

Maps, ground water

- Arlington, Wickliffe SW quadrangles: Davis, R. W. 04334
 Barlow and Cairo (Ill.) quadrangles: Hansen, Arnold J., Jr. 03687
 Blandville quadrangle: Hansen, Arnold J., Jr. 00609
 Hickman quadrangle: Lambert, T. W. 03684
 Middlesboro area: Mull, D. S. 01810
 Oakton-Wolf Island quadrangles: Hansen, Arnold J., Jr. 03685
 Wickliffe area: Lambert, T. W. 03686

Maps, isopach

Apex Consolidated oil field: Rose, William D. 07835

Jingo oil field, Salem Limestone: Neudecker, Thomas E. 07848

Midland gas field, Bethel sand: Reynolds, Doug. 07850

Pulaski County, Crab Orchard Shale: Helton, Walter L. 04182

Maps, mineral resources

Calloway County: McGrain, Preston. 07398

Maps, structure

- Boxville oil pool: Avila, John. 07837
 Greensburg oil pool: Kincheloe, Jesse. 07843
 Hanson oil pool: Nuttall, Brandon D. 07845
 Illinois basin, base of New Albany black shale: Illinois Geological Society. 07826
 Midland gas field, Paint Creek Limestone: Reynolds, Doug. 07850
 Pulaski County, base of Chattanooga Shale: Helton, Walter L. 04182
 Taffy oil field, base of Vienna limestone: Smith, Avery E. 07954
 West Louisville oil pool, Vienna lime: Norris, Ronald L. 07959

Mineralogy

Clay, Jackson Purchase region, Eocene: Olive, Wilds W. 10329

Paleontology

- Conodonts, Devonian, North Vernon Limestone, Beechwood Member: Orr, R. William. 05761
 Conodonts, Ordovician, Cincinnati region, faunas, species: Kohut, Joseph J. 06030
 Conodonts, Ordovician, Maysville-Richmond strata, Cincinnati region: Kohut, Joseph James. 01733
 Conodonts, Silurian, Brassfield Limestone, Salamonie Dolomite: Nicoll, Robert S. 06701
 Crinoidea, Mississippian, Chester Series, western, allagecrinids: Gutschick, Raymond C. 05674
 Crinoidea, Silurian, Brassfield Limestone, Estill County: Jillson, Willard Rouse. 07855

Kentucky—Continued*Paleontology—Continued*

- Foraminifera, Mississippian, Golconda Formation, new faunule: Pohl, E. Robert. 02188
 Invertebrata, Mississippian, Salem Limestone, south-central, list: Taylor, Ronald S. 09309
 Invertebrata, Ordovician, Saluda Formation, north-central: Hatfield, Craig Bond. 03724
 Mollusca, Pleistocene, Peoria loess, Henderson County: Browne, Ruth G. 01681
 Pteridophytes, Pennsylvanian, *Arnoldella*: Seby, W. S. 02344
 Vertebrata, Pleistocene, Big Bone Lick and general: Jillson, Willard Rouse. 09411

Sedimentary petrology

- Central, Borden Formation, turbidites: Kepferle, Roy C. 10108
 Central, Lexington Limestone, mineralogy vs. texture: Fisher, Irving S. 03541
 Louisville area, Silurian-Devonian contact, pre-Jeffersonville erosion: Freeman, Tom. 10103
 Maysville to Stanford, Ordovician, Upper facies: Weir, Gordon W. 05189
 Newport area, Kope and Fairview Formations, megapiraples, paleocurrents: Rife, David L. 00013

Northern, Ordovician, Upper, provenance: Ford, J. P. 03783

Pennsylvanian nonmarine sedimentation models: Ferm, J. C. 08177

South-central, Salem Limestone: Taylor, Ronald S. 09309

Stratigraphy

- Carboniferous, Ezel quadrangle, section: Pipirigos, G. N. 01108
 Carboniferous, Johnetta quadrangle, section: Gualtieri, J. L. 01111
 Carboniferous, Quaternary, Bee Spring quadrangle, section: Gildersleeve, Benjamin. 09386
 Carboniferous, Quaternary, Dundee quadrangle, section: Goudarzi, Gus H. 00993
 Carboniferous, Quaternary, Olaton quadrangle, section: Johnson, William D., Jr. 00451
 Carboniferous, Quaternary, Olney quadrangle, section: Trace, Robert D. 01802
 Carboniferous, Quaternary, Pleasant Ridge quadrangle, section: Goudarzi, Gus H. 06672
 Carboniferous, Quaternary, Quality quadrangle, section: Gildersleeve, Benjamin. 00334
 Carboniferous, Quaternary, Repton quadrangle, section: Seeland, David A. 04208
 Carboniferous, Quaternary, Riverside quadrangle, section: Shawe, Fred R. 02916
 Carboniferous, Quaternary, Wildie quadrangle, section: Gualtieri, J. L. 01110
 Cretaceous-Quaternary, Cravens quadrangle, section: Peterson, Warren L. 02950
 Cretaceous-Quaternary, Hardin quadrangle, section: Scott, Glenn R. 04159
 Cretaceous-Quaternary, Lovelaceville quadrangle, section: Finch, Warren I. 05751
 Cretaceous-Quaternary, Oak Level quadrangle, section: Olive, Wilds W. 04204
 Devonian, Northern Vernon Limestone, Beechwood Member, reference section: Orr, R. William. 05761
 Devonian-Mississippian, Quaternary, Shepherdsville quadrangle, section: Kepferle, Roy C. 01100
 Devonian-Quaternary, Calvert City quadrangle, section: Amos, Dewey H. 02948

Kentucky—Continued*Stratigraphy—Continued*

Eocene, clay deposits, Jackson Purchase region: Olive, Wilds W. 10329

Exie quadrangle, section: Moore, Samuel L. 02913

Johnson Hollow quadrangle, section: Klemic, Harry. 00456

Mississippian, Cretaceous, Quaternary, Cobb quadrangle, section: Seeland, David A. 00594

Mississippian, Quaternary, Gracey quadrangle, section: Nelson, Willis H. 02914

Mississippian, Quaternary, Greensburg quadrangle, section: Taylor, Alfred R. 02414

Mississippian, Quaternary, Hodgenville quadrangle, section: Moore, Frank B. 04207

Mississippian, Quaternary, Pembroke quadrangle, section: Moore, Samuel L. 00453

Mississippian, Quaternary, Russellville quadrangle, section: Miller, Robert C. 00455

Ordovician, Cenozoic, Ford quadrangle, section: Black, Douglas F. B. 06482

Ordovician, Cenozoic, Frankfort East quadrangle, section: Pomeroy, J. S. 00452

Ordovician, Cenozoic, Salvisa quadrangle, section: Cressman, E. R. 04768

Ordovician, Lexington Limestone and Kope Formation, western: Brown, George D. 00929

Ordovician, Quaternary, Clintonville quadrangle, section: MacQuown, W. C., Jr. 00269

Ordovician, Quaternary, Lexington East quadrangle, section: MacQuown, William C., Jr. 00031

Ordovician, Quaternary, Mays Lick quadrangle, section: Gibbons, A. B. 07385

Ordovician, Saluda Formation, north-central, paleoecology: Hatfield, Craig Bond. 03724

Ordovician, Upper, lithofacies, Maysville to Stanford: Weir, Gordon W. 05189

Ordovician, Upper, northern, correlation with Ohio: Ford, J. P. 03783

Ordovician-Mississippian, Monroe County, subsurface: Perkins, Hunt. 03234

Ordovician-Mississippian, northeastern, guidebook: Ohio Geological Society. 01332

Ordovician-Quaternary, Moberly quadrangle, section: Greene, Robert C. 00030

Ordovician-Quaternary, Panola quadrangle, section: Greene, Robert C. 00450

Ordovician-Silurian, northeastern, field trip, outcrop descriptions: Peck, John H. 01335

Paleozoic, Quaternary, Nicholasville quadrangle, section: MacQuown, W. C., Jr. 06685

Pennsylvanian, Quaternary, David quadrangle, section: Outerbridge, William F. 02947

Pennsylvanian, Quaternary, Dorton quadrangle, section: Barr, J. L. 00454

Pennsylvanian, Quaternary, Hartford quadrangle, section: Goudarzi, Gus H. 00991

Pennsylvanian, Quaternary, Jamboree quadrangle, section: Outerbridge, William F. 07384

Pennsylvanian, Quaternary, Leatherwood quadrangle, section: Prostka, Harold J. 00457

Pennsylvanian, Quaternary, Majestic, Hurley, Wharncliffe quadrangles, section: Outerbridge, William F. 04412

Pennsylvanian, Quaternary, McDowell quadrangle, section: Rice, Charles L. 00380

Pennsylvanian, Quaternary, Nortonville quadrangle, section: Palmer, James E. 04770

Pennsylvanian, Quaternary, Redbush quadrangle, section: Rice, Charles L. 00335

Kentucky—Continued*Stratigraphy—Continued*

Pennsylvanian-Quaternary, Owensboro East quadrangle, section: Johnson, William D., Jr. 02912

Pleistocene, Peoria loess, Henderson County, sections: Browne, Ruth G. 01681

Silurian, Brassfield Limestone, Salamonie Dolomite: Nicoll, Robert S. 06701

Silurian-Devonian, Pulaski County: Helton, Walter L. 04182

Structural geology

Bluegrass area, normal faults, cluster: Jillson, Willard Rouse. 07987

Jeptha Knob, meteorite impact origin: Seeger, C. Ronald. 04500

Monroe County, Paleozoic rocks, subsurface: Perkins, Hunt. 03234

Pine Mountain fault block, subsurface: Wilson, Edward Norman. 08568

Western basin, Pennsylvanian: Mullins, Allan T. 03237

Krypton*Abundance*

Leighton chondrite: Meason, J. L. 00388

Geochemistry

Chondritic meteorites, unequilibrated, analyses: Heymann, D. 00297

Sea water, noble gas analyses: Bieri, Rudolf H. 02841

Isotopes

Abundance in Leighton chondrite: Meason, J. L. 00388

Meteorites: Eugster, O. 08487

Labrador*Areal geology*

Lac Joseph area: Stevenson, I. M. 04737

Economic geology

Iron, Carol mining district, reserve estimation, grade control: Dagenais, J. E. 05309

Iron, Labrador geosyncline, occurrence, resources: Gross, G. A. 11113

Iron, Schefferville area, genesis: Seguin, Maurice. 06926

Iron, Smallwood mine, distribution, statistical analysis: Zodrow, Erwin L. 07764

Geochemistry

Kiglapait intrusion, K-Rb fractionation: Morse, S. A. 07830

Geomorphology

Shoal Lake area, till-cored ridge, genesis: Cowan, W. R. 07992

Geophysical surveys

Continental margin, seismic: Grant, A. C. 05448

Glacial geology

Deglaciation, late-Wisconsin: Ives, J. D. 10128

Shoal Lake area, till-cored ridge, genesis: Cowan, W. R. 07992

Ungava Peninsula, deglaciation, ice-dispersal center: Barnett, D. M. 00585

West-central, ribbed moraine, genesis: Cowan, W. R. 05433

Maps, geologic

Knob Lake area: Gross, G. A. 11113

Labrador geosyncline, iron-formations: Gross, G. A. 11113

Lac Joseph area: Stevenson, I. M. 04737

Maps, geomorphologic

Northern peninsula, glaciers: Henoch, W. E. 07674

Maps, magnetic

Lac Bellanca (Quebec) area, airborne: Canada Geological Survey. 06300

Labrador—Continued*Maps, magnetic—Continued*

Lac Domagaya area, airborne: Canada Geological Survey. 06293

Lac Fleur-de-May area, airborne: Canada Geological Survey. 06285

Lac Thevet (Quebec) area, airborne: Canada Geological Survey. 06301

Sheet 22 P:10, airborne: Canada Geological Survey. 06292

Paleomagnetism

Precambrian, Michikamau anorthositic intrusion: Murthy, G. S. 05469

Structural geology

Mistastin Lake volcanic crater, new discovery: Currie, K. L. 04997

Lake Superior region*Absolute age*

Precambrian rocks, geochronology, problems, review: Goldich, S. S. 07480

Economic geology

Iron, general: Marsden, Ralph W. 05410

Geochemistry

Duluth gabbro, rare-earth elements: Haskin, Larry. 07813

Geomorphology

Lake Superior, bottom features: Farrand, William R. 07718

Geophysical surveys

Eastern, structure, magnetic: O'Hara, Norbert Wilhelm. 02617

Lake Superior, 1963 seismic experiment, reinterpretation: O'Brien, P. N. S. 00516

Lake Superior, bottom, seismic noise: Willis, David E. 10554

Western, seismic, upper mantle structure: Lewis, Brian T. 00956

Wisconsin area, gravity: Wold, Richard J. 11376

Paleomagnetism

Precambrian, Keweenaw lavas, field direction: Books, Kenneth G. 05202

Precambrian, Keweenaw volcanic units: Palmer, H. C. 11336

Sedimentary petrology

Iron formations, chert beds: Mengel, Joseph T. 07797

Structural geology

Eastern, tectonic features: O'Hara, Norbert Wilhelm. 02617

Lakes*Alaska*

Kenai Lake, bathymetry, earthquake-induced waves and seiches: McCulloch, David S. 06491

Ecology

Eutrophication, mathematical models: Brezonik, Patrick Lee. 07007

Iowa, West Okoboji, diatoms: Stoermer, E. F. 02408

Lake Erie, plankton concentrations, relation to hydroxy-apatite: Snow, Phillip D. 07008

Mississippi Valley, chydorid branchiopods, species diversity: deCosta, John. 06511

Genesis

New Mexico, Zuni Salt Lake maar: Bradbury, John Platt. 01725

Virginia, Mountain Lake, paleolimnology: Marland, Frederick Charles. 01363

Geochemistry

California, High Sierras, trace-element contents: Bradford, G. R. 04472

Great Lakes region, mineral-water equilibrium, aluminosilicates: Sutherland, Jeffrey Clark. 07203

Lakes—Continued*Geochemistry—Continued*

Lake Erie, hydroxy-apatite saturation vs. plankton: Snow, Phillip D. 07008

Lake Erie, water, chemical composition: Weiler, R. R. 07094

Manganese solution, biological vs. chemical, experiment: Ingols, Robert S. 03672

New York, Fayetteville area, Green Lake, chemical and isotopic balances: Takahashi, Taro. 02536

Nitrogen cycle in eutrophication, mathematical model: Brezonik, Patrick Lee. 07007

Oregon, Abert and Summer Lakes: Van-Denburgh, A. S. 08027

Oregon, Crater, East, and Davis Lakes, dissolved solids: Phillips, Kenneth N. 05503

pH-temperature profiles, in-place probe, California: Ben-Yaakov, S. 06049

Sediments, Fe-reducing environment, Eh and thermodynamic equilibrium: Doyle, Roger Whitney Stevens. 04535

Sediments, ferrous iron analysis, Lake Erie: Ross, Curtis. 07093

Water analysis, methods, Lakes Erie, Ontario: Chawla, V. K. 07092

Wisconsin, Lake Mendota, manganese chemistry: Delfino, Joseph J. 09373

Wisconsin, manganese: Delfino, Joseph John. 06534

Geological exploration

Manned submersible, Star 2, Lake Michigan: Somers, Lee H. 07095

Lake Michigan

Northern, subsurface topography, bedrock, sediments: Somers, Lee H. 07086

Lake Superior region

Lake Superior, bottom features: Farrand, William R. 07718

Limnology

Alaska, Tanana and Yukon River drainage areas: Likens, Gene E. 05332

California-Nevada, Lake Tahoe: Goldman, Charles R. 09387

Connecticut, Linsley Pond, eutrophication, element distribution: Cowgill, Ursula M. 03054

Idaho-Utah, Bear Lake, eutrophication trends, effect on zooplankton: Nyquist, David. 05509

Indiana, cladoceran remains in sediments, primary productivity: Harmsworth, Rodney V. 06125

New Mexico, Zuni Salt Lake maar: Bradbury, John Platt. 01725

Pleistocene, history, evidence: Horie, Shoji. 10192

Wisconsin, Madison area, Lake Mendota: Nriagu, Jerome O. 04473

Minnesota

Cedar Creek Bog, lake-bog succession, radial mat growth rate: Buell, Murray F. 06705

New York

Fayetteville Green Lake, limnology, calcite sedimentation: Brunkill, Gregg John. 06566

Northwest Territories

Somerset Island, Stanwell-Fletcher Lake, history, sediments: Coakley, J. P. 05522

Somerset Island, Stanwell-Fletcher Lake, sedimentation: Rust, B. R. 08064

Paleolimnology

South Dakota, Pickerel Lake: Watts, W. A. 01999

Sediments

Geochemistry, interstitial water, Fe, Connecticut: Doyle, Roger W. 05229

Lakes—Continued*Sediments—Continued*

Lake Erie, western, south shore reef area: Herdendorf, Charles E. 07088

Lake Michigan, southwestern, analyses, distribution: Somers, Lee H. 07091

Lakes Erie, Ontario, chlorophyll degradation products: Kemp, A. L. W. 07089

Mineralogy, iron sulfides, Connecticut, Linsley Pond: Doyle, Roger W. 05337

Northwest Territories, Somerset Island: Coakley, J. P. 06602

Texas, Mound Lake, sepiolite occurrence: Parry, W. T. 06444

United States

Great Lakes, water supply, simulation study for statistical evaluation: Megerian, Edmond. 00146

Utah

Great Salt Lake, composition, water source: Straesser, Manfred. 06993

Washington

Lake Washington, valley configuration, sediment fill: Schwarz, Sigmund D. 04848

Wisconsin

Lake Mendota, nitrogen cycle: Brezonik, Patrick Lee. 04451

Lakes, extinct*Arizona*

Southern, Lake Cochise, palynology: Hevly, Richard H. 11381

Winona area, evidence: Batchelder, George L. 04388

California

Death Valley, Lake Manly, popular account: Houghton, S. G. 10811

San Joaquin Valley, C-14 dates: Croft, M. G. 00785

Searles Lake, Quaternary sedimentation, climate: Smith, G. I. 03975

Connecticut

Lake Hitchcock, level changes: Hartshorn, J. H. 11042

Idaho

Lake Bonneville, catastrophic flood: Malde, Harold E. 05449

Lake Bonneville, outlet at Red Rock Pass: Williams, J. Stewart. 01486

Massachusetts

Berkshire Hills, glacial, shore features: Holmes, G. William. 09791

Lake Hitchcock, level changes: Hartshorn, J. H. 11042

New York

Erie Lowland, glacial, beach ridges: Calkin, Parker E. 09757

Glacial Lake Warren, Buffalo area, late Pleistocene history: Calkin, Parker E. 01138

Ontario

Ancestral Lake Huron, Manitoulin Island, strandlines: Lewis, C. F. M. 05304

Holleford meteorite crater, Precambrian-Paleozoic: Saint John, Brian E. 02730

Lake Nipissing, Manitoulin Island, strandline: Smith, J. Edward. 09469

Quaternary

Distribution and recognition, paleoclimatic methods, Pleistocene: Reeves, C. C., Jr. 07657

Quebec

Southeastern, proglacial: McDonald, Barrie C. 05677

Lakes, extinct—Continued*South Dakota*

Beadle County, glacial Lake Dakota plain: Hedges, Lynn S. 06026

Texas

Lake Lomax, western; sedimentation history: Frye, J. C. 03978

Utah

Lake Bonneville, history: Bissell, Harold J. 11442

Lake Bonneville, Pleistocene levels, Provo area: Rigby, J. Keith. 06157

Lake Uinta, Eocene, changes in level: Picard, M. Dane. 03569

Lanthanum*Abundance*

Brenham meteorite: Masuda, Akimasa. 04520

Geochemistry

Norton County achondrite, distribution: Masuda, Akimasa. 07871

Laser methods*Techniques*

Earthquake prediction system: Fowler, R. A. 04792

Laterites*General*

Review: Saenz Maroto, Alberto. 10517

Genesis

Nickel bearing deposits, potential resources: Domaas, Finn B. 09594

Hawaii

Oahu, water retention and movement: Sharma, M. L. 05933

Lava*Composition*

Gases, Hawaii, variations: Finlayson, J. Bruce. 04660

Flow mechanism

Pillow and pahoehoe: Jones, J. G. 03898

Flow velocity

Washington, Oregon, Yakima Basalt: Shaw, H. R. 08879

Lekolith

New term, planar-convex mass: Coats, Robert R. 06494

Magnetic properties

AF demagnetization curves, applications to geophysical problems: Irving, E. 08370

Physical properties

Hawaii, Kilauea: Peck, Dallas L. 07837

Structural features

Idaho, King's Bowl lava field and Great Rift zone: Prinz, Martin. 07681

Temperature

Basalt, relation to columnar joint formation: Peck, Dallas L. 02976

Hawaii, Makaopuhi lake, cooling rate, effect on composition: Evans, Bernard W. 02276

Hawaii, Makaopuhi lava lake, 1965: Wright, Thomas L. 00980

Viscosity

Hawaii, Makaopuhi lava lake: Shaw, H. R. 01039

Melting range, rheology: Shaw, Herbert R. 10628

Lead*Analysis*

Atomic absorption spectroscopy, water, chelation-extraction: Fishman, Marvin J. 04308

Spectrochemical, water, Colorado, Clear Creek: Mallory, Edward C., Jr. 00775

Lead—Continued

Appalachians

Resources, review: Wedow, Helmuth, Jr. 01331

Arizona

Bisbee area, genesis: Bryant, Donald G. 00540
Mineral Park district, occurrence, genesis: Eidel, J. J. 05430

Yavapai County, Iron King mine, occurrence, genesis: Gilmour, Paul. 05429

British Columbia

Bluebell mine, genesis: Ohmoto, Hiroshi. 04153

Canada

Geochemistry, carbonate-rock deposits, trace-element atomic ratios: Sangster, D. F. 02908
Western, occurrence: Evans, T. L. 04222

Colorado

Gilman district, occurrence, genesis: Radabaugh, R. E. 05401

Leadville district, occurrence, genesis: Tweto, Ogen. 05387

San Juan Mountains, western, occurrence, genesis: Burbank, Wilbur S. 05388

Geochemistry

Biologic concentration: Boyle, R. W. 04234

Carbonate replacement deposits: Titley, Spencer R. 04155

Stability relations in system Cu-Pb-S: Craig, James R. 02218

Zircon, loss, kinetic model: Craig, Harmon. 00121

Greenland

Mesters-Vig district, geochemical prospecting, mercury-halo method: Lehnert-Thiel, Klaus. 01824

Idaho

Coeur d'Alene district, occurrence, genesis: Hobbs, S. Warren. 05346

Illinois

Occurrence, genesis: Grogan, Robert M. 05406

Upper Mississippi Valley district, occurrence, genesis: Heyl, Allen V. 05408

Iowa

Upper Mississippi Valley district, occurrence, genesis: Heyl, Allen V. 05408

Isotopes

Composition, Cambrian-Devonian rocks, Montana: Zartman, R. E. 04111

Evolution, crust and mantle, recycling model: Armstrong, Richard Lee. 01102

Interpretation, single- and multi-stage development models: Kanasevich, E. R. 04707

Pb-206, -207, -208, Mississippi Valley lead-zinc districts: Cannon, R. S. 06868

Pb-206:Pb-204, volcanic rocks, Hawaii: Tatsu-moto, M. 08029

Ratios, Cenozoic volcanics, Rocky Mountains: Doe, Bruce R. 05115

Ratios, meteorite: Marshall, Royal R. 03929

Ratios, Montana: Doe, B. R. 07636

Ratios, New York, Balmat area: Reynolds, P. H. 05471

Ratios, oceanic basalts, independent age for Earth: Oversby, V. M. 07303

Ratios, oceanic basalts, independent age for Earth: Ulrych, T. J. 07304

Ratios, standard samples: Catanzaro, E. J. 00317

Ratios, ultramafic rocks: Marshall, Royal R. 07941

Ratios, Utah: Stacey, J. S. 06945

Ratios, volcanics, Colorado: Doe, B. R. 07762

U-238/Pb-204, abundance in rocks, concordia plots: Russell, R. D. 00372

Lead—Continued

Kansas

Miami-Picher field: Underwood, Roger. 00159
Tri-State district, occurrence, genesis: Brockie, Douglas C. 05407

Kentucky

Occurrence, genesis: Grogan, Robert M. 05406

Maine

Southeastern, occurrence, exploration: Hodder, R. W. 06873

Mexico

Durango, Mapimi district, occurrence: Hoffman, Victor J. 11303

Naica, Fresnillo, exploration: Villaseñor, Luis. 04133

San Luis Potosi, ore guides: Gomez, Manuel. 04115

Mississippi Valley

Genesis, glaciation as cause: McGinnis, L. D. 04220

Geochemistry, trace elements: Hall, Wayne E. 04122

Ore deposits, general: Sawkins, F. J. 07638

Missouri

Southeast district, occurrence, genesis: Snyder, Frank G. 05404

Tri-State district, occurrence, genesis: Brockie, Douglas C. 05407

Nevada

Pioche district, occurrence, genesis: Gemmill, Paul. 05378

New Mexico

Grant County, Central mining district, occurrence, genesis: Hernon, Robert M. 05382

Hansonburg district, Mex-Tex deposits: Roedder, Edwin. 04223

North Carolina

Southwestern, occurrence: Davis, James H. 08520

Northwest Territories

Pine Point area, exploration history: Seigel, H. O. 03050

Pine Point, genesis: Beales, F. W. 07752

Pine Point, genesis: Roedder, Edwin. 04231

Oklahoma

Miami-Picher field: Underwood, Roger. 00159
Tri-State district, occurrence, genesis: Brockie, Douglas C. 05407

South Dakota

Galena district, Double Rainbow mine, mineralogy: Garske, David H. 05874

Tennessee

Eastern, geochemical prospecting: Carpenter, R. H. 06834

United States

Central, summary: Heyl, Allen V. 09395

Midcontinent ore district, general: Snyder, Frank G. 05385

Utah

Bingham district, occurrence, genesis: Rubright, R. D. 05483

Park City district, occurrence, genesis: Barnes, Marvin P. 05376

Tintic district, occurrence, genesis: Shepard, W. M. 05485

Washington

Metaline district, occurrence, genesis: McConnell, Roger H. 05354

Van Stone mining district, occurrence, genesis: Cox, Manning W. 05357

Wisconsin

Upper Mississippi Valley district, occurrence, genesis: Heyl, Allen V. 05408

Lead—Continued*Yukon*

Resources, lode mining potential: Green, L. H. 08056

Lexicons*Stratigraphy*

Idaho geologic names: Savage, C. N. 07903

Lignite*Montana*

Foster Creek field, reserves, evaluation: Gil-mour, E. H. 10228

Reserves, estimation procedure, Fort Union For-mation: Carmichael, Virgil W. 01911

North Dakota

Reserves, estimation procedure, Fort Union For-mation: Carmichael, Virgil W. 01911

Texas

Coastal plain, exploration, depositional models: McGowen, J. H. 07445

Palynology, petrology: Traverse, Alfred. 09720

Limestone*Alberia*

Cadomin area: Gotts, R. J. 09676

Appalachians

Resources for cement, review: Ericksen, George E. 01400

Resources, review: Ericksen, George E. 01386

Illinois

Northeastern, resources: Major, Robert L. 01627

Indiana

Big Walnut Reservoir site: Heising, Leonard F. 06095

Downeyville Reservoir site, occurrence: Renick, Abbott. 06097

Resources, Devonian, Silurian: French, Robert R. 04483

Kentucky

Appalachian area, resources: McGrain, Preston. 08545

Calloway County, resources: McGrain, Preston. 07398

Calvert City quadrangle, occurrence: Amos, Dewey H. 02948

Cobb quadrangle, occurrence: Seeland, David A. 00594

Dundee quadrangle, occurrence: Goudarzi, Gus H. 00993

Exie quadrangle, occurrence: Moore, Samuel L. 02913

Ford quadrangle, occurrence: Black, Douglas F. B. 06482

Frankfort East quadrangle, Tyrone Limestone: Pomeroy, J. S. 00452

Johnetta quadrangle, occurrence: Gualtieri, J. L. 01111

Olaton quadrangle, occurrence: Johnson, Wil-liam D., Jr. 00451

Pembroke quadrangle, occurrence: Moore, Samuel L. 00453

Russellville quadrangle, occurrence: Miller, Robert C. 00455

Missouri

Independence quadrangle, occurrence: Parizek, Eldon J. 02917

Montana

Rattler Gulch area, exploration, reserves: Lan-dreth, John O. 00602

New Brunswick

Kings County, occurrence, reserves: Hamilton, J. B. 07403

Limestone—Continued*North Dakota*

Pembina and Grand Forks Counties, cement-rock possibilities, exploration: Anderson, Sid-ney B. 07051

Pennsylvania

Franklin County, composition, resources: Root, Samuel I. 06744

Tennessee

Adams quadrangle, occurrence: Hershey, Robert E. 07606

Alpine quadrangle, occurrence: Taylor, Landon C. 03072

Baxter quadrangle, occurrence: Taylor, Landon C. 03582

Burgess Falls quadrangle, occurrence: Wilson, Charles W., Jr. 03075

Campaign quadrangle, occurrence: Wilson, Charles W., Jr. 03077

Cassville quadrangle, occurrence: Wilson, Charles W., Jr. 03082

Cookeville East quadrangle, occurrence: Fer-guson, Carl C. 11188

Cookeville West quadrangle, occurrence: Taylor, Landon C. 03583

Cumberland City quadrangle, occurrence: Wil-son, Charles W., Jr. 03073

Dibrell quadrangle, occurrence: Wilson, Charles W., Jr. 05543

Erin quadrangle, occurrence: Wilson, Charles W., Jr. 03579

Gassaway quadrangle, occurrence: Wilson, Charles W., Jr. 03581

Hilham quadrangle, occurrence: Taylor, Landon C. 03584

Jeannette quadrangle, occurrence: Wilson, Charles W., Jr. 03690

Liberty quadrangle, Carters and Bigby-Cannon Limestones: Wilson, Charles W., Jr. 03696

Livingston quadrangle, occurrence: Taylor, Lan-Don C. 05538

Monterey quadrangle, occurrence: Garman, R. Keith. 09509

Needmore quadrangle, occurrence: Wilson, Charles W., Jr. 03578

Okalona quadrangle, occurrence: Garman, R. Keith. 03071

Perryville quadrangle, occurrence: Wilson, Charles W., Jr. 03689

Readyville quadrangle, occurrence: Wilson, Charles W., Jr. 03074

Short Mountain quadrangle, occurrence: Wil-son, Charles W., Jr. 07609

Silver Point quadrangle, Bigby-Cannon Forma-tion: Wilson, Charles W., Jr. 03076

Sligo Bridge quadrangle, occurrence: Wilson, Charles W., Jr. 05537

Springfield North quadrangle, occurrence: Hershey, Robert E. 07607

Sugar Tree quadrangle, occurrence: Wilson, Charles W., Jr. 03607

Woodbury quadrangle, occurrence: Wilson, Charles W., Jr. 05535

Youngville quadrangle, occurrence: Hershey, Robert E. 07608

Texas

Coastal plain, exploration, depositional models: McGowen, J. H. 07445

Coastal plain, sources: Eifler, G. K., Jr. 07451

West Virginia

Western, resources, Greenbrier Limestone: Kusler, David J. 01151

Lineation**Gneiss**

New York, Ohio quadrangle: Nelson, Arthur E. 04003

Regional

Arkansas-Missouri, Ozark region, radar detection: Kirk, J. Norman. 09288
Atlantic Ocean, Straits of Florida, faulting evidence: Malloy, Richard J. 08960
New England, southern, magnetic data: Bromery, Randolph W. 09754
Washington, Olympic-Wallowa lineament: McKee, Bates. 10022

Slickensides

United States, Blue Ridge, deformation plan dated: Cloos, Ernst. 07980

Tectonic transport

Pennsylvania, Conococheague Formation: Henderson, John R. 08179

Terminology

Primary current, preferred for sedimentary feature: Stokes, William Lee. 03854

Lithium**Abundance**

Meteorites, stony, isotopic: Balsiger, H. 10692

Analysis

Activation, Li-6: Sedlacek, W. A. 10928

Geochemistry

Hudson River water, New York: Fabricand, Burton P. 03551

Melting curves to 80 kb: Luedemann, H. D. 00570

River water, United States, cf. marine sediments: Sreekumaran, C. 05345

Soils, clays, exchange capacity, calcium: Bair, F. L. 02255

Isotopes

Ratios, Holbrook meteorite: Gradsztajn, Eli. 00212

Louisiana**Absolute age**

Franklin Parish, shells, C-14: Saucier, Roger T. 02505

Areal geology

Baton Rouge to Vicksburg, Miss., guidebook: Am. Assoc. Stratigraphic Palynologists. 08888
Mississippi River, South Pass mouth: Morgan, James P. 09199

Economic geology

Clays, resources, properties: Dixon, Louis H. 09886

Natural gas, northern, occurrence: Shreveport Geological Society. 02164

Natural gas, southern, occurrence: Lafayette Geological Society. 02121

Natural gas, Thornwell field, occurrence: Hardin, Frank R. 02122

Petroleum and natural gas, coastal area, Pleistocene: Sabate, R. W. 09342

Petroleum and natural gas, offshore operations, legal aspects: Stone, Oliver L. 05111

Petroleum, North Haynesville field, occurrence: Bishop, William F. 00065

Petroleum, Timbalier Bay area, salt dome complex: Frey, M. G. 01211

Engineering geology

Applications, flood control, hurricane-protection: Bowen, Thomas J. 08617

Breton Sound, sedimentation in Mississippi River-Gulf Outlet channel: Briggs, Garrett. 09337

Louisiana—Continued**Engineering geology—Continued**

Flood control structures, Atchafalaya basin floodway: Hebert, Kermit L. 09888

Foundations, Mississippi delta clays: McClelland, Bramlette. 08798

Foundations, New Orleans: Eustis, J. Bres. 08680

Highways, southern: Kemahlioglu, Ali S. 08761

Land subsidence, Baton Rouge area: Davis, George H. 08519

Land subsidence, New Orleans area, groundwater offtake: Kazmann, Raphael G. 09322

Salt failure, explosive, Winn Parish: Short, N. M. 01117

Geochemistry

Atchafalaya basin, organic sediments, cf. Mississippi Delta: Ho, Clara. 01218

Sediments, Holocene, offshore, sulfur: Laseter, J. L. 08777

Geomorphology

Coastal, shoreline sedimentary processes: Beall, Arthur O., Jr. 03546

Landform description, popular account: Kniffen, Fred B. 11198

Natchez-New Orleans area, terraces: Durham, C. O., Jr. 08889

Pontchartrain Basin, history: Saucier, Roger Thomas. 03022

Southwestern, chenier plain: Leont'yev, O. K. 07297

Geophysical surveys

Coastal shale diapirs, electrical logging, interpretation: Gilreath, J. A. 03375

Ship Shoal shale mass, gravity, seismic: Musgrave, A. W. 03357

Well logging, dipmeter, Wilcox sands: Reese, Dale O. 09343

Hydrogeology

New Orleans area, land subsidence, groundwater offtake: Kazmann, Raphael G. 09322

Pointe Coupee Parish, ground-water resources, quality: Harder, A. H. 03759

Pointe Coupee Parish, resources: Winner, M. D., Jr. 01625

Saline ground water: Winslow, A. G. 07142

Southeastern, ground-water levels, resources: Dial, D. C. 03644

Southwestern, abnormal hydrostatic pressure, deep wells: Dickey, Parke A. 01089

Maps, ground water

Pointe Coupee Parish: Winner, M. D., Jr. 01625

Saline: Winslow, A. G. 07142

Mineralogy

Clay and heavy minerals, Mississippi border, Pleistocene loess: Snowden, J. O., Jr. 05668

Paleontology

Cephalopoda, Eocene, Jackson and Claiborne Groups, sepiids, n.spp.: Allen, James E. 02974

Foraminifera, Miocene, *Globorotalia foehsi*, type locality: Barker, R. Wright. 09351

Petrology

Mississippi River, South Pass mouth, mudlump development, core study: Morgan, James P. 09199

Sedimentary petrology

Alluvial point-bar sands, structures, interpretation: Gwinn, Vinton E. 02088

Citronelle Formation, heavy minerals: Rosen, Norman Charles. 04543

Gulf Coast embayment, Buckner Formation: Dickinson, Kendell A. 03524

Louisiana—Continued

Sedimentary petrology—Continued

- Gulf coast, Holocene sediments, continental shelf: Krawiec, Wesley. 01047
- Mississippi border, Pleistocene loess: Snowden, J. O., Jr. 05668
- Mississippi delta, gastrolithic beach gravel, fish otoliths: Dixon, Mark A. 01239
- North Haynesville oil field, Smackover Limestone: Bishop, William F. 00065
- South-central, loess: Daniels, R. B. 00923
- Southeastern, sediments, consolidation, cementation: Coleman, James M. 08647
- Western, Catahoula Formation: Paine, William R. 01436
- Winnfield salt dome, petrofabrics: Muehlberger, William R. 11332

Stratigraphy

- Cenozoic, southern, general: Lafayette Geological Society. 02121
- Jurassic, Buckner Formation, Gulf Coast embayment: Dickinson, Kendell A. 03524
- Jurassic, northwestern, Upper: Dickinson, Kendell A. 01693
- Jurassic-Quaternary, Washington Parish, Tatum salt dome area: Eargle, D. H. 01105
- Mesozoic-Cenozoic, northern: Shreveport Geological Society. 02164
- Oligocene(?), Frio Formation, Hackberry wedge, southwestern: Paine, William R. 00305
- Oligocene-Miocene, Catahoula Formation, western: Paine, William R. 01436
- Pleistocene, continental shelf: Fails, Thomas G. 10898
- Quaternary, Mississippi River, South Pass mouth, mudlumps, core study: Morgan, James P. 09199
- Tertiary, Wilcox Group, depositional systems: Galloway, William E. 09334

Structural geology

- Gulf Coast geosyncline, faulting, role in subsidence: Shelton, John W. 00912
- Gulf coast, salt domes: Atwater, Gordon I. 01036
- Mississippi delta, mudlumps, relation to diapirs: Morgan, James P. 03244
- Salt domes, distribution in sedimentary basin: Paulson, Oscar L., Jr. 09344
- Salt domes, mechanics: Muehlberger, William R. 01104
- Vermilion Parish, Abbeville structure, evolution: Steinhoff, R. O. 08559
- Washington Parish, Tatum salt dome area: Eargle, D. H. 01105
- Winn Parish, Winnfield salt dome: Hoy, Robert B. 01017
- Winnfield salt dome, internal structure: Muehlberger, William R. 11332

Luminescence

Calcite

- New Jersey, New Brunswick area: Modreski, Peter J. 09089

Interpretation

- Carbonate deep-sea cores, natural radiation dosimetry: Bothner, Michael H. 08475
- Minerals, activators, impurities, correlation: Greer, R. T. 10475

Meteorites

- Enstatite chondrites, achondrites, electron-excited: Greer, Raymond T. 08711

Silicate rock powders

- Ultraviolet-excited: Nash, Douglas B. 08485

Luminescence—Continued

Spinel

- Red fluorescence spectrum: Wood, D. L. 09257

Magmas

Crystallization

- Element behavior, bond energies, equation: Damon, Paul E. 01985
- Processes, theoretical discussion: Jaeger, J. C. 04641
- Stocks, alkalic: Giles, David L. 04154

Deuteric phenomena

- Iron-oxide reactions: Surdam, Ronald C. 07641
- Ore-forming fluids, Mexico: Rye, Robert O. 04116
- West Indies, calcalkaline suites, melting relations, water effects: Brown, G. M. 01568

Differentiation

- Anorthosite, massif to layered types, variation: Romey, William D. 05621
- Arizona, Cornelia pluton: Wadsworth, William B. 01910
- Basalt, Greenland, Svartenhuk Peninsula: Clarke, D. B. 02063
- Basalt, mechanism: Kuno, Hisashi. 04644
- Basaltic, akermanite stability, depth indicator: Yoder, H. S., Jr. 01570
- Basaltic andesite, genesis: Coats, R. R. 04645
- Basaltic, Greenland, Ilordleq area, dikes: Waterson, Juan. 01862
- British Columbia, Princeton area, Copper Mtn. intrusions: Montgomery, J. H. 03595
- Calc-alkalic, oxidation states: Mueller, Robert F. 08816
- California, Sierra Nevada batholith: Piwinski, A. J. 04433
- Columbia River Basalt, Oregon, Picture Gorge type: Aoki, Ken-ichiro. 00666
- Fe-Ti oxides, diabase: Davidson, A. 07640
- Fractional crystallization, Ontario, Porcupine district, sill: Naldrett, A. J. 02176
- Granitic, plagioclase zoning as key, Washington: Wiebe, Robert A. 04499
- Greenland, Ilimaussaq alkaline intrusion: Sorensen, H. 02959
- Greenland, Ilimaussaq Peninsula, northern, Gardar dikes: Scharbert, Heinz G. 05667
- Hawaii: Macdonald, Gordon A. 07937
- Hawaii, Kilauea, basalt: Peck, Dallas L. 07837
- Hawaii, Makaopuhi lava lake, cooling history: Evans, Bernard W. 08681
- K-Rb fractionation trends, covariance analysis: Shaw, D. M. 08878
- Layered intrusions, Greenland, Skaergaard, and others: Wager, L. R. 00366
- Liquid immiscibility: Desborough, George A. 04124
- Mechanism, flow and dike injection: Bhattacharji, Somdev. 04437
- Mechanism, flow and dike injection: Bridgwater, D. 04883
- Metallic phases, Greenland: Melson, W. G. 10748
- Mineral deposits, genesis: Smirnov, V. I. 04219
- Nevada, Santa Rosa Range: LeMasurier, Wesley E. 02695
- New York, Adirondack Mts., anorthosite-charnockite series: Letteney, Cole DeWitt. 01752
- Processes, variable factors, checklist: Middleton, Eric A. K. 05647
- Water pressures, Nevada, tuff formation: Noble, Donald C. 05210

Magmas—Continued

Experimental studies

- Basaltic melts, spinel stability: Hill, Robin. 10906
 California, Sierra Nevada batholith, central: Piwinski, A. J. 04433
 Felsic and crystalline phases, crystallization order, composition: Gibbon, Donald L. 11286
 Fe-S-O system, melting relations, crystallization temperatures: Naldrett, A. J. 01556
 Flow conditions, model study: Bhattacharji, Somdev. 07825
 Forsterite-enstatite melting, effect of water vapor: Sclar, C. B. 10759
 Granitic, crystallization sequence: Kudo, A. M. 08769
 Granitic, eutectic liquids, composition, pressure effects: Luth, W. C. 01573
 Granitic, water under-saturated, P-T conditions: Luth, William C. 10664
 Granodiorite and tonalite, melting: Piwinski, A. J. 00462
 Incongruent melting of enstatite, equilibrium diagrams: Kushiro, I. 05058
 Nephelinitic, carbonatite derivatives: Watkinson, D. H. 07974
 Phase relations to 40 kb, basaltic, peridotitic: Ito, Keisuke. 05344
 Rock series, parental material, melting relations: Tilley, C. E. 01566
 Silicate melts, generation limits in crust and mantle: Boettcher, A. L. 00463
 Ultramafic, KO-MgO-SiO-HO system: Seifert, Friedrich. 08077
 Volatiles, influence on temperature at rock contacts: Kesler, Stephen E. 05338
 Zircon crystallization, diverse P-T conditions: Dietrich, R. V. 00330

Genesis

- Anatexis at depth vs. differentiation of basaltic, Ontario: Heimlich, R. A. 03002
 Anatexis at depth vs. differentiation of basaltic, Ontario: Johnston, W. G. Q. 03001
 Anatexis, California, southern: Warnke, Detlef A. 07999
 Basaltic: Green, D. H. 04648
 Basaltic, island arcs, relation to seismic activity: Sugimura, Arata. 04642
 Depth in mantle, indicators, mafic and ultramafic inclusions: MacGregor, Ian D. 01948
 Isotopic evidence, Montana: Doe, B. R. 07636
 Mantle convection: Keith, M. L. 04117
 Mantle melting, basaltic types: Oxburgh, E. R. 00515
 Mantle, upper, model study: Tarakanov, R. Z. 04671
 New York, Adirondacks, migmatite, anatexis: Dietrich, R. V. 08524
 Processes, variable factors, checklist: Midlemost, Eric A. K. 05647
 Silica-saturated, experimental study: Kushiro, I. 05058
 Tectonism, shear melting: McConnell, R. B. 00006
 Tholeiitic and alkaline, trace-element fractionation: Gast, Paul W. 04866

Geochemistry

- Basaltic gas, composition, Hawaii: Nordlie, Bert E. 08828
 Calc-alkalic, Si-enriched, pyroxene crystallization, oxygen fugacity: Best, Myron G. 07824

Magmas—Continued

Geochemistry—Continued

- Compositions, upper mantle, partial zone melting: Kushiro, Ikuro. 00061
 Equilibrium crystallization, term questioned: Wagener, H. D. 03852
 Hawaii, basaltic, rare-earth abundance patterns: Schilling, Jean-Guy. 10801

Temperature

- Wall-rock contacts, effect of volatiles: Kesler, Stephen E. 05338
 Wall-rock thermoluminescence, paleothermometer: Johnson, Noye M. 03960

Theoretical studies

- Plagioclase-magma system, quantitative relations: Kudo, Albert M. 07923

Viscosity

- Granitic, liquid, evidence for: Taubeneck, William H. 09713

Zonation

- Texas, Buchanan granite massif, crystallization: Cook, Beverly Gatlin. 07462

Magnesium*Nevada*

- Gabbs area, occurrence, genesis: Schilling, John H. 05363

Washington

- Okanogan County, northern, occurrence, composition: Fox, Kenneth F., Jr. 04112

Magnesium*Analysis*

- Atomic absorption spectroscopy, acetylene flames: Ramakrishna, T. V. 11343
 Electrochemical, activity coefficients: Kramer, James R. 07921

Geochemistry

- Achondrites: Deuser, W. G. 03105
 Hudson River water, New York: Fabricand, Burton P. 03551
 Metamorphic rocks, garnet-biotite pairs: Grant, James A. 10900
 Soils, North Carolina, coastal plain: Rice, H. B. 02266

Magnetic field, Earth*Causes*

- Precessional torques, turbulent flow in core: Malkus, W. V. R. 00595

General

- Arctic Ocean, drifting station studies: Hessler, V. P. 09878
 Pre-Gilbertian concepts: Smith, Peter J. 07065
 Relation to planetary physics: Kaula, William M. 09412

Instruments

- Magnetometer, self-oscillating rubidium, stability: Allen, J. H. 05426

Intensity

- Pliocene, New Mexico, Arizona: Kono, M. 05341
 Precambrian to present: Carmichael, C. M. 00319

Internal

- Core-mantle interface, hydromagnetic waves, reflection, refraction: Skiles, Durward D. 08399
 Spectrum and lower mantle conductivity: Currie, Robert G. 00664

Models

- Mathematical, analog, electromagnetic variations at surface: Dosso, Harry William. 00869
 Theories, summary: Phillips, O. M. 00561
 Three-dimensional, for earth science studies: Northcutt, Fred. 01600

Magnetic field, Earth—Continued

Observations

- Arctic Ocean, ARLIS II Ice Island, 1961-62: Ostenson, N. A. 09881
- Earthquake effects, 1964: Hirshberg, Joan. 00203

Observatories

- Airborne Secular Variation Observatory, proposal: Hinton, George F. 08402

Rapid variations

- Coast effect, model study: Hermance, John F. 01967

Secular variations

- Clear windows, fine structure: Hinton, George F. 08402
- Core, kinematics: Backus, George E. 08396
- Core, kinematics: Booker, John Ratcliffe. 04531
- Reversals, dynamo theory: McDonald, Keith Leon. 11323

Variations

- Earth's rotation, rate, relations: Ball, R. H. 08401

Magnetic methods

Airborne

- Anomalies, relation to remanent magnetism, Nevada: Bath, Gordon D. 06806
- Iron exploration, instruments: Labarthe, Guillermo. 09524
- Mineral exploration with widely spaced profiles: Zietz, I. 06864

Applications

- Disseminated sulfide exploration, British Columbia: Fountain, David K. 07754
- Mid-oceanic ridge system, anomalies along crest: Talwani, Manik. 07997

Experimental studies

- Anomalies, mid-ocean ridge system, simulation: Harrison, C. G. A. 00654

Instruments

- Magnetometer, fast response, ferromagnetic resonance: Schwee, L. J. 09232
- Magnetometer, vibrating sample, high dc fields: Foner, S. 09231

Interpretation

- Airborne, linear filtering, applicability: Naidu, Prabakar S. 11116
- Buried steps and sheets, digital computer technique: Hall, Donald H. 07298
- Magnetic anomalies, linear, marine: Watkins, N. D. 03733
- Marine anomalies, numerical methods: Emilia, D. 10426
- Piezomagnetic anomalies, creep displacements along faults: Breiner, Sheldon. 02046

Techniques

- Dual-level airborne, petroleum exploration: Jenny, W. P. 00363
- Ionic etching, titanomagnetite, domain structure revealed: Soffel, H. C. 08390

Magnetic properties

Basalt

- Atlantic Ocean: Phillips, J. D. 07846
- Magnetic polarity, correlation with petrology: Watkins, N. D. 03907
- Oceanic, continental: Wasilewski, P. J. 08395
- Oceanic, magnetic classes: Wasilewski, Peter J. 05243
- Oregon-Washington, intensity, stability: Irving, E. 02727
- Polarity, correlation with petrology, Columbia Plateau: Larson, E. E. 03905
- Polarity, correlation with petrology, Columbia Plateau: Wilson, R. L. 03906

Magnetic properties—Continued

Basalt—Continued

- Puerto Rico Trench: Wasilewski, P. J. 08443
- Reversed polarity, correlation with oxidation state: Wright, J. B. 04290
- Thermoremanent decay: Belshe, John C. 08391

Cassiterite

- Remanence, ferromagnetism, origin: Banerjee, Subir K. 08388

Coal

- Proton magnetic relaxation, room-temperature, bituminous: Retcofsky, H. L. 04490
- Susceptibility, variation with rank: Bivins, Doris. 00377

Cobalt

- Magnetomechanical behavior, rock magnetism applications: Carmichael, Robert Stewart. 02047

Copper-bearing minerals

- Susceptibility: Powell, H. E. 01512

Diorite

- California, northern, Bucks pluton: Merrill, Ronald T. 08378

Ferrite

- Synthetic, remanent, stability: Pucher, R. 10411

Ferromagnetic material

- Strain model: Holstrom, Geoffrey. 08385

Goethite

- Thermoremanence: Strangway, D. W. 03909

Hematite

- Remanence, origin, stability: Smith, Randall William. 01755
- Thermoremanence and spontaneous magnetization: Strangway, D. W. 03909

Hematite-maghemite intergrowths

- Remanent magnetization, direction and intensity: Porath, H. 04369

Igneous rocks

- Michigan, Keweenaw lavas: Vincenz, S. A. 00512
- Michigan, Portage Lake lavas: Vincenz, S. A. 00519
- Piezo-remanent magnetization, rate of acquisition: Nagata, T. 05278
- Precambrian rocks: Schwarz, E. J. 00589
- Resonance absorption spectra, genetic and heating histories: Bender, D. D. 07820

Ilmenite-hematite minerals

- Coercivity and origin of TRM: Merrill, Ronald T. 05277

Lava

- AF demagnetization curves, applications to geophysical problems: Irving, E. 08370

Lead-bearing minerals

- Susceptibility: Powell, H. E. 01512

Magnetite

- Internal stress effects on IRM, TRM: Lowrie, W. 08387
- Magnetomechanical behavior, rock magnetism applications: Carmichael, Robert Stewart. 02047
- Remanence, internal stress effects: Lowrie, William. 02610
- Stable remanence and memory, controls: Kobayashi, Kazuo. 03886

Manganese minerals

- Susceptibility: Powell, H. E. 00036

Marine sediments

- Magnetic fabric, cores, off California, La Jolla canyon and fan: Rees, Anthony I. 04425

Measurements

- Arizona, Ajo mining district: May, Bruce T. 08392

Magnetic properties—Continued*Measurements—Continued*

- Arizona, Ajo porphyry copper deposit: May, Bruce Tipton. 04546
 California, northern, Bucks pluton: Merrill, Ronald Thomas. 01754
 California, Paso Robles Formation, susceptibility: Galehouse, Jon S. 01078
 Colorado, Spanish Peaks: Larson, E. E. 08374
 Colorado, Thirtynine Mile volcanic field: Graebner, P. 11069
 Lake Superior region, Keweenaw lavas, remanence: Books, Kenneth G. 05202
 Mexico, Valley of Mexico, lava: Nairn, Alan E. M. 08372
 Mid-Atlantic Ridge sediments, thermomagnetism: Schwarz, E. J. 07210
 Nevada, Lousetown Fm.: Heinrichs, Donald F. 08278
 Nevada, southern, Thirsty Canyon Tuff: Noble, Donald C. 02715
 Nevada, Test Site, ash-flow tuff, remanent: Allingham, John W. 08569
 Nevada Test Site, volcanics: Bath, Gordon D. 06806
 New Brunswick, Hopewell group: Roy, J. L. 00049
 New Brunswick, Maringouin Formation, diagenetic remanent: Roy, J. L. 01960
 Recording thermomagnetic balance: Schwarz, E. J. 02907
 Washington, south-central, Yakima Basalt: Rietman, Jan D. 10836

Metallic minerals

- Susceptibility, of group IVB, VB, and VIB : Powell, H. E. 00037

Monodomain grains

- Neel theory verified: Dunlop, D. J. 03851

Multidomain materials

- Stable remanence and memory, controls: Kobayashi, Kazuo. 03886

Nickel

- Internal stress effects: Shive, Peter N. 08386
 Magnetomechanical behavior, rock magnetism applications: Carmichael, Robert Stewart. 02047
 Remanence, internal stress effects: Lowrie, William. 02610
 Thermoremanence, destruction by deformation: Shive, Peter N. 05043

Paramagnetic minerals

- Magnetic moment of Fe²⁺: Parks, George A. 05931

Pyrrhotite

- Ferrimagnetic and antiferromagnetic phases: Schwarz, E. J. 03093

Red beds

- Remanent magnetization, chemical: VanHouten, Franklyn B. 01085

Remanence

- Within-specimen dispersion: May, Bruce T. 08389

Rhyolite

- Missouri, Cottoner Mountain: Park, Frederick B. 03100

Sandstone

- Missouri, LaMotte Formation: Al-Khafaji, Saadi. 08394

Serpentine

- Maryland, Hunting Hill: Sasajima, Sadao. 08393

Siltstone

- Pennsylvania, Appalachians, Mauch Chunk Formation: Knowles, Raymond R. 03931

Magnetic properties—Continued*Sphalerite*

- Iron-bearing, iron concentration effects: Keys, J. D. 03753

Techniques

- Anisotropic susceptibility, rotating specimen: Hanna, William F. 10370
 Rock magnetic parameters, differential thermal analysis: Vollstadt, H. 03912
 Susceptibility, induction-type apparatus: Hanna, William F. 10371

Volcanic glass

- Susceptibility, United States, western: Noble, Donald C. 09151

Volcanic rocks

- Magnetic stability, cause of high: Strangway, David W. 01949

Zinc-bearing minerals

- Susceptibility: Powell, H. E. 01512

Magnetic surveys*Alberta*

- Southern, crust, upper mantle: Kanasewich, E. R. 05063

Arctic

- Franklin and continental shelf, airborne, interpretation: Bhattacharyya, B. K. 04736

Arctic Ocean

- Alpha and Nansen Cordillera, sea-floor spreading: Vogt, Peter Richard. 07160

- Chukchi Sea, northeastern: Bassinger, B. G. 00078

- Greenland Sea, subbottom profiles: Ostenso, N. A. 00544

Atlantic Coastal Plain

- Basement, structural interpretation: Reed, John C., Jr. 08850

Atlantic Ocean

- Cape Hatteras, magnetic anomaly on continental rise: Brakl, J. 03228

- Labrador Sea: Kroenke, Loren W. 09828

- Labrador Sea, northeast of Newfoundland: Fenwick, D. K. B. 01975

- Labrador Sea, sea-floor spreading, evidence: Mayhew, M. A. 08446

- Mid-Atlantic Ridge, interpretation, crustal spreading questioned: Watkins, N. D. 02815

- Mid-oceanic ridge, anomaly pattern, interpretation: Heirtzler, James R. 00655

- North of Bahama-Antilles Islands, anomalies, interpretation: Bracey, Dewey R. 05300

- Northern, Mid-Atlantic ridge: Talwani, Manik. 10847

- Northwestern, Labrador Sea Ridge: Johnson, G. Leonard. 00636

Bering Sea

- Floor, interpretation, mosaic structure: Gaynanov, A. G. 03810

California

- Nevada County, northern: Oliver, Howard W. 01419

- San Andreas fault, central, airborne reconnaissance: Hanna, William F. 04031

- San Andreas fault, piezomagnetic effects: Breiner, Sheldon. 02046

- San Bruno-Hollister area, San Andreas fault, piezomagnetic changes: Breiner, Sheldon. 04033

- San Jose area, Calaveras, Hayward, Silver Creek faults, airborne: Robbins, Stephen L. 04032

Canada

- Canadian Shield, airborne, map interpretation: MacLaren, A. S. 04713

Magnetic surveys—Continued

Caribbean region

Lesser Antilles, Guadeloupe region: Fink, L. Kenneth, Jr. 08686

Caribbean Sea

Cayman Trough: Gough, D. I. 08407

Colorado

North Park area: Behrendt, John C. 10206

Gulf of California

Transform faults: Moore, David G. 08462

Gulf of Mexico

Salt dome, cf. seismic and gravity data: Prindle, Robert O. 00721

West Florida Escarpment, basement fault: Antoine, J. W. 09336

Hawaii

Hawaiian ridge, anomalies, tectonic trends: Malahoff, Alexander. 04656

Illinois-Indiana-Kentucky

Illinois basin: Dawson, Woodson H. 07960

Iowa

Washington, Keokuk Counties, Keota dome: Hase, D. H. 01994

Kansas

Eastern: Ball, M. M. 08362

Kentucky

Jephtha Knob, meteorite crater: Seeger, C. Ronald. 04500

Lake Superior region

Eastern, tectonic features: O'Hara, Norbert Wilhelm. 02617

Maryland

Baltimore County, structural, lithologic interpretation: Bromery, Randolph W. 09755

Baltimore-Washington anticlinorium, northeast end, airborne: Bromery, Randolph Wilson. 05514

Mexico

Upper Mantle Project, 1966-67: Maldonado-Koerdell, M. 09022

Missouri

Cottoner Mountain, interpretation: Park, Frederick B. 03100

Ozark uplift, eastern flank: Phelan, Michael. 10115

Montana

Disturbed Belt, northern: Kleinkopf, M. D. 10238

Lewis and Clark Range, southeastern: Mudge, Melville R. 04110

Nevada

Dixie Valley, interpretation: Smith, Thomas E. 00288

Regional, airborne, mineral exploration: Mabey, D. R. 06848

Sheep Creek Range, western: Gott, Garland B. 03996

New Brunswick

Miramichi Bay area, anomaly, structural interpretation: McGrath, P. H. 04402

New England

Interpretation: Griscom, Andrew. 07207

Southern, lineament defined: Bromery, Randolph W. 09754

Northwest Territories

Great Slave Lake area, airborne, interpretation: Naidu, Prabakar S. 11116

Ontario

Kenora District, airborne, interpretation: Hall, Donald H. 07298

Kenora district, anomalies, crustal structure: Hall, Donald H. 05475

Magnetic surveys—Continued

Ontario—Continued

Manitoulin Island, interpretation, basement: MacLaren, A. S. 05279

Moose River belt, airborne, interpretation: MacLaren, A. S. 00961

Moose River belt, interpretation: Skinner, R. 00960

Northeastern, selected magnetic anomalies: Gaucher, E. G. 01654

Oregon

Cascade Range, Crater Lake region: Blank, H. Richard, Jr. 07747

Continental margin, southern shelf: Kulm, L. D. 10962

Pacific Ocean

Aleutian Islands area, anomalies, lineation pattern: Hayes, Dennis E. 02334

Aleutian Trench, south of, east-west anomalies: Grim, Paul J. 08713

Anomalies, sea-floor spreading: Pitman, W. C., 3d. 00573

California area, anomalies, microrelief: Loughridge, Michael S. 07947

Chautauqua seamount, age interpretation: Francheteau, Jean. 05000

Chautauqua seamount, age interpretation: Schimke, Gerald R. 05001

Chautauqua seamount, Hawaiian Ridge area: Schimke, Gerald R. 00090

Continental margin, Washington to California: Emilia, David A. 02689

Gulf of Alaska, interpretation, sea-floor spreading: Pitman, Walter C., 3d. 03937

Hawaiian ridge, northern: Malahoff, Alexander. 11321

Juan de Fuca ridge: Lister, C. R. B. 08454

Mid-oceanic ridge, anomaly pattern, interpretation: Heirtzler, James R. 00655

Northeastern, anomaly lineations: Luyendyk, Bruce P. 04368

Quebec

Anticosti Island, oil and gas exploration: Roliff, W. A. 04718

Monteregian plutons, airborne, Grand Bois anomaly: Kumarapeli, P. S. 01958

South Carolina

Columbia area, fault-dike relations: Thompson, George M. 08380

Texas

Delaware basin: Steenland, Nelson C. 10180

United States

Continental margin, eastern, airborne, interpretation: Taylor, Patrick. 03805

Eastern, continental margin, airborne, implications: Zietz, Isidore. 09866

Pacific Coast, San Francisco to Strait of Juan de Fuca: Berg, Joseph W., Jr. 08237

Transcontinental, airborne: Zietz, Isidore. 04262

Western, transcontinental strip: Zietz, Isidore. 07986

Virginia

Leesburg quadrangle: Toewe, E. Clayton. 01139

Wisconsin

Regional, airborne: Patenaude, Robert William. 01352

Magnetite*Oregon*

Horse Sign Butte area, Eocene, black sand deposit: Baldwin, Ewart M. 09193

Magnetotelluric methods*Experimental studies*

Earth impedances, analysis: Morrison, H. F. 00663

Interpretation

Induction anomaly, effect of external sources, Greenland: Wilhjelm, J. 05133

Polarization, scalar impedance, tensor impedance studies, models: Sims, W. E. 10841

Techniques

Impulse response of earth to incident disturbance: Rankin, David. 07397

Magnetotelluric surveys*Alberta*

Leduc area, subsurface resistivity structure: Rankin, David. 07397

Southern, polarization studies: Rankin, D. 08409

Southern, traverse: Rankin, D. 08410

British Columbia

Victoria area, upper mantle conductivity: Caner, B. 05472

California

Trans-state profile, earth impedances, analysis: Morrison, H. F. 00663

Colorado

Northeastern: Harthill, Norman. 10230

North America

Crust, electrical conductivity in lower: Hyndman, R. D. 02984

Texas

Central: Word, Darrell R. 11378

United States

Selected areas, crustal, mantle resistivities: Vozoff, K. 10477

Maine*Absolute age*

Castine-Blue Hill area, igneous complex, K-Ar, Rb-Sr: Brookins, Douglas G. 10733

Coast, deglaciation, submergence, carbon-14: Stuiver, Minze. 09939

Eastern, Silurian-Devonian volcanics, Rb-Sr: Fullagar, Paul D. 10732

Southern, Presumpscot Formation, C-14: Kilbourne, Richard T. 00884

Areal geology

Edmunds Unit, Moosehorn National Wildlife Refuge: Pease, Maurice H., Jr. 00014

Passamaquoddy Bay area: Ruitenber, A. A. 07696

Upper Saint John-Allagash River basins: Boudette, Eugene L. 09753

Economic geology

Copper, Eastport area, genesis: Greenwood, Robert. 01897

Lead-zinc, southeastern, exploration history: Hodder, R. W. 06873

Mineral resources, exploration, review: Young, Robert S. 05421

Pollymetallic ores, Passamaquoddy Bay area: Ruitenber, A. A. 07696

Polymetallic ores, Somerset County, prospecting method, structural analysis: Delaney, John R. 09767

Geochemistry

Eastport area, sulfides in sediments: Greenwood, Robert. 01897

Muscovite, Na:Na O K, relations to metamorphic grade, pelitic schist: Guidotti, Charles V. 08716

Maine—Continued*Geochemistry—Continued*

Somerset County, Attean quartz monzonites, geochemical prospecting: Young, Robert S. 09956

Geophysical surveys

Gravity, interpretation: Kane, M. F. 07258

Glacial geology

Southeastern, end-moraine complex: Borns, Harold W., Jr. 11262

Hydrogeology

Androscoggin River basin, lower, ground-water resources: Prescott, Glenn C., Jr. 04776

Maps, geologic

Androscoggin River basin, lower, surficial: Prescott, Glenn C., Jr. 04776

Connecticut Lakes-Parmachenee area: Green, John Chandler. 04298

Northeastern: Pavlides, Louis. 04107

Passamaquoddy Bay area: Ruitenber, A. A. 07696

Waterville-Vassalboro area: Osberg, Philip H. 05444

Maps, ground water

Androscoggin River basin, lower: Prescott, Glenn C., Jr. 04776

Mineralogy

Garnet, northwestern, composition: Warner, Jeffrey. 09731

Muscovite after staurolite, Rangeley-Oquossoc areas: Guidotti, C. V. 06749

Paris-Buckfield area, Mount Mica mine and quarries, collecting: Gregory, Gardiner E. 08130

Rumford area, Black Mtn. pegmatite quarries: Gregory, Gardiner E. 00365

Paleoclimatology

Pleistocene, Presumpscot Formation, southern: Kilbourne, Richard T. 00884

Paleontology

Anthozoa, Silurian, Moose River synclinorium, nomenclature: Stumm, Erwin C. 00603

Brachiopoda, Ordovician, Magog belt: Neuman, Robert B. 07136

Pteridophytes, Devonian, Lower, northern: Andrews, Henry. 02346

Pteridophytes, Devonian, Trout Valley Formation, psilophyte, n.sp.: Andrews, Henry N. 00362

Petrology

Cape Neddick Gabbro, Kittery Formation, contact alteration: Woodard, H. H. 00461

Coastal plutons, cf. White Mtn. Magma Series: Chapman, Carleton A. 07256

Igneous intrusives, metamorphic facies, southwestern: Hussey, Arthur M., 2d. 07249

Little Bigelow Mountain quadrangle, contact metamorphism: Childs, John F. 10804

Moxie pluton: Espenshade, Gilbert H. 09770

Northwestern, schist, staurolite to sillimanite transition, assemblages: Guidotti, Charles V. 10000

Pelitic schists, variable μ_{S_2} , significance: Guidotti, Charles V. 08715

Piscataquis volcanic belt: Rankin, Douglas W. 07254

Rangeley-Oquossoc areas, metapelites, prograde metamorphism: Guidotti, C. V. 06749

Rapakivi granites, xenoliths: Elders, Wilfred. 07710

Southeastern, Tunk Lake Granite, feldspar, mantled: Karner, Frank R. 07907

Maine—Continued

Petrology—Continued

Southeastern, Tunk Lake granite pluton, mineral zoning: Karner, Frank R. 00458
Waterville-Vassalboro area, metamorphism: Osberg, Philip H. 05444

Sedimentary petrology

Machias-Eastport area, Silurian volcanic breccia, submarine slides: Gates, Olcott. 09778

Stratigraphy

Cambrian-Devonian, Boundary Mountains anticlinorium: Green, John C. 07246
Cambrian-Devonian, Connecticut Lakes-Parmachenee area: Green, John Chandler. 04298
Ordovician, Magog belt, paleogeography: Neuman, Robert B. 07136
Ordovician-Devonian, Merrimack synclinorium: Osberg, P. H. 07245
Ordovician-Devonian, southwestern: Hussey, Arthur M., 2d. 07249
Ordovician-Silurian, Carys Mills Formation, northeastern: Pavlides, Louis. 04107
Ordovician-Silurian, Cupsuptic quadrangle, Taconic orogeny: Harwood, David S. 09786
Silurian-Devonian, Waterville-Vassalboro area: Osberg, Philip H. 05444

Structural geology

Boundary Mountains anticlinorium: Green, John C. 07246
Buckfield quadrangle, analysis, computer-aided: Warner, Jeffrey. 09949
Connecticut Lakes-Parmachenee area: Green, John Chandler. 04298
Moxie pluton: Espenshade, Gilbert H. 09770
Southwestern: Hussey, Arthur M., 2d. 07249
Waterville-Vassalboro area, folds: Osberg, Philip H. 05444

Major-element analyses

Algae

Magnesium-calcite ratios, factors: Moberly, Ralph, Jr. 08983

Amphibole

California, Cazadero blueschists: Coleman, R. G. 01932

Andesite

Average, range, cf. granitic, basaltic rocks: Taylor, S. R. 08031
West Indies, Saint Kitts, Mt. Misery Volcano: Baker, P. E. 03887

Apatite

Fossil bone, X-ray, infrared, chemical: Brophy, Gerald P. 05970
Potassium-bearing system, synthetic: Simpson, Dale R. 05969

Barian florencite

Virginia, Amherst County, pegmatite: Mitchell, Richard S. 04890

Basalt

Hawaii, Kilauea Volcano, December 1965: Fiske, R. S. 02427
Hawaii, Makaopuhi lava lake: Evans, Bernard W. 02276
Hawaii, Maui, Haleakala Volcano: Macdonald, Gordon A. 02001
Nevada, Santa Rosa Range: LeMasurier, Wesley E. 02695
North Carolina, Orange County, pillows: Wilson, William F. 04102
Washington, Grays River area: McKee, Edwin H. 02711
West Indies, Saint Kitts, Mt. Misery Volcano: Baker, P. E. 03887

Major-element analyses—Continued

Basaluminite

Kansas, southeastern: Tien, Pei-Lin. 06465

Bauxite

Standard sample 69A: Langmyhr, F. J. 06739

Bentonite

Alberta, western: Lerbekmo, J. F. 07229

Bikitaite

North Carolina, King's Mtn.: Leavens, Peter B. 06770

Biotite

California, Cartridge Pass pluton: Dodge, F. C. W. 00797
Iron, absorption spectra: Faye, G. H. 03448
New Jersey, Sterling Hill: Frondel, Clifford. 07548
Ontario, Gananogue area: Reinhardt, E. W. 01974
Texas, Enchanted Rock batholith: Ragland, Paul C. 08029

Braitschite

Utah, Grand County: Raup, Omer B. 06787

Chalk

Kansas, Niobrara Formation: Miller, Halsey W. 09887

Chlorite

Iron, absorption spectra: Faye, G. H. 03448

Chromium ore

Variation with geographic location: Kramer, Henry H. 04706

Clinopyroxene

Eclogite inclusions in kimberlite: Kushiro, Ikuo. 06753

Coal

Indiana, proximate and ultimate: Miller, Louis V. 06917

Comendite

Variations, genetic significance: Noble, Donald C. 02674

Connate water

California, San Joaquin Valley oil fields, summary: Weddle, James R. 02866

Cordierite

Ontario, Gananogue area: Reinhardt, E. W. 01974

Cummingtonite

New Jersey, Franklin orebody: Klein, Cornelis, Jr. 06782

Diabase

North Carolina Piedmont: Ragland, Paul C. 07069
Ontario, Cobalt area, Nipissing sill: Hriskevich, M. E. 03829
Standard samples: Langmyhr, F. J. 06738

Emery

Oregon, Cascade Range: White, Jack C. 09270

Epidote

California, Salton Sea geothermal system: Keith, Terry E. C. 07537

Eserite

New Jersey, Franklin: Ito, Jun. 02214

Eucryptite

North Carolina, King's Mtn.: Leavens, Peter B. 06770

Feldspar

California, Sierra Nevada batholith, electron-probe: Piwinskii, A. J. 02522
Mantled: Elders, W. A. 00528

Ferromanganese pavement

Atlantic Ocean, San Pablo Seamount: Aumento, F. 04726

Major-element analyses—Continued

Fluid inclusions

Mexico, atomic absorption, X-ray fluorescence:
Rye, Robert O. 04116

Gabbro

Whole-rock, Maine, Cape Neddick: Woodard,
H. H. 00461

Garnet

Chrome-pyrope in diamond, electron probe:
Meyer, Henry O. A. 01917

Eclogite inclusions in kimberlite: Kushiro, Ikuro.
06753

Laser probe, in matrix: Blackburn, W. H. 03445
Ontario, Gananoque area: Reinhardt, E. W.
01974

Glaucophane

California, Tiburon Peninsula: Papike, J. J.
06768

Gneiss

New York, Ohio quadrangle: Nelson, Arthur E.
04003

Ontario, Gananoque area: Reinhardt, E. W.
01974

Quebec, Mount Wright-Mount Reed area:
Clarke, P. J. 09364

Whole rock, containing myrmekite: Phillips,
Evan R. 06776

Granite

Standard samples: Langmyhr, F. J. 06738

Granitic rocks

Alaska, Aleutian and Alaska Ranges, plutons:
Reed, Bruce L. 00010

California, Cartridge Pass pluton: Dodge, F. C.
W. 00797

Texas, Enchanted Rock batholith: Ragland, Paul
C. 08029

Wyoming, Laramie Range: Condie, Kent C.
00008

Granodiorite

California, Box Springs Mts., vertical variations:
Joshi, Martand Shripad Rao. 01747

Graywacke

Utah, northern, Precambrian: Condie, Kent C.
08582

Ground water

Alabama, Coffee County: Turner, J. D. 07141

Alabama, Conecuh County: Reed, P. C. 07071

Alabama, Covington County: Turner, J. D.
09477

Alabama, Crenshaw County: McWilliams, R. G.
07074

Alabama, Dale County: Newton, J. G. 07073

Alabama, data, by counties: Avrett, James R.
01811

Alabama, Henry County: Newton, J. G. 09441

Alabama, Pike County: Shamburger, V. M., Jr.
07070

Alaska, Homer area: Waller, Roger M. 09483

Arizona, Colorado River, Lees Ferry to Lake
Mead, inflow: Johnson, P. W. 00915

Arizona, Paradise Valley: Arteaga, F. E. 01879

Arkansas, Grant and Hot Spring Counties: Hal-
berg, H. N. 04806

California, Borrego, Carrizo, San Felipe Valley
areas: Moyle, R. W., Jr. 11016

California, coastal area, northern: California
Dept. Water Resources. 01154

Colorado, northwestern, Piceance Creek basin:
Coffin, D. L. 02086

Major-element analyses—Continued

Ground water—Continued

Florida, Charlotte, De Soto, Hardee Counties:
Kaufman, M. I. 01488

Florida, Econfinia Creek basin: Musgrove, R. H.
07299

Florida, Orange County, Floridan aquifer:
Lichter, W. F. 01872

Gulf Coastal Plain, central, Sparta Sand: Payne,
J. N. 02081

Illinois, Shelby County: Sanderson, E. W. 09522

Indiana, Delaware County: Hoggatt, R. E. 06340

Iowa, Dubuque area: Morehouse, David F.
01492

Jamaica, Puerto Rico, limestone regions: Birot,
P. 07984

Kansas, Labette County: Jungmann, William L.
00824

Kentucky, Barlow and Cairo (Ill.) quadrangles:
Hansen, Arnold J., Jr. 03687

Kentucky, Middlesboro area: Mull, D. S. 01810

Louisiana, saline: Winslow, A. G. 07142

Maine, Androscoggin River basin, lower:
Prescott, Glenn C., Jr. 04776

Massachusetts, Housatonic River basin: Nor-
vitch, Ralph F. 04760

Minnesota, Hibbing area: Lindholm, Gerald F.
02919

Minnesota, Lac qui Parle River watershed:
Cotter, R. D. 02075

Mississippi, Harrison County: Newcome, Roy,
Jr. 01491

Mississippi Valley, embayment, alluvial aquifers:
Boswell, E. H. 04517

Mississippi Valley, embayment area: Jeffery, H.
G. 04518

Missouri, Saint Charles-Jefferson City area: Em-
mett, L. F. 06567

Montana, Bighorn Valley, lower: Hamilton, L. J.
03680

Nebraska, Fillmore County: Keech, C. F. 00910

Nebraska, Polk County: Smith, F. A. 01642

Nevada, Butte Valley: Glancy, Patrick A. 07697

Nevada, Diamond Valley: Harrill, J. R. 04805

Nevada, Mesquite-Ivanpah Valley area: Glancy,
Patrick A. 07965

Nevada, Moapa-Lake Mead area: Rush, F. Eu-
gene. 08013

Nevada, Smoke Creek-San Emidio Desert area:
Glancy, Patrick A. 02576

Nevada, Snake River basin: Moore, Donald O.
07344

Nevada, Thousand Springs Valley: Rush, F. Eu-
gene. 07345

New Jersey, Atlantic County: Clark, Glenn A.
05640

New Jersey, Burlington County: Rush, F. Eu-
gene. 06076

New Jersey, Essex County: Nichols, William D.
07923

New Jersey, Rahway area: Anderson, Henry R.
05623

New Mexico, McKinley County, southeastern:
Cooper, James B. 01878

North Carolina, Belhaven area: Lloyd, Orville
B., Jr. 09491

North Carolina, Chowan County: Lloyd, Orville
B., Jr. 08899

North Carolina, Pitt County: Sumsion, Carlton
T. 03682

North Dakota, Grand Forks County: Kelly, T. E.
00066

Ohio, Great Miami River valley, lower: Spieker,
Andrew M. 05558

Major-element analyses—Continued

Ground water—Continued

- Oregon, Santiam River basin, lower: Helm, D. C. 04321
 Quebec, Beloeil area: Tremblay, J. -J. 04712
 Saskatchewan, South Saskatchewan reservoir area: vanEverdingen, R. O. 00976
 South Carolina, Greenville County: Koch, Neil C. 07172
 South Dakota, Britton area: McMeen, James W. 09914
 South Dakota, Brookings area: Barari, Assad. 09924
 South Dakota, Bryant area: Jorgensen, Donald. 09916
 South Dakota, Burke area: Christensen, Cleo M. 09913
 South Dakota, Dell Rapids area: Barari, Assad. 09920
 South Dakota, Eureka area: Steece, Fred V. 11058
 South Dakota, Faulkton area: Christensen, Cleo M. 09909
 South Dakota, Lake Andes area: Shurr, George W. 09918
 South Dakota, Lake Norden area: Jorgensen, Donald. 09915
 South Dakota, Lake Preston area: Hedges, Lynn S. 09910
 South Dakota, Madison area: Tipton, M. J. 11059
 South Dakota, Menno area: Bruce, Richard L. 09911
 South Dakota, Miller area: Christensen, Cleo M. 09912
 South Dakota, Mission area: Barari, Assad. 11255
 South Dakota, Mitchell area: Barari, Assad. 09922
 South Dakota, Selby area: Wong, H. D. 11060
 South Dakota, Tyndall area: Bruce, Richard L. 09908
 South Dakota, Viborg area: Beffort, J. David. 09923
 South Dakota, Waubay area: Beffort, J. David. 09921
 South Dakota, Wessington Springs area: Steece, Fred V. 09919
 South Dakota, Winner area: Barari, Assad. 09917
 Tennessee, Memphis area, "500-ft" sand: Bell, Edwin A. 03678
 Texas, Liberty County: Anders, R. B. 00815
 Texas, Nueces and San Patricio Counties: Shafer, George H. 01534
 Texas, Polk County: Tarver, George R. 04216
 Texas, Tyler County: Tarver, George R. 01535
 Texas, Upton County: White, D. E. 01773
 Utah, Skull Valley: Hood, J. W. 02431
 Utah, Uinta Basin, Green River Formation: Fel-tis, R. D. 00729
 Virginia, Coastal Plain: DeBuchananne, George D. 02567
 Wyoming, Green River basin: Welder, George E. 07922
 Wyoming, Wind River basin area: Whitcomb, Harold A. 01645
- Hendricksite*
 New Jersey, Sterling Hill: Frondel, Clifford. 07548
- Hypersthene*
 Ontario, Gananoque area: Reinhardt, E. W. 01974

Major-element analyses—Continued

- Ice*
 Greenland: Langway, Chester C., Jr. 07927
- Igneous rocks*
 American Samoa, alkalic: Macdonald, Gordon A. 09584
 American Samoa, Manu'a Islands: Stice, Gary D. 11437
 Arizona, Hopi Buttes, X-ray fluorescence: Laidley, Richard A. 04273
 Colorado, North-Middle Parks area: Hail, William J., Jr. 05982
 Colorado, Spanish Peaks region: Johnson, Ross B. 01702
 Idaho, Alder Creek mining district: Nelson, W. H. 04109
 Neutron activation data: Gordon, Glen E. 11290
 Ontario, Sudbury nickel intrusive, electron-probe: Naldrett, A. J. 03597
 Oregon, Newberry Crater, X-ray fluorescence: Laidley, Richard A. 04273
 Puerto Rico, north-central, intrusives: Nelson, Arthur E. 00799
 Quebec-Ontario, Noranda volcanic belt, stratigraphic variation: Baragar, W. R. A. 02723
 Utah, Bingham: Moore, W. J. 04239
 Wet chemical and X-ray fluorescence, standard rocks: Carmichael, I. S. E. 02511
- Ignimbrite*
 Oregon, Malheur County, Dinner Creek tuff: Haddock, Gerald Hugh. 03030
 Oregon, Wagonite Mtn.: Walker, George W. 00772
- Iron ore*
 Michigan, Iron River-Crystal Falls district: James, H. L. 01692
- Iron-titanium oxides*
 Quebec, LaBlache Lake, titaniferous magnetite deposit: Anderson, A. T. 04432
- Kaersuite*
 Arizona, San Carlos area: Mason, Brian. 09062
- K-feldspar*
 Texas, Enchanted Rock batholith: Ragland, Paul C. 08029
- Lamproite*
 Utah, northeastern: Best, Myron G. 06576
- Limestone*
 Idaho, Alder Creek mining district: Nelson, W. H. 04109
- Magnesianriebeckite*
 New Jersey, Franklin orebody: Klein, Cornelis, Jr. 06782
- Manganese*
 Minnesota, iron formations: Lepp, Henry. 00472
- Manganese-bearing chain silicates*
 Absorption spectroscopy: Manning, P. G. 03461
- Meta-aluminite*
 Utah, Temple Mountain, Fuemrole mine, new mineral: Frondel, Clifford. 06574
- Metasediments*
 Ontario, Haliburton-Madoc area: vandeKamp, P. C. 07235
- Meteorite*
 Walltown, low-iron chondrite: Ehmann, William D. 11249
- Mica peridotite*
 Utah, northeastern: Best, Myron G. 06576
- Microsyenite*
 Greenland, Ilimaussaq Peninsula, dikes: Scharbert, Heinz G. 05667

Major-element analyses—Continued

- Monzonite**
New Mexico, spectrochemical: Thompson, Tommy B. 07639
- Natural gas**
Illinois, glacial drift: Meents, W. F. 03407
- Palagonite tuff**
Hawaii, Oahu, Koko Craters: Hay, Richard L. 02253
- Pantellerite**
Variations, genetic significance: Noble, Donald C. 02674
- Pegmatite**
Wyoming: Proctor, Paul Dean. 10940
- Pelecypoda**
Magnesium-calcite ratios, factors: Moberly, Ralph, Jr. 08983
- Phlogopite**
Iron, absorption spectra: Faye, G. H. 03448
New Jersey, Sterling Hill: Frondel, Clifford. 07548
- Phosphate nodules**
Texas, Hopkins County: Milton, Charles. 00798
- Platinum metals**
Ontario, nickel ore, electron-probe: Rucklidge, John. 03602
- Poughite**
Mexico, Moctezuma mine, Sonora: Gaines, Richard V. 06747
- Rhabdophane**
Idaho, Valley County: Adams, John W. 00786
- Rhyolite**
California, Mono Craters, Southern Coulee flow: Loney, Robert A. 06503
Nevada, Elko County, Circle Creek Rhyolite: Coats, Robert R. 06494
Nevada, Santa Rosa Range: LeMasurier, Wesley E. 02695
- Rock-forming minerals**
California, Red Mountain-De Puerto complex: Himmelberg, G. R. 02710
Maryland, ultramafic body, apatite, chlorite, iron oxides: Southwick, David L. 02716
- Sandine**
Utah, northeastern: Best, Myron G. 06576
- Schist**
California, albite, pyroxene, glaucophane: Keith, Terry E. 02709
District of Columbia, chlorite-talc: Broughton, Paul L. 04098
- Senaite**
Relation to magnetoplumbite, davidite: Rouse, Roland C. 07005
- Serpentine**
Lake Superior, Minnesota: Jahanbagloo, I. Cyrus. 02211
- Silicon**
Meteorites and standard rocks, activation analysis: Ehmann, William D. 01514
- Standard samples**
Spectroscopy, atomic absorption: Galle, O. Karmie. 04270
- Staurolite**: Smith, J. V. 06767
- Sulfide schists**
Canada: Boyle, R. W. 06978
- Sulfur**
Nuclear magnetic resonance spectroscopy: Karr, Clarence, Jr. 02601
- Surface water**
Alabama, Coffee County: Turner, J. D. 07141
Alabama, Conecuh County: Reed, P. C. 07071

Major-element analyses—Continued

- Surface water—Continued**
Alabama, Crenshaw County: McWilliams, R. G. 07074
Alabama, Dale County: Newton, J. G. 07073
Alabama, Henry County: Newton, J. G. 09441
Alabama, Pike County: Shamburger, V. M., Jr. 07070
California, coastal area, northern: California Dept. Water Resources. 01154
Indiana, Delaware County: Hoggatt, R. E. 06340
Jamaica, Puerto Rico, limestone regions: Birot, P. 07984
Massachusetts, Housatonic River basin: Norvitch, Ralph F. 04760
- Syenite**
Ontario, Blue Mountain nepheline syenite: Payne, John G. 01959
X-ray emission and fast-neutron activation: Volborth, A. 04749
- Taconite**
Wyoming, Wind River Mts.: Worl, R. G. 07972
- Talc**
New York, Gouverneur district: Ross, Malcolm. 06568
- Tektites**
Georgia, Massachusetts: Cuttitta, Frank. 10702
- Tellurides**
Silver, electron-probe: Cabri, L. J. 03756
- Tirodite**
New York, Gouverneur district: Ross, Malcolm. 06568
- Tremolite**
New Jersey, Franklin orebody: Klein, Cornelis, Jr. 06782
New York, Gouverneur district: Ross, Malcolm. 06568
- Tuff clasts**
California, Paleogene conglomerates: Woodford, A. O. 04291
- Ultramafic rocks**
California, Burro Mountain: Burch, Stephen H. 01124
California, Red Mountain-De Puerto complex: Himmelberg, G. R. 02710
- Vivianite**
Iron, absorption spectra: Faye, G. H. 03448
- Volcanics**
Arizona, silicic volcanics in Yavapai Supergroup: Anderson, C. A. 06500
Colorado, Powderhorn-Black Canyon region: Olson, J. C. 00374
Oregon, Mount Jefferson area: Greene, Robert C. 01870
- Water**
Connecticut, Linsley Pond, eutrophication effect: Cowgill, Ursula M. 03054
Lake Erie, chemical composition: Weiler, R. R. 07094
- Weinschenkite**
Virginia, Amherst County, pegmatite: Mitchell, Richard S. 04890
- Whewellite**
Ohio, Milan area: Leavens, Peter B. 06755
- Zeolites**
Alteration products of eclogites: Berg, G. W. 06786
- Malacostraca**
Cancer davidi, n.sp.
Pliocene, California, Kettleman Hills, Etchegoin Formation: Nations, J. Dale. 00492

Mammalia*Aglaocetus patulus*, n.sp.

Miocene, Maryland, Calvert Formation: Kellogg, Remington. 05586

Aluralagus bensonensis, n.gen.

Pliocene, Arizona, San Pedro Valley: Downey, Joe S. 05230

Apatemyidae

Evolution from palaeoryctids: Szalay, Frederick S. 05993

Apternodus bicuspis

Oligocene, North America, reassigned to *Proterix*: Gawne, Constance Elaine. 02990

Artiodactyla

Eocene, lower, Wyoming, evolution of tarsus, lateral toes: Guthrie, Daniel A. 11292

Arvicolinae

Pliocene, cf. circetine rodents, mandibular musculature, origin: Repenning, Charles A. 07900

Beckia grangerensis, n.gen. n.sp.

Oligocene, Washington, Ellensburg Formation, mustelid: Bryant, Laurie J. 06802

Bison latifrons

Pleistocene, California, Rancho La Brea: Miller, Wade E. 06900

Blickomylus, n.gen.

Miocene, United States, western: Frick, Childs. 05717

Borophagus diversidens

Texas, Tertiary, Blanco Fm., dog: Dalquest, Walter W. 08051

Brachycrus

Tertiary, California, Barstow Formation, Mud Hills area: Lewis, G. Edward. 01842

Canis familiaris

Holocene, Idaho, Birch Creek valley, Jaguar Cave: Lawrence, Barbara. 06168

Cenozoic

North America-Eurasia, correlation: Gabunia, L. 05062

Cetacea

Evolution, acoustic mechanisms: Norris, Kenneth S. 10866

Evolution, monophyletic origin from protocetid: VanValen, Leigh. 01092

Chalicotherioidea

Tertiary, North America and Nebraska, distribution: Skinner, Morris F. 03872

Chonecetis sookensis, n.gen., n.sp.

Oligocene, British Columbia, Sooke Formation, Vancouver Island: Russell, Lorin S. 02729

Coendou, n.sp.

Pleistocene, California, Palm Springs Formation: White, John A. 04335

Colodon

Oligocene, South Dakota, Big Badlands, new records: Bjork, Philip R. 03669

Cretaceous

Alberta, Edmonton Formation: Lillegraven, Jason Arthur. 06521

Texas, north-central, Lower, earliest eutherians, premolar evolution: Slaughter, Bob H. 09081

Cricetidae

Pliocene, Kansas, WaKeeney local fauna, new: Wilson, Richard Leland. 06938

Cymaprimadon kenni, n.gen., n.sp.

Oligocene, South Dakota, Chadron Formation: Clark, John. 01144

Mammalia—Continued*Dicotyles tajacu*

Morphology, taxonomy, cf. white lipped peccary: Woodburne, Michael O. 03763

Dicrostonyx

Quaternary, North America, species divergence: Guilday, John E. 08061

Didelphidae

Cretaceous, Texas, Albian deposits: Slaughter, Bob H. 03823

Didelphodon vorax

Cretaceous, Montana, Hell Creek Formation, jaw and teeth: Clemens, William A., Jr. 01650

Dinohyus

Miocene, South Dakota, Sharps Formation, skull: Green, Morton. 07000

Diorocetus hiatus, n.gen., n.sp.

Miocene, Maryland, Calvert Formation: Kellogg, Remington. 05585

Entomolestes grangeri

Taxonomy, ancestor of Soricidae, Erinaceidae: Robinson, Peter. 05994

Entoptychus

Oligocene-Miocene, Oregon, John Day Formation: Rensberger, John Marshall. 04549

Synonymy, *Palustrimus*: Rensberger, John M. 08316

Eporeodontinae

Genera, descriptions: Schultz, C. Bertrand. 08906

Equidae

Oligocene-Holocene, manus osteology, evolution, paleoecology: Sondaar, P. Y. 07006

Pliocene, Mexico, Guanajuato, Ocoté fauna, teeth: Mooser, O. 01637

Erethizon

Morphology, cf. *Coendou*, mastication: White, John A. 04335

Eutheria

Cretaceous, Texas, Albian deposits: Slaughter, Bob H. 03823

Evolution

Dentition, molars, Triassic origin of therians: Crompton, A. W. 04779

Mesozoic, phylogenetic considerations: Kuhne, Walter G. 10860

General

Microscopic teeth, measurement of angles, occlusion: Slaughter, Bob H. 05698

Relict and legendary forms, popular account: Ley, Willy. 11200

Geographic distribution

North America, Pleistocene-Holocene, lemmings: Guilday, John E. 08061

North America, Tertiary, upper, chalicotheres: Skinner, Morris F. 03872

Tertiary, Pacific and Arctic Oceans, migration: Mitchell, Edward. 07871

Virginia, Pleistocene, Kempsville Formation, cf. modern: Ray, Clayton E. 03172

Hemiaodon jepseni, n.sp.

Eocene, Utah, Uinta Basin: Robinson, Peter. 02806

Hominidae

Miocene, *Ramapithecus*: Pilbeam, David. 03916

Hydracotherium seekinsi, n.sp.

Tertiary, Mexico, Baja California, cf. *H. angustidens*, dentition: Morris, William J. 08996

Hyopsodus spp

Tertiary, United States, Eocene, western: Gazin, C. Lewis. 06025

Mammalia—Continued

Hyphippus

Tertiary, Nevada, Esmeralda Fm., Cedar Mtn. area: Mawby, J. E. 08062

Hyracodon

Tertiary, dentition, evolution: Hanson, C. Bruce. 06997

Hyracodontidae

Oligocene, Nebraska: Tanner, Lloyd G. 02474

Insectivora

Cretaceous-Tertiary, derivation of primates: Szalay, Frederick S. 01093
North America, aquatic: Hutchison, J. Howard. 08287

Ischyromyidae

Eocene, Utah, Green River Formation, Powder Wash fauna: Dawson, Mary R. 02849

Tertiary, taxonomy, relationship of *Mytonomys*: Black, C. C. 10948

Ischyromys

Oligocene, Montana, Nebraska, South Dakota: Black, Craig C. 02848

Ischyromys douglassi, n.sp.

Oligocene, Montana, McCarty's Mtn.: Black, Craig C. 02848

Jepsenella praepropera

Paleocene, Wyoming, origin of apatemyids: Szalay, Frederick S. 05993

Leptacodon tener

Paleocene, United States, dentition, classification: McKenna, Malcolm C. 02991

Leptaucheninae

Genera, descriptions: Schultz, C. Bertrand. 08906

Macrotarsius siegerti, n.sp.

Eocene, Wyoming, Badwater Creek area: Robinson, Peter. 02806

Mammuthus primigenius

Pleistocene, Ontario, Woodbridge area: Churcher, C. S. 09026

Marsupialia

Cretaceous, Texas, Albian deposits: Slaughter, Bob H. 03823

Cretaceous-Eocene, origin and evolution: Clemens, William A. 01091

Eocene, Colorado, Huerfano Formation, opossum: Simpson, George Gaylord. 11008

Mastodon americanus

Pleistocene, North America, eastern, extinction, climate: Dreimanis, A. 10976

Megabelodon minor, n.sp.

Tertiary, Nevada, Esmeralda Fm., Mineral County, mandible: Mawby, J. E. 08066

Megahippus

Tertiary, Nevada, Esmeralda Fm., Cedar Mtn. area: Mawby, J. E. 08062

Megalonychidae

Pliocene-Pleistocene, North America, taxonomy: Hirschfeld, Sue E. 08054

Megalonyx leptostomus

Quaternary, Texas, Blanco beds, Cita Canyon: Hirschfeld, Sue E. 08054

Megalonyx mathisi, n.sp.

Tertiary, California, Mehrtens Fm., Merced area: Hirschfeld, Sue E. 08054

Merychippus

Tertiary, California, Barstow Formation, Mud Hills area: Lewis, G. Edward. 01842

Merycoidodontidae

Taxonomy, morphology, summary: Schultz, C. Bertrand. 07991

Mammalia—Continued

Merycoidodontinae

Genera, descriptions: Schultz, C. Bertrand. 08906

Microscaptos

Pliocene, arvicoline, morphology: Repenning, Charles A. 07900

Microtus pennsylvanicus

Pleistocene, United States, southern, distribution: Martin, Robert A. 09032

Morphology

Comparative odontology, textbook: Peyer, Bernhard. 11199

Didelphodon, Cretaceous, Montana, lower jaw: Clemens, William A., Jr. 01650

Proboscidea, Tertiary, tuskless mandibles, genera: Mawby, J. E. 08066

Rodentia, incisor enamel, variability: Wahlert, John H. 07023

Rodentia, mandibular musculature, arvicoline cf. circetine: Repenning, Charles A. 07900

Smilodon, Pleistocene, California: Miller, George J. 01132

Talpidae, osteology, living cf. fossil: Hutchison, J. Howard. 06922

Teeth, evolution: Weller, J. Marvin. 02204

Multituberculata

Cretaceous-Tertiary, North America, western, generic diversity: Fox, Richard C. 04842

Morphology, cochlea, references for description: Simpson, George Gaylord. 00897

Mysticeti

Miocene, Maryland, Calvert Formation, Cope's types, taxonomy: Kellogg, Remington. 05615

Mytonius hopsoni, n.gen., n.sp.

Eocene, Utah, Uinta Basin, type of new omomyid subfamily: Robinson, Peter. 02806

Mytonomys robustus

Eocene, Utah, Uinta Formation, ischyromiid relations: Black, C. C. 10948

Namatomys fantasma, n.sp.

Eocene, California, Sespe Fm., Ventura County, teeth: Lindsay, Everett. 08021

Nyctitheriidae

Eocene, Wyoming, Bridger Fm., Marsh collection, classification: Robinson, Peter. 07576

Ondatra

Pleistocene, South Dakota, Bennett, Walworth, Lincoln Counties: Harsen, J. C. 06895

Oreodonts

Phylogeny: Schultz, C. Bertrand. 07991

Phylogeny: Schultz, C. Bertrand. 08906

Ovibos

Illinois, Pleistocene, geographic distribution: Ray, Clayton E. 04379

Pleistocene, Northwest Territories, Banks Island, Wisconsin age: Maher, William J. 05658

Palustrinus

Synonymy, *Entoptychus*: Rensberger, John M. 08316

Paracricetodon exiguus (Wood), n. comb.

Oligocene, Nebraska, from *Eumys*, cf. Europe: Alker, Julius. 09034

Parietobalaena palmeri

Miocene, Maryland, Calvert Formation: Kellogg, Remington. 05587

Parydrosorex concisus, n.gen. n.sp.

Pliocene, Kansas, WaKeeney local fauna: Wilson, Richard Leland. 06938

Mammalia—Continued

Peromyscus

California, Barstow syncline: Lindsay, Everett. 10014

Pleistocene, Texas, Friesenhahn Cave, species analysis: Martin, Robert A. 05566

Phenacolemur mcgrewi, n.sp.

Eocene, Wyoming, Badwater Creek area: Robinson, Peter. 02806

Picrodontidae

Paleocene, Montana, Wyoming, dentition, evolution: Szalay, Frederick S. 03870

?Pliomastanastes galushai, n.sp.

Pliocene, New Mexico: Hirschfeld, Sue E. 08054

Pliomastanastes protistus, n.gen., n.sp.

Pliocene, Florida, Hemphillian, Alachua County: Hirschfeld, Sue E. 08054

Primates

Eocene, Utah, Wyoming, prosimian faunas, dentition: Robinson, Peter. 02806

Evolution, hominoid line, immunological study: Sarich, Vincent M. 06507

Evolution, insectivore-primate transition, dentition: Szalay, Frederick S. 01093

Tertiary, new finds, review: Simons, Elwyn L. 06506

Promimomys

Pliocene, arvicoline mandibular musculature: Repenning, Charles A. 07900

Proterix bicuspidis

Oligocene, North America, reassigned from *Apternodus*: Gawne, Constance Elaine. 02990

Prothryptacodon albertensis, n. sp.

Paleocene, Alberta, Paskapoo Formation, condylarth: Fox, Richard C. 09035

Protolabis(?)

Tertiary, California, Barstow Formation, Mud Hills area: Lewis, G. Edward. 01842

Protolabis barstowensis, n.sp.

Miocene, California, Barstow Formation: Lewis, G. Edward. 02722

Quaternary

Alaska, interior, paleoecology, late Pleistocene: Guthrie, R. D. 05659

Alaska, Pleistocene ecology, late, grazing community: Guthrie, R. D. 00812

Alberta, Cochrane area, Bow River terrace, ungulates: Churcher, C. S. 07234

California, McKittrick tar pits, Pleistocene: Church, C. C. 02857

California, Palos Verdes area, Pleistocene: Miller, Wade E. 08303

Georgia, Bartow County, Pleistocene, new: Ray, Clayton E. 00891

Idaho, Soda Springs area, spring deposits, mammoth: Jones, Robert W. 00383

Kansas, Pleistocene sand pits, Manhattan area, mastodon(?) tusk: O'Brien, Patricia J. 07966

North America, short-faced bears: Firby, Jean B. 08271

Ontario, Dickson Quarry, subfossil cave fauna: Churcher, C. S. 01493

Puerto Rico, Holocene cave deposits, insectivores, bats: Choate, Jerry R. 09033

Virginia, Pleistocene, Kempsville Formation: Ray, Clayton E. 03172

Wyoming, Converse County, Little Box Elder cave, Pleistocene: Anderson, Elaine. 08060

Rakomylus

Miocene, United States, western: Frick, Childs. 05717

Mammalia—Continued

Rangifer tarandus

Pleistocene?, New York, Orange County cave deposit, with artifact: Guilday, John E. 11291

Rodentia

Eocene, California, Sespe Fm., teeth: Lindsay, Everett. 08021

Sciuravidae

Eocene, Utah, Green River Formation, Powder Wash fauna: Dawson, Mary R. 02849

Sciuravus eucristadens

Eocene, Utah, Green River Formation, Powder Wash: Dawson, Mary R. 02849

Sigmodon

Quaternary, Arizona, southeastern, taxonomy: Cantwell, R. J. 04389

Smilodon californicus

Pleistocene, California, Rancho La Brea, age groups: Miller, George J. 01132

Stegomastodon

Miocene-Pliocene, Nevada, Truckee Formation: Lintz, Joseph, Jr. 08297

Stenoderma rufum anthonyi, n. subsp.

Holocene, Puerto Rico, cave deposits, bat: Choate, Jerry R. 09033

Stenomylus

Miocene, United States, western: Frick, Childs. 05717

Sylvilagus? bensonensis

Pliocene, Arizona, reassigned to new gen.: Downey, Joe S. 05230

Symbos

Illinois, Pleistocene, geographic distribution: Ray, Clayton E. 04379

Pleistocene, British Columbia, muskox: Harington, C. R. 05478

Talpavus nitidus

Taxonomy, family relations: Robinson, Peter. 05994

Talpidae

Tertiary, Oregon, taxonomy, morphology, n.gen. n.spp.: Hutchison, J. Howard. 06922

Tanupolama sp.

Pleistocene, California, Rancho La Brea: Miller, Wade E. 06900

Taxonomy

Cymaprimadontidae, n.fam., insectivores: Clark, John. 01144

Definition of class, quasi-mammals, discussion: Fox, Richard C. 05620

Pantotheria and Symmetrodonta, proposed, molar evolution: Crompton, A. W. 04779

Primates, Omomyidae, Anaptomorphidae, Eocene: Robinson, Peter. 02806

Rodentia, Ischyromyidae, Oligocene: Black, Craig C. 02848

Stenomylinae, Miocene genera, United States: Frick, Childs. 05717

Talpidae, Cenozoic, North America, review: Hutchison, J. Howard. 06922

Tertiary

Arizona, Benson local fauna, rabbits: Downey, Joe S. 05230

California, Barstow Formation, diagnostic faunas: Lewis, G. Edward. 02722

California, Barstow Formation, Mojave Desert: Lindsay, Everett. 08296

California, Barstow Formation, Mud Hills area: Lewis, G. Edward. 01842

California, Tropic Group, new fauna: Whistler, David P. 11029

Mammalia—Continued*Tertiary*—Continued

Colorado, Troublesome Formation, Hot Sulphur Springs quadrangle: Izett, Glen A. 05557

Florida, paleogeographic indicators: Olsen, S. J. 04006

Florida, Pliocene, Bone Valley Formation, Manatee County: Webb, S. David. 05212

Kansas, Trego County, WaKeeney local fauna: Wilson, Richard Leland. 06938

Mexico, provincial ages, correlation: Morris, William J. 09150

Miocene-Pliocene, Nebraska, Norden Bridge, rodents: Klingener, David. 02810

Nebraska, Pliocene, seasonal growth evidence: Voorhies, M. R. 11049

Nevada, Esmeralda Formation: Mawby, John E. 10020

North America-Europe, Miocene correlation: Wilson, Robert. 04815

Oregon, John Day Formation, gophers, evolution: Rensberger, John Marshall. 04549

Oregon, southeastern basins, descriptions: Shotwell, J. Arnold. 07300

South Dakota, Turtle Butte: Skinner, Morris F. 11351

Utah, Green River Formation, tracks: Moussa, Mounir T. 06007

Torrejonia wilsoni

Paleocene, New Mexico, Nacimiento Fm.: Gazin, C. Lewis. 07024

Man, fossil*Evolution*

Elementary account: Moore, Ruth. 04332

Origin of hominid line, immunological study: Sarich, Vincent M. 06507

Pliocene-Pleistocene, effect of paleoclimates: Emiliani, Cesare. 10951

Popular account: Clymer, Eleanor. 09182

General

Popular and elementary account: Bailey, John. 08127

Geographic distribution

North America: Hibben, Frank C. 06186

Quaternary

North America, Great Plains, history: Reider, Richard G. 00259

West Virginia, Holocene, Charleston area, St. Albans site, artifacts: Broyles, Bettye J. 01714

Manganese*Abundance*

Biotite and hornblende, plutonic rocks: Greenland, L. Paul. 05293

Carbonaceous chondrites: Yates, Ann M. 06999

Analysis

X-ray fluorescence, ore: Egan, W. D. 04748

Appalachians

Resources, review: Dorr, John Van N., 2d. 01381

Atlantic Ocean

Blake Plateau, geochemistry: Manheim, F. T. 08791

San Pablo Seamount, possibilities: Aumento, F. 04726

Geochemistry

Ferromanganese pavement, Atlantic Ocean, San Pablo Seamount: Aumento, F. 04726

Hydrous oxides, heavy metals fixation, soils, waters: Jenne, E. A. 03751

Lakes, water and sediments, Wisconsin: Delfino, Joseph John. 06534

Mercury content, deep-sea nodules: Harriss, Robert C. 02012

Manganese—Continued*Geochemistry*—Continued

Soils, organic material, reactions: Rosell, Ramon Antonio. 04447

Solution in lake waters, biological vs. chemical, experiment: Ingols, Robert S. 03672

Wisconsin, Lake Mendota, eutrophic: Delfino, Joseph J. 09373

Mexico

Baja California, Concepcion Peninsula, occurrence: McFall, C. Carew. 02556

Metallogenetic provinces: Wilson, Ivan F. 04148

Minnesota

Geochemistry, iron formations: Lepp, Henry. 00472

Montana

Butte district, occurrence, genesis: Meyer, Charles. 05351

Nevada

Nye County, occurrence: Hewett, D. F. 04221

New Mexico

Grant County, Central mining district, occurrence, genesis: Hernon, Robert M. 05382

Ore deposits, general

Mineralogy, occurrence: Roy, Supriya. 06986

Resources

Deep-sea nodules: Ocean Industry. 01603

Deep-sea nodules, mineral economics, potential: Brooks, David B. 05109

Ocean vs. land mining, economics: Brooks, David B. 06102

United States

Southwestern, hypogene veins, epithermal: Hewett, D. F. 00136

Virginia

Buckingham quadrangle, resources: Ern, Ernest H. 03194

Yukon

Keno Hill area, content in stream and spring sediments: Gleeson, C. F. 06680

Manitoba*Absolute age*

C-14, University of Wisconsin list: Bender, Margaret M. 01122

Rice Lake-Beresford areas, Rb-Sr: Turek, A. 07236

Areal geology

Guay Lake area: Kornik, L. J. 08059

Halfway Lake area: Godard, J. D. 08058

Nejanilini Lake area: Davison, W. L. 02586

Southeastern, field trip: Bluemle, Mary E. 10770

Economic geology

Evaporites, Elk Point Group, occurrence: Gorrill, H. A. 01028

Polymetallic ores, Lynn Lake orebodies, reserves, grade control: Ruttan, G. D. 05216

Sand, gravel, southeastern, exploration: Wyder, J. E. 00986

Tantalum, Bernic Lake pegmatite: Howe, A. C. A. 09569

Engineering geology

Hydroelectric plant, Grand Rapids, ground-water control: Grice, R. H. 07748

Permafrost, Fort Churchill area, rotary drilling and coring problems: Lange, G. Robert. 06726

Rural development, Interlake region, limestone ridges, glacial till: Giles, Jack D. 09620

Slope stability, Porcupine Hills landslide areas: Scott, J. S. 02057

Geophysical surveys

Northern, gravity, anomalies vs. rock density: Gibb, R. A. 02240

Manitoba—Continued*Geophysical surveys—Continued*

- Northern, gravity, Churchill-Superior boundary: Gibb, R. A. 02241
- Southeastern, electrical, ground water, gravel: Wyder, J. E. 00986

Hydrogeology

- Grand Rapids hydroelectric plant, ground-water flow analysis: Grice, R. H. 07748
- Southeastern, exploration: Wyder, J. E. 00986

Maps, geologic

- Guay Lake area, west half: Kornik, L. J. 08059
- Halfway Lake area, west half: Godard, J. D. 08058
- Nejanilini Lake area: Davison, W. L. 02586
- Watt Lake area (east half), Pas mining district: Cranstone, Donald A. 07865

Maps, gravity

- Northern, Bouger anomaly: Gibb, R. A. 02241

Maps, isopach

- Southwestern, Devonian: Kent, D. M. 03181

Maps, magnetic

- Alonsa area, airborne: Canada Geological Survey. 05798
- Amaranth area, airborne: Canada Geological Survey. 05797
- Arborg area, airborne: Canada Geological Survey. 05783
- Ashern area, airborne: Canada Geological Survey. 05791
- Black River area, airborne: Canada Geological Survey. 05777
- Camping Islands area, airborne: Canada Geological Survey. 05815
- Crane Bay area, airborne: Canada Geological Survey. 05806
- Dauphin River area, airborne: Canada Geological Survey. 05794
- Duck Bay area, airborne: Canada Geological Survey. 05814
- Ebb and Flow area, airborne: Canada Geological Survey. 05799
- Eriksdale area, airborne: Canada Geological Survey. 05790
- Fairford area, airborne: Canada Geological Survey. 05801
- Garland area, airborne: Canada Geological Survey. 05812
- Gimli area, airborne: Canada Geological Survey. 05782
- Gladstone area, airborne: Canada Geological Survey. 05795
- Guynemer area, airborne: Canada Geological Survey. 05805
- Gypsumville area, airborne: Canada Geological Survey. 05802
- Kircro Lake area, airborne: Canada Geological Survey. 05816
- Lac du Bonnet area, airborne: Canada Geological Survey. 05775
- Lake Saint Martin area, airborne: Canada Geological Survey. 05793
- Langruth area, airborne: Canada Geological Survey. 05796
- Lenswood area, airborne: Canada Geological Survey. 05817
- Lundar area, airborne: Canada Geological Survey. 05789
- MacDonald area, airborne: Canada Geological Survey. 05787
- McCreary area, airborne: Canada Geological Survey. 05803

Manitoba—Continued*Maps, magnetic—Continued*

- Milk Creek area: Canada Geological Survey. 00757
- Moosehorn area, airborne: Canada Geological Survey. 05792
- Narcisse area, airborne: Canada Geological Survey. 05785
- Ochre River area, airborne: Canada Geological Survey. 05808
- Pelican Rapids area, airborne: Canada Geological Survey. 05818
- Pine Falls area, airborne: Canada Geological Survey. 05776
- Poplarfield area, airborne: Canada Geological Survey. 05786
- Proulx Lake area, airborne: Canada Geological Survey. 05807
- Red River Delta area, airborne: Canada Geological Survey. 05778
- Riverton area, airborne: Canada Geological Survey. 05780
- Rorketon area, airborne: Canada Geological Survey. 05809
- Sagemace Bay area, airborne: Canada Geological Survey. 05813
- Saint Ambroise area, airborne: Canada Geological Survey. 05788
- Saint Laurent area, airborne: Canada Geological Survey. 05784
- Skownan area, airborne: Canada Geological Survey. 05811
- Steep Rock area, airborne: Canada Geological Survey. 05800
- Teulon area, airborne: Canada Geological Survey. 05781
- Valpoy area, airborne: Canada Geological Survey. 05804
- Victoria Beach area, airborne: Canada Geological Survey. 05779
- Winnipeg mining district, Sheet 54 A/11: Canada Geological Survey. 00756
- Winnipegosis area, airborne: Canada Geological Survey. 05810

Maps, mineral resources

- Cat Lake-Winnipeg River area, beryllium, geologic distribution: Mulligan, Robert. 06082

Mineralogy

- Serpentine, Setting Lake-Moak Lake area, varieties: Coats, Colin J. A. 03460
- Winnipeg area, swelling clay soils: Quigley, Robert M. 04260

Paleontology

- Fauna, Ordovician-Devonian, Hudson Bay, Kaskattama well: Nelson, Samuel J. 07320
- Palynomorphs, Holocene, cores, Tiger Hills area: Ritchie, J. C. 02736
- Vertebrata, Cretaceous, Vermillion River Formation, Boyne and Pembina Members: Bardack, David. 02177

Petrology

- Northern, Precambrian rocks, density: Gibb, R. A. 02240
- Setting Lake-Moak Lake area, ultramafic rocks, serpentine minerals: Coats, Colin J. A. 03460
- Watt Lake area, Precambrian series: Cranstone, Donald A. 07865

Stratigraphy

- Devonian, southwestern: Kent, D. M. 03181
- Paleozoic, Lower, Hudson Bay, Kaskattama well: Nelson, Samuel J. 07320

Manitoba—Continued*Stratigraphy—Continued*

Precambrian, Wasekan and Sickie series, Watt
Lake area: Cranstone, Donald A. 07865

Precambrian, Wollaston Lake fold-belt system:
Money, P. L. 07209

Structural geology

Northwestern, Wollaston Lake fold-belt system:
Money, P. L. 07209

Mantle*Alberta*

Structure, magnetic, seismic, gravity data:
Kanasewich, E. R. 05063

British Columbia

Conductivity structure of upper, magnetotelluric
data: Caner, B. 05472

Elastic-wave velocities, interpretation: White,
W. R. H. 04670

Canada

Canadian shield, Churchill province, structure,
seismic data: Weichert, D. H. 11439

Composition

Chemical inhomogeneity, upper and lower: An-
derson, Don L. 05099

Diamonds, genesis: Kennedy, George C. 04229
Exploration, clues, textbook: Phillips, O. M.
00561

Hawaiian Islands, upper: Jackson, E. D. 05064
Isotopic, strontium, lead, evolution, recycling in
mantle: Armstrong, Richard Lee. 01102

Mineral phases, shock-wave data: Wang, Chi-
Yuen. 01636

Olivine-spinel transition zone: Garlick, G.
Donald 10757

Primitive: Carter, James L. 07783

Shock-wave data for lower: Wang, Chi-Yuen.
03825

Upper, chemical changes with depth, model stu-
dy: Christensen, Nikolas I. 06011

Upper, suboceanic, subcontinental: Gast, Paul
W. 05886

Velocity layers, basalt data: Manghnani, Murli.
04664

Volcanic rocks as evidence, Pacific Ocean: Mc-
Birney, Alexander R. 02009

Deformation

High-temperature creep, model, mechanisms:
McKenzie, Dan P. 05896

Model construction, elements: McConnell,
Robert K., Jr. 06652

Elastic waves

Body, traveltimes, observed vs. models: Walker,
Daniel A. 02294

Body waves, attenuation, Q structure: Teng, Ta-
Liang. 00652

Core-mantle boundary, elastic waves, reflection,
transmission: Teng, Ta-Liang. 10048

Love waves, excitation as function of magnitude:
Brune, James N. 10451

Mineralogical, temperature variations: Toksoz,
M. Nafi. 10542

PKP, diffraction theory: Phinney, Robert A.
10527

P-velocity distribution, lower: Hales, A. L.
05461

P-waves, lower, velocities: Johnson, Lane R.
10011

P-waves, traveltimes, 10-40°, structure: Carder,
D. S. 02799

Rayleigh and Love, data discrepancy, interpreta-
tion: Takeuchi, Hitoshi. 00968

Refracted, velocity, curvature correction:
Mereu, R. F. 00207

Mantle—Continued*Elastic waves—Continued*

Shear wave velocity profiles, upper mantle
model: Fairborn, John W. 10460

S-wave velocities, measurements, LASA: Fair-
born, John. 11096

S-wave velocity data, structural model: Ibrahim,
Abou-Bakr K. 10009

Transition regions, propagation: Ahrens,
Thomas J. 10621

Upper, deep-focus earthquakes: Herrin, Eugene.
10562

Experimental studies

Composition, effect of pressure variation:
Amoros, J. L. 09841

Garnet, magnesian, isothermal compression to
300 kb: Liu, Lin-Gun. 10604

Geotherm distribution during convection: Ox-
burgh, E. R. 00515

High pressure mineral phases, shock wave data:
Ringwood, A. E. 10620

High-pressure transformations: Ringwood, A. E.
10758

Incongruent melting of enstatite, origin of silica-
saturated magmas: Kushiro, I. 05058

Love waves, excitation functions: Chang, Andre
Chichao. 05498

Low velocity zone, hornblende stability, model:
Lambert, I. B. 03919

Magma generation, limits: Boettcher, A. L.
00463

Melting, temperature of beginning: Kushiro,
Ikuo. 11313

Models, upper, synthetic seismograms, cf.
nuclear explosions: Helmberger, Donald V.
06637

Mohole project, deep-drilling program: Mekh-
tiev, Sh. F. 11154

Olivine-spinel stability relations: Kamb, Barclay.
07569

Olivine-spinel transition, depth, temperature:
Akimoto, Syun-iti. 00281

Olivine-spinel transition, natural forsterite: Ito,
K. 10486

Phase transformations: Ringwood, A. E. 08854

Rocks, minerals, compressibilities, 22°C-450°C,
36-26 kb: LaMori, Phillip. 08775

Shock loading, silicate transformation: Wang,
Chi-Yuen. 03825

Shock-wave research: Duvall, George E. 07410

Spinel, ferromagnesian, lattice parameters, pres-
sure dependence: Mao, Ho-kwang. 02973

Spinel-, garnet-bearing peridotites, stabilities:
MacGregor, Ian D. 07938

Spinel structure minerals, isothermal compres-
sion to 300 kb: Mao, Ho-kwang. 10603

Thermal history, selective fusion of silicates, ef-
fect: Lee, W. H. K. 02836

Transition layer, temperature, discontinuities:
Fujisawa, Hideyuki. 00958

General

Upper Mantle Project symposium, 1966, Pacific
area: Knopoff, Leon. 04674

Upper, Pan-American symposium, 1968:
Knopoff, Leon. 03881

Genesis

Magmatic differentiation, variable factors,
checklist: Middlemost, Eric A. K. 05647

Geochemistry

Geochemical evolution, irreversible, potash
depletion: Dickinson, William R. 00502

Hawaii

Ridge, trench, and rise, geophysical studies:
Woollard, George P. 07975

Mantle—Continued

North America

- Western, convection currents, evidence: Cook, Kenneth L. 07793
- Western, structure, S-wave velocities: Kovach, Robert L. 10461

Pacific Ocean

- Hawaiian arc, velocity anisotropy: Morris, G. B. 10560
- Upper, anisotropy: Crosson, R. S. 10449
- Upper, anisotropy: Raitt, R. W. 10559

Physical properties

- Anelasticity, recent evidence: McConnell, Robert K., Jr. 06652
- Anisotropy, magma pockets: Takeuchi, Hitoshi. 00968
- Conductivity structure, British Columbia: Caner, B. 05472
- Density, elasticity, increase in transition region, cause: Anderson, Don L. 05099
- Electrical conductivity, lower 2,000 km: Currie, Robert G. 00664
- Exploration, clues, textbook: Phillips, O. M. 00561
- Seismic anisotropy, upper: Christensen, N. I. 07388
- Seismic data interpretation, CaO content effect: Soga, Naohiro. 09471
- Viscosity, contrasts, crustal drift mechanism: McConnell, Robert K., Jr. 05897
- Viscosity, geopotential, Pleistocene glaciation, correlation: O'Connell, Richard J. 10626
- Viscosity, mathematical model, isostatic processes: Danes, Z. F. 03006
- Viscosity, relaxation time spectra: McConnell, Robert K., Jr. 04186
- Viscosity, variable, thermal convection: Danes, Z. F. 03008

Processes

- Convection currents, descending, sea-floor spreading: Oxburgh, E. R. 10631
- Convection currents, effects of variable properties: Turcotte, D. L. 10630
- Convection currents, external gravity field, relations: McKenzie, D. P. 10624
- Convection currents, indicators, flood basalts and dike swarms: Clifford, Paul M. 02213
- Convection currents, possibilities: Marvin, Ursula. 02084
- Convection currents, theoretical model: Foster, Theodore D. 10627
- Convection currents, tilting of lithosphere: McConnell, Robert K., Jr. 10629
- Convection, effect of boundary conditions and rotation: McKenzie, D. P. 03910
- Convection, effect of low viscosity layer: McFadden, C. P. 04491
- Convection, geotherm distribution: Oxburgh, E. R. 00515
- Convection, inferred from satellite-sensed gravity map: Schwiderski, Ernst W. 00660
- Convection, low-viscosity zone, theoretical model: Foster, Theodore D. 00003
- Convection, mobile fluids, generation: Keith, M. L. 04117
- Convection, time of cessation: Carr, Jerome B. 07001
- Determination from seismic anisotropy: Christensen, N. I. 07388
- Diapiric movement, continental drift mechanism: Maxwell, John C. 00599
- Magmatic differentiation, variable factors, checklist: Middlemost, Eric A. K. 05647

Mantle—Continued

Processes—Continued

- Partial zone melting, magma compositions: Kushiro, Ikuo. 00061
- Phase changes, relation to earthquake hypocentral patterns: Dennis, John G. 00284
- Phase changes, relation to earthquake hypocentral patterns: Sykes, Lynn R. 00283
- Rotation, theory, causes: MacNeil, F. Stearns. 02845
- Thermal convection, theoretical study: Danes, Z. F. 03008
- Upwelling conducting zone, reflection at surface: Dosso, H. W. 02167

Structure

- Bering Sea, transition to crust: Helmberger, Donald V. 00378
- Determination, S-waves: Ibrahim, Abou-Bakr Khalil. 01361
- Elastic waves, surface, inverse normal mode problem: Gilbert, Freeman. 00554
- Idaho-Oregon-Tufts Abyssal Plain, seismic, gravity data: Dehlinger, P. 03623
- Love waves, excitation functions: Chang, Andre Chichao. 05498
- Low-velocity layer, cause, partial-melting, experimental study: Spetzler, Hartmut. 04486
- North America, Mould Bay to Tucson, seismic profile: Wickens, A. J. 05455
- Ocean-continent transition zone, seismic data: Kosminskaya, I. P. 04668
- Pacific Ocean, Hawaiian Islands area: Helmberger, Donald V. 00040
- P-wave station anomalies: Hales, A. L. 01946
- P-waves near 110°, interpretation: Bolt, Bruce. 06327
- Reflecting horizons: Whitcomb, James H. 10463
- "Tectonofor", deep earthquake zones: Sheynmann, Yu. M. 04663
- Texas, Gulf of Mexico margin, S-phase data: Shurbet, D. H. 04254
- Transition zone at 650 km, PKPPKP waves, reflection: Engdahl, E. R. 06636
- United States, central: Green, R. W. E. 00476
- Upper, early P'P' reflections: Adams, R. D. 05453
- Upper, lateral contrasts: Molnar, Peter H. 11099
- Upper, layered, model study: Tarakanov, R. Z. 04671
- Upper, P-wave traveltimes: Carder, D. S. 02799
- Upper, west of Lake Superior: Lewis, Brian T. 00956

Marble*South Dakota*

- Black Hills area, Harney Peak dome, possibilities: Kernaghan, James S. 05873

Marine geology*Alaska*

- Gulf of Alaska, eastern, heavy-mineral exploration: Valencia, Shirley M. 04586

Arctic Ocean

- Mid-oceanic ridge, geomorphology, tectonics: Litvin, V. M. 05862

Atlantic Ocean

- Northern, crustal structure, seismic data review: Orlenok, V. V. 09443

Automatic data processing

- Geophysical data: Ross, D. I. 08473
- Photogeology, storage, retrieval system: Manchester, Keith S. 08474

Bottom features

- Abyssal anti-dunes: Fox, P. J. 04492
- Atlantic Ocean, Bahama canyon system, morphology: Andrews, James E. 07748

Marine geology—Continued

Bottom features—Continued

- Atlantic Ocean, Eleuthera Ridge, genesis, turbidity currents: Andrews, James E. 08603
- Atlantic Ocean, northwestern, photography: Ewing, Maurice. 09136
- Atlantic Ocean, Nova Scotia to Puerto Rico, topography: Pratt, Richard M. 04519
- Atlantic Ocean, off Rhode Island, cuesta, inner lowland: McMaster, Robert L. 00927
- Atlantic Ocean, Straits of Florida, sedimentary structures: Neumann, A. Conrad. 08441
- Bering Sea, Gulf of Alaska: Gershanovich, D. E. 06120
- California, La Jolla submarine fan valley, channel geometry: Normark, W. R. 08461
- Chautauqua seamount, Hawaiian Ridge area: Schimke, Gerald R. 00090
- Cobb seamount, off Washington, age, polarity, sea-floor spreading: Dymond, J. R. 01941
- Continental margin, North America: Uchupi, Elazar. 00926
- Continental slope off Massachusetts, Martha's Vineyard area: Emery, K. O. 06338
- Depositional anticlines, Straits of Florida, Miami Terrace: Malloy, Richard J. 09323
- Evolution, Canada, Bay of Fundy: Swift, Donald J. P. 06123
- Fan-valley, California, off La Jolla: Shepard, Francis P. 04552
- Geomorphic provinces, Arctic Ocean basin: Hunkins, Kenneth. 09877
- Gulf of Mexico, De Soto canyon: Harbison, R. N. 03224
- Gulf of Mexico, Sigsbee Knolls and central basin: Pyle, Thomas E. 11048
- Guyots, Pacific Ocean, western, volcanic: Boyce, R. E. 04426
- Hawaii, off Oahu, wave-cut terraces and sedimentation: Brock, Vernon E. 02530
- Mid-Atlantic Ridge, ultramafic rocks: Bonatti, Enrico. 03159
- Mid-Atlantic Ridge, volcanism, metamorphism: Melson, W. G. 11241
- Midoceanic ridges, continental drift, evidence: Stubbs, Peter. 00156
- Midoceanic rises, rifted, structure and development: vanAndel, Tjeerd H. 01813
- Pacific Ocean, Aleutian abyssal plain, fossil channel: Grim, Paul J. 00036
- Pacific Ocean, Bering Sea, geophysical data, review: Stone, D. B. 07062
- Pacific Ocean, Gorda Ridge, nascent fracture: Northrop, J. 03060
- Pacific Ocean, Gorda rise: Atwater, Tanya M. 08456
- Pacific Ocean, Hawaiian arch, seismic survey: Normark, William R. 04286
- Popular account: Briggs, Peter. 09495
- Reef-front platform, Bermuda area: Stanley, Daniel J. 07659
- Seamounts, New England Chain, Atlantic Ocean: Uchupi, E. 05144
- Sedimentary structures, morphology and origin, deep slopes: Hulsemann, Jobst. 01919
- Sohm Abyssal Plain terminus, North Atlantic: McGregor, Bonnie A. 07372
- Submarine canyon, evolution, Washington, Juan de Fuca: Carson, Bobb. 08641
- Submarine canyons, current action: Ross, David A. 02010
- Submarine canyons, evolution, hypotheses: DeLuca, Frederick P. 09296

Marine geology—Continued

Bottom features—Continued

- Submarine canyons, genesis, Atlantic Ocean, Hatteras area: Rona, Peter A. 08056
- Submarine canyons, Maryland-Virginia, erosional origin: Uchupi, Elazar. 07060
- Submarine canyons, tectonic origin: Dulemba, Jean-L. 11022
- Submarine canyons, United States, eastern, continental rise: Pratt, Richard M. 11043
- California*
- Continental margin, Tanner Basin, sedimentation history: Gorsline, Donn S. 01904
- Caribbean Sea*
- Jamaica area, dwarf atolls, genesis: Burke, Kevin. 00267
- General*
- Continental shelf, exploration, need: Stewart, Harris B., Jr. 07380
- Data storage-retrieval systems, development: Weiss, Martin. 09735
- Developments, post World War II: Shepard, Francis P. 02844
- Federal activity, Gulf of Mexico: Berryhill, Henry L., Jr. 09314
- Geophysical surveying, methods, capability: Adams, Richard M. 03752
- Oceanographic data, new concepts and techniques: Hill, Mason L. 05245
- Research, 1967, review: Lyman, John. 00004
- Research and exploration, 1966-67, review: Ichiye, Takashi. 03663
- Research vessels, ALVIN, bottom sediment strength observations: Rucker, James B. 10341
- Research vessels, Deep Submergence Research Vehicle, recent observations, Bahamas: Schlee, John S. 08971
- Geophysical surveys*
- Magnetic, linear anomalies, interpretation: Watkins, N. D. 03733
- Pacific Ocean, northeastern, Pioneer Fracture-Delgada Fan intersection: Winterer, E. L. 07061
- Gulf of Mexico*
- DeSoto and Campeche Canyons, salt tectonics: Antoine, J. W. 09320
- Geomorphology, seismic surveys: Pyle, T. E. 09317
- Instruments*
- Bathymetric programmer, narrow-beam for acoustical sounding: Saunders, John M. 06717
- "Bootstrap" corer, sediments: Isaacs, John D. 01438
- Core drill, water-powered, deep-ocean floor: Brooke, John. 06337
- Corer, hard-sediment propellant: Farrell, Thomas P. 06720
- Coring apparatus, nearshore sands: Sanders, John E. 06609
- Coring device with flexible liner: Chmelik, F. B. 09332
- Dredge with camera: Aumento, F. 00985
- Grab sampler, for bottom sediment, water, organisms: Carey, Andrew G., Jr. 04560
- Heat flow, ocean floor: Corry, Charles. 01814
- Manned submersible, GEMMS: Sturm, Roland G. 11356
- Manned submersible, mobile, sea-floor exploration: Sturm, Roland G. 09472
- New developments, sea-floor studies: Johnson, G. Leonard. 03664

Marine geology—Continued*Instruments—Continued*

- Pegasus Underwater Photographic System: Rebikoff, Dimitri. 07377
 Piezometer probe, pore pressure measurements, clays: Lai, John Y. 08477
 Rock-coring drill, submersible electric, Nova Scotia: Godden, C. A. 06608
 Samplers, sea water, terrigenous detritus: Folger, D. W. 06992
 Sand corer: Coffee, Clark E. 00720
 Seismograph system, 30-day ocean-bottom: McDermott, Joseph G. 10448
 Sonar system, precision detector for side-lobe interference: Key, Charles R. 06718
 Vane shear probe, Gulf of Maine tests: Richards, A. 05280

Methods

- Advances, bathyscaphes, platforms: Lill, Gordon G. 07669
 Coring, piston, sediment disturbance: Bouma, A. H. 03801
 Diving geologists, evaluation: Kenny, John E. 05550
 Electrical, sea floor, conductivity, shallow water: Bannister, Peter R. 08408
 Geophysical, Lamont Geological Observatory: Ewing, Maurice. 07995
 Geophysical, midoceanic ridge system: Talwani, Manik. 07997
 Mosaic photogrammetric surveys, Florida shelf: Rebikoff, Dimitri. 07377
 New developments, sea-floor studies: Johnson, G. Leonard. 03664
 Research vessel, submersible PISCES, Canada: Pelletier, B. R. 09449
 Sampling, large-diameter undisturbed benthos sampler: Menzies, Robert J. 06132
 Seismic, continuous reflection profiling: Moore, David G. 05237
 Seismic profiling and core study: Ewing, John I. 07986
 Seismic reflection, Vibroseis system: Lee, Milford R. 01431
 Seismic, Sparker system: Luehrmann, W. H. 01430
 Seismic surveys, PAR air gun: Luskin, Bernard. 01429

Mineral resources

- Deep ocean, geomorphic subdivisions, potential: James, Harold L. 06104
 Economics, ocean vs. land mining, Mn, Ni, S, P: Brooks, David B. 06102
 Exploration, recovery, review: Cruickshank, Michael J. 03668
 General: Ocean Industry. 01603
 Manganese nodules, potential: Brooks, David B. 05109
 Offshore portions: Weeks, Lewis G. 05432
 Petroleum, public policy, coastal-nation boundaries: Hedberg, Hollis D. 06108
 Phosphate, exploration problems, economics: Overall, M. P. 03658
 Sea water: McIlhenny, W. F. 07450
 Symposium: Keiffer, Elisabeth. 06115
 Techniques: Mecarini, Gino. 09576
 United States, continental shelf, potential: McKelvey, V. E. 11325

Pacific Ocean

- Chautauqua seamount, age, from magnetic data: Francheteau, Jean. 05000
 Chautauqua seamount, age, from magnetic data: Schimke, Gerald R. 05001

Marine geology—Continued*Paleontology*

- Atlantic coast submarine canyons, Ostracoda, Pleistocene: Hazel, Joseph E. 05693
 Bryozoa, geographic and depth distribution, sampling bias: Schopf, Thomas J. M. 11392
 Foraminifera, planktonic, Miocene-Holocene, zonation, climate: Bandy, Orville L. 09127
 Palynology, possibilities, limitations, problems: Groot, Johan J. 09784
 Pelecypoda, Jurassic-Holocene, infaunal vs. epifaunal: Nicol, David. 09021

Petrology

- Mid-Atlantic Ridge, median valley to crest, basalts: Aumento, F. 02166

Processes

- Pacific Ocean, volcanoes, submarine eruptions, detection: Norris, Roger A. 00022
 Tectonics, sea-floor spreading, magnetic anomalies: Heirtzler, J. R. 05900
 Tectonics, sea-floor spreading, magnetic anomalies: Vine, F. J. 05899
 Tectonics, sea-floor spreading, problems: Menard, H. W. 05869
 Tectonics, sea-floor spreading, seismologic evidence: Sykes, Lynn R. 05889

Sediments

- Acoustical properties, grain size correlation: Horn, D. R. 00644
 Arctic Ocean, Alpha Rise, sea-floor cores, clay minerals: Carroll, Dorothy. 01231
 Atlantic and Pacific basins, physical properties: Keller, G. H. 05627
 Atlantic Ocean, Barracuda Escarpment, clay mineralogy: Bonatti, Enrico. 06443
 Atlantic Ocean, Gulf of Maine, clays, shear strength, density: Richards, Adrian F. 08478
 Atlantic Ocean, horizon beta, palynology, age: Habib, Daniel. 05166
 Atlantic Ocean, mineralogical zones and provinces: Shurko, I. I. 08071
 Bahamas, New Providence Platform, carbonate lithification: Taft, William H. 06319
 Bering Sea, Gulf of Alaska: Gershanovich, D. E. 06120
 Calcium carbonate content, variation with depth: Smith, Stephen V. 07371
 Carbonate, underwater portable flume: Scoffin, Terence P. 01458
 Clay minerals, distribution: Griffin, John J. 05986
 Clay, pore pressures, Gulf of Maine: Lai, John Y. 08477
 Continental margin, Florida, organic constituents: Hulsemann, Jobst. 01147
 Continental margin, North Carolina, Onslow Bay: Cleary, William J. 01150
 Continental margin, U.S., eastern: Stanley, Daniel J. 07975
 Continental rise, Atlantic, stratification: Heezen, B. C. 07350
 Continental shelf and slope, southeastern U.S., texture, bottom currents: Hollister, Charles D. 07351
 Continental shelf, Nova Scotia, ice transport: Stanley, Daniel J. 07381
 Continental shelf, off British Columbia, sediments, glauconite pellets: Murray, J. W. 01970
 Continental slope off Massachusetts, Martha's Vineyard area: Emery, K. O. 06338
 Continental slope, transport, contour and turbidity currents: Heezen, Bruce C. 01215

Marine geology—Continued*Sediments—Continued*

- Deep-sea, Pleistocene paleotemperatures of carbonates: Eriksson, Erik. 04164
- Deep-sea, Quaternary, water temperatures and salinity: Worthington, L. V. 04163
- Engineering aspects: Monney, Neil Thomas. 01766
- Fabric analysis, Atlantic Ocean, piston core disturbance: Bouma, A. H. 03801
- Fe-Mn nodules, Atlantic Ocean, Nares Abyssal Plain: Smith, R. E. 03061
- Flysch sedimentation, California margin cf. Bavarian flysch: VonRad, Ulrich. 09481
- General description, Atlantic Ocean, Baffin Bay: Marlowe, James I. 06736
- Geochemistry, Holocene, fatty acids, North Atlantic: Cooper, W. J. 07059
- Geochemistry, NaCl content vs. depth: Handy, R. L. 09392
- Georgia, continental shelf: Henry, Vernon J., Jr. 05435
- Gulf of Maine, Wilkinson basin, clays, properties, probe tests: Richards, Adrian F. 01190
- Gulf of Mexico, Pleistocene, quartz dispersal pattern: Davies, David K. 01235
- Gulf of Panama, Holocene history: Golik, Abraham. 04429
- Hawaii, archipelago: Belshe, John C. 09829
- Interstitial water, chemical changes, continental shelf: Friedman, Gerald M. 06599
- Manganese nodules, composition, Pacific Ocean: Lorber, Harvey R. 00049
- Manganese nodules, ferro, genesis: Penn, Sheldon H. 00048
- Mid-Atlantic Ridge, thermomagnetic properties: Schwarz, E. J. 07210
- North Atlantic and Caribbean, sound velocity: Schreiber, B. Charlotte. 00285
- Northwest Territories, Prince Gustaf Adolf Sea area: Marlowe, J. I. 02054
- Nova Scotia, Bay of Fundy, intertidal sand bodies: Swift, D. J. P. 01987
- Pacific basin, northern, distribution, sea-floor spreading: Ewing, John. 09378
- Pacific Ocean, Cascadia basin, Blanco Fracture zone: Duncan, John Russell, Jr. 07153
- Pacific Ocean, northeastern, abyssal environments: Duncan, John R. 08482
- Pacific Ocean, northeastern, Mt. Mazama ash: Nelson, C. Hans. 01920
- Paralic, red bed genesis: VanHouten, Franklyn B. 01085
- Patterns, Wilmington canyon off Delaware: Stanley, Daniel J. 07376
- Phosphorite genesis, in situ, continental shelf environment: d'Anglejan, Bruno F. 02173
- Physical properties, Gulf of Mexico, continental slope: Morelock, Jack. 00039
- Physical properties, mass, ocean floor: Keller, George H. 05208
- Puerto Rico Trench, organic material, plant affinities: Friedel, R. A. 11282
- Pyroclastics, pumice recognition, significance: Fiske, Richard S. 00012
- Relict, on continental shelves: Emery, K. O. 00921
- Sampling, surface coring apparatus, evaluation: Richards, Adrian F. 05206
- Sedimentation rates, ionium-thorium chronology: Goldberg, Edward D. 01532
- Seismic reflection coefficients, relation to properties: Faas, Richard W. 07378

Marine geology—Continued*Sediments—Continued*

- Strength, environmental effects, measurements: Vey, Eben. 05207
- Strength, in-place measurement, accelerometer: Scott, Ronald F. 05235
- Submarine canyons, sedimentation patterns: Stanley, Daniel J. 00320
- Seismology*
- Hydroacoustic waves, propagation, bottom-sediment effect, Pacific Ocean: Northrop, John. 01950
- Hydroacoustic waves, topographic reflectors: Northrop, John. 01951
- Stratigraphy*
- Pleistocene, deep-sea cores, paleotemperature and carbonate cycles: Emiliani, Cesare. 10951
- Pliocene-Pleistocene, paleomagnetism as guide: Opdyke, N. D. 05898
- Structure*
- Atlantic continental shelf, off U.S., seismic evidence: Emery, K. O. 07349
- Gulf of Mexico, Alaminos Canyon, origin, submarine canyon system, salt tectonics: Bouma, Arnold H. 09335
- Mid-ocean ridges, mantle convection: Oxburgh, E. R. 00515
- Mid-oceanic ridges, Atlantic, tectonics, geology, geophysics: vanAndel, Tjeerd H. 09479
- Pacific Ocean, basin history, relation to California: Yeats, Robert S. 05052
- Pacific Ocean, sea-floor spreading, magnetic anomalies: Pitman, W. C., 3d. 00573
- Sea-floor spreading and block tectonics, implications: Menard, Henry W., Jr. 06101
- Textbooks*
- Introductory: Keen, M. J. 07625
- United States*
- North Atlantic shelf, sample inventory: Weiss, Martin. 09005
- Maryland**
- Absolute age*
- Baltimore Gneiss, Rb-Sr, whole rock and minerals: Wetherill, G. W. 01903
- Piedmont, Precambrian, Paleozoic crystalline rocks: Wetherill, G. W. 08199
- Areal geology*
- Southern, Coastal Plain, guidebook: Atlantic Coastal Plain Geol. Assoc. 08017
- Engineering geology*
- Aqueduct trench, Baltimore-Aberdeen area: Cleaves, Emery T. 11233
- Geochemistry*
- Baltimore area, schist weathering, silicate-water interaction: Bricker, Owen P. 04307
- Baltimore area, stream waters, cations and silica, control: Bricker, Owen P. 07358
- Harford County, apatite, magnetite, rutile, chlorite: Southwick, David L. 02716
- Geomorphology*
- Chesapeake Bay, erosion, sedimentation: Schobel, J. R. 10966
- Salisbury area, buried paleochannel: Hansen, Harry J. 08221
- Geophysical surveys*
- Baltimore County, magnetic, gravity data, interpretation: Bromery, Randolph W. 09755
- Baltimore-Washington anticlinorium, northeast end, aeromagnetic, gravity: Bromery, Randolph Wilson. 05514
- Hunting Hill, serpentinite, magnetic properties: Sasajima, Sadao. 08393

Maryland—Continued

Hydrogeology

- Charles County, ground-water resources: Slaughter, Turbit H. 00568
 Salisbury area, Cenozoic aquifers, ground-water resources: Boggess, Durward H. 11261
 Susquehanna River basin, aquifer yields, cost: Holliday, Este F. 02743

Maps, geologic

- General: Cleaves, E. T. 11270
 Southern: Atlantic Coastal Plain Geol. Assoc. 08017

Mineralogy

- Apatite, Harford County, ultramafic chlorite rock: Southwick, David L. 02716
 Glauconite, pellets, morphology, similar X-ray patterns: Tapper, M. 04742
 Rodingite intrusive bodies, Rockville area: Larabee, David M. 05194

Paleontology

- Mammalia, Miocene, Calvert Formation, new whale: Kellogg, Remington. 05585
 Mammalia, Miocene, Calvert Formation, new whale: Kellogg, Remington. 05586
 Mammalia, Miocene, Calvert Formation, whale: Kellogg, Remington. 05587
 Mammalia, Miocene, Calvert Formation, whales, Cope's types: Kellogg, Remington. 05615
 Ostracoda, Paleocene, Brightseat Formation: Hazel, Joseph E. 01131
 Palynology, Quaternary, Cranesville Swamp, profile: Cox, Donald D. 04346

Petrology

- Harford County, paragneiss: Southwick, D. L. 08194
 Harford County, ultramafic chlorite rock, metasomatism: Southwick, David L. 02716
 Rockville area, serpentinite and rodingite: Larabee, David M. 05194
 State Line Serpentinite: McKague, H. Lawrence. 09803

Sedimentary petrology

- Baltimore-Aberdeen area, fall zone, saprolite, Cretaceous: Cleaves, Emery T. 09760
 Baltimore-Aberdeen area, Piedmont and Coastal Plain deposits: Cleaves, Emery T. 11233
 Chesapeake Bay, northern, sedimentation, suspended sediment: Schubel, J. R. 03201
 Limestone conglomerate, description: Dennis, John V. 00819

Stratigraphy

- Cretaceous, sands, southern, correlation by geophysical logging: Hansen, Harry J., 3d. 03169
 Cretaceous-Cenozoic, Charles County, water-bearing characteristics: Slaughter, Turbit H. 00568
 Paleocene, Brightseat Formation, biostratigraphy: Hazel, J. E. 08952
 Paleocene, Brightseat Formation, correlation, ostracodes: Hazel, Joseph E. 01131
 Precambrian-Cambrian, Glenarm Series, Piedmont: Hopson, Clifford A. 08181
 Sections: Cleaves, E. T. 11270

Structural geology

- Baltimore-Washington anticlinorium, northeast end: Bromery, Randolph Wilson. 05514

Weathering

- Baltimore area, schist, silicate-water interaction: Bricker, Owen P. 04307

Maryland—Continued

Weathering—Continued

- Baltimore-Aberdeen area, saprolite zones, aqueduct trench: Cleaves, Emery T. 11233

Massachusetts*Absolute age*

- Ammonoosuc Volcanics, Rb-Sr: Brookins, Douglas G. 02444
 Cape Ann Granite, weathered samples: Bottino, Michael L. 04497
 Cape Cod, glacial deposits, carbon-14: Oldale, Robert N. 09812
 Northeastern, igneous rocks, Rb-Sr, K-Ar: Fairbairn, H. W. 09771
 Triassic basalt: DeBoer, Jelle. 01167

Areal geology

- Boston, City Tunnel area: Tierney, F. Lyle. 07390
 Collinsville quadrangle, field trip: Stanley, Rolfe S. 05998
 Heath quadrangle: Hatch, Norman L., Jr. 02949
 Milford area: Shaw, Charles Ernest. 01355

Economic geology

- Bauxite, Martha's Vineyard, glacial drift: Kaye, Clifford A. 08958

Engineering geology

- Clays, Boston Blue, shear strength: Ladd, C. C. 05285
 Tunnels, Boston area, City Tunnel: Tierney, F. Lyle. 07390

Geomorphology

- Berkshire Hills, glacial lakes, shore features: Holmes, G. William. 09791
 Connecticut River area, buried valleys, postglacial channels: Saines, Marvin. 03795
 Erosion surfaces, analysis, band width method: Farnsworth, Roy L. 11019
 Lake Hitchcock, glacial, level changes: Hartshorn, J. H. 11042
 Plum Island, marshes, Holocene: McCormick, Charles Larry. 07194
 Shorelines, Monomoy Point quadrangle: Koteff, Carl. 11312
 Southeastern, erosion furrows, Pleistocene: Koteff, Carl. 09795
 Vineyard Sound, sand ridge, evolution, stability: Smith, J. Dungan. 09934

Geophysical surveys

- Buzzards Bay, sonar, side-scanning: Sanders, John E. 06391
 Cape Cod, Harwich-Dennis area, gravity: Cabaniss, Gerry H. 09756
 Connecticut River valley, Amherst area, gravity: Foote, Richard M. 03853
 Magnetic: Griscom, Andrew. 07207
 Merrimack River estuary, infrared: Cotton, John E. 09763
 Nashoba Formation, seismic field data cf. elastic properties: Tuttle, C. R. 09944

Hydrogeology

- Cape Cod, Great Island, salt-water intrusion: Cotton, John E. 09764
 Housatonic River basin, ground-water resources, quality: Norvitch, Ralph F. 04760
 Tennile and Taunton River basins, ground-water resources: Williams, John R. 07035

Maps, aeromagnetic

- Chester quadrangle: U.S. Geological Survey. 02070
 East Brookfield quadrangle: Popenoe, Peter. 00447
 Goshen quadrangle: U.S. Geological Survey. 02071

Massachusetts—Continued*Maps, aeromagnetic—Continued*

Hampden quadrangle: U.S. Geological Survey. 02417

Leicester quadrangle: U.S. Geological Survey. 09453

Ludlow quadrangle: Popenoe, Peter. 00610

Monson quadrangle: U.S. Geological Survey. 02418

Mount Tom quadrangle: Popenoe, Peter. 00448

Palmer quadrangle: Popenoe, Peter. 00444

Southbridge quadrangle: U.S. Geological Survey. 02419

Springfield North quadrangle: Popenoe, Peter. 00445

Springfield South quadrangle: U.S. Geological Survey. 02420

Wales quadrangle: U.S. Geological Survey. 02421

Warren quadrangle: Popenoe, Peter. 00446

Webster quadrangle: U.S. Geological Survey. 02422

West Springfield quadrangle: U.S. Geological Survey. 02423

Westhampton quadrangle: U.S. Geological Survey. 02073

Worcester South quadrangle: U.S. Geological Survey. 09452

Worthington quadrangle: U.S. Geological Survey. 02072

Maps, geologic

Heath quadrangle: Hatch, Norman L., Jr. 02949

Housatonic River basin: Norvitch, Ralph F. 04760

Monomoy Point quadrangle: Koteff, Carl. 11312

Wellfleet quadrangle: Oldale, Robert N. 04160

Maps, ground water

Housatonic River basin: Norvitch, Ralph F. 04760

Tennile and Taunton River basins, northern: Williams, John R. 07035

Marine geology

Bottom features, Martha's Vineyard area, continental slope: Emery, K. O. 06338

Mineralogy

Cleavelandite, Chesterfield: Fisher, D. Jerome. 07562

Clinoamphibole, Ordovician volcanics: Jaffe, Howard W. 01088

Paleontology

Protista, dinoflagellates, Holocene, cysts, cf. fossil: Evitt, William R. 04788

Petrology

Milford area, metamorphic rocks: Shaw, Charles Ernest. 01355

Mount Tom Range, basaltic plugs and extrusives: Foose, Richard M. 04280

North-central, Hardwick Granite: Mook, Anita L. 09805

Ultramafic plutons, structural features, northwestern: Chidester, Alfred H. 07253

Western, diorite, pegmatite, postmetamorphic: Schnabel, R. W. 09932

Sedimentary petrology

Boston area, Pennsylvanian, Wamsutta Formation: Stanley, Daniel J. 03438

Boston Harbor, mud, surficial: Mencher, Ely. 01435

Cape Cod, sand, dark-mineral accumulations: Trumbull, James V. A. 00741

Concord, kame delta, ripple-drift cross-laminations: Jopling, Alan V. 06733

Massachusetts—Continued*Sedimentary petrology—Continued*

Narragansett Basin, Pennsylvanian nonmarine sediments: Mutch, Thomas A. 10939

Stratigraphy

Cambrian-Ordovician, southwestern: Hatch, Norman L., Jr. 07131

Holocene, Plum Island, marshes: McCormick, Charles Larry. 07194

Monson area: Peper, John D. 09815

Pennsylvanian, Narragansett Basin, nonmarine sediments: Mutch, Thomas A. 10939

Pennsylvanian, Wamsutta Formation, Boston area: Stanley, Daniel J. 03438

Pleistocene, Cape Cod: Oldale, Robert N. 09812

Quaternary, Wellfleet quadrangle, section: Oldale, Robert N. 04160

Structural geology

Collinsville quadrangle, nappes, field trip: Stanley, Rolfe S. 05998

Eastern, Appalachians, easterly tectonic transport: Skehan, James W. 09933

Eastern, thrust faults: Bell, Kenneth G. 09750

Great Barrington area, deformation episodes: Ratcliffe, Nicholas M. 08201

Monson area: Peper, John D. 09815

Northeastern, Newbury Formation, undeformed fossils, faulting evidence: Cuppels, Norman P. 09766

Road construction fill area, pro-Alpine deformation: Wolfe, C. W. 08191

Wachusett-Marlborough Tunnel, faults, fractures: Skehan, James W. 07248

Western, isoclinal folds, indicators: Hatch, Norman L., Jr. 05183

Weathering

Cape Ann Granite, effects on Rb-Sr ratios: Bottino, Michael L. 04497

Mercury*Abundance*

Manganese nodules, deep-sea: Harriss, Robert C. 02012

Metamorphic rocks, as geothermometer: Jovanovic, S. 00904

Meteorites: Ehmann, William D. 08044

Meteorites, irons: Tanner, James T. 08495

Sandstone, Colorado Plateau, Navajo Sandstone: Cadigan, Robert A. 08635

Wallrock holes, Idaho, Coeur d'Alene district: Clark, Allen LeRoy. 06546

Analysis

Atomic absorption spectroscopy, submicrogram quantities: Hatch, W. Ronald. 09641

California

Hot spring deposits, genesis: Dickson, Frank W. 05281

New Idria mining district, occurrence, genesis: Linn, Robert K. 05364

Wilbur Springs, genesis: Moiseyev, Alexis N. 01884

Experimental studies

Solubility in sodium sulfide solutions: Learned, Robert Eugene. 01750

Exploration

Abundance in soil gas, air: McCarthy, J. H. 06849

Genesis

Halos around ore deposits: Dickson, F. W. 05071

Geochemistry

Cinnabar-stibnite deposits, solubilities, genesis: Learned, R. 11416

Mercury—Continued*Geochemistry—Continued*

Thermodynamic calculations: Moiseyev, Alexis N. 01884

United States, sphalerite, wallrocks: Jolly, Janice L. 05981

Idaho

Hot spring deposits, genesis: Dickson, Frank W. 05281

Nevada

Hot spring deposits, genesis: Dickson, Frank W. 05281

Opalite mining district, occurrence: Fisk, Elwin L. 05361

Texas

Terlingua district, geochemical prospecting: Geddes, Richard W. 11283

Mesozoic*Alabama*

Wilcox County, reworked palynomorphs in Paleocene: McLean, Dewey M. 06008

Alaska

Lake Peters area, stratigraphy: Reed, Bruce L. 04488

Southeastern, tectonics, volcanism: Brew, D. A. 05068

Alberta

Limestone Mountain area, stratigraphy: Olerenshaw, N. C. 06571

Arizona

Santa Rita and Empire Mountains, stratigraphy: Drewes, Harald. 02647

Santa Rita Mountains, new formations, absolute age: Drewes, Harald. 04108

Southeastern, stratigraphy, history: Hayes, Philip T. 02662

Southern, absolute age: Damon, Paul E. 02639

British Columbia

Southwestern, stratigraphy: Danner, W. R. 09085

California

Absolute age, southeastern: Adams, J. A. S. 07742

Southern, tectonics, relation to Pacific basin: Yeats, Robert S. 05052

Canada

Western, stratigraphy: Edmonton Geological Society. 02132

Cephalopoda

Ammonoidea, recent literature, review: Haas, Otto. 03231

Colorado

Hot Sulphur Springs quadrangle: Izett, Glen A. 05557

North and Middle Parks area, stratigraphy: Hail, William J., Jr. 05982

Paradox basin, stratigraphy: Peterson, James A. 01018

Slick Rock district, stratigraphy: Shawe, Daniel R. 07018

Gulf Coastal Plain

Correlation, eastern, cross sections: Maher, John C. 07067

Gymnosperms

Cycadeoidales, evolution, cone origin, hypotheses: Delevoryas, T. 09372

Idaho

Southern, metamorphism: Armstrong, Richard Lee. 03865

Kansas

Stratigraphy, nomenclature, classification: Jewett, John Mark. 07665

Mesozoic—Continued*Louisiana*

Northern, stratigraphy: Shreveport Geological Society. 02164

Mexico

San Luis Potosi, El Salado area, stratigraphy: Garcia-Calderon, Jorge. 07648

Sierra del Tunal, northeastern, stratigraphy: Humara Gomez, Gilberto. 07363

Zacatecas, El Salado (S.L.P.) area, stratigraphy: Garcia-Calderon, Jorge. 07648

Montana

Sweetgrass arch area, stratigraphy: Nordquist, Jack W. 02140

Northwest Territories

Arctic, western, stratigraphy: Gallup, W. B. 00109

Prince Gustaf Adolf Sea area, sedimentation: Marlowe, J. I. 02054

Palynology

Catalog: Traverse, A. 01651

Catalog: Traverse, A. 04328

Reptilia

Dinosaurs, evolution, paleoecology, popular account: deCamp, L. Sprague. 11236

South Dakota

Black Hills area, catalog of formation names: Wulf, George R. 05883

Texas

Northeastern, stratigraphy: Nichols, P. H. 02156

United States

Midcontinent, Fort Dodge gypsum, palynology: Cross, Aureal T. 07796

Utah

Paradox basin, stratigraphy: Peterson, James A. 01018

Washington

Northwestern, stratigraphy: Danner, W. R. 09085

Wyoming

Grand Teton National Park, stratigraphy: Love, J. D. 11319

Western, tectonics: Crosby, Gary W. 04512

Metals*Abundance*

Estimation, debatable assumptions: Lovering, Thomas S. 00135

Alaska

Alaska Range, southern, Windy Fork-Post River, possibilities: Reed, Bruce L. 01709

Chulitna district, upper, occurrence: Hawley, C. C. 01140

Koyukuk River region, possibilities: Miller, Thomas P. 01721

McCarthy B-4 and B-5 quadrangles, distribution: MacKevett, E. M., Jr. 05156

McGrath A-2 quadrangle, Bowser Creek, occurrence: Reed, Bruce L. 00931

Slana area, geochemical prospecting: Richter, Donald H. 04058

Yukon-Tanana area, stream sediments, geochemical survey: Burand, W. M. 03743

Appalachians

Genesis, metallotectonic zoning: Gabelman, John W. 04992

Resources: U.S. Geological Survey. 01408

Southern, genetic types, age, review: Laurence, Robert A. 06302

Arizona

Bisbee district, structural controls: Nye, Thomas Spencer. 07198

Metals—Continued*Arizona—Continued*

Occurrence, genesis: Anderson, Charles A. 05380

British Columbia

Cominco mines, reserve estimation: Swanson, C. O. 05227

Resources summary, 1967: British Columbia Minister of Mines. 06100

Colorado

Mountain province, occurrence: Tweto, Ogden. 05403

San Juan Mountains, central, occurrence: Steven, Thomas A. 05398

San Juan Mountains, western, occurrence, genesis: Burbank, Wilbur S. 05388

Summitville mining district, exploration: Sharp, William N. 00355

Uncompahgre primitive area, resources: Fischer, R. P. 04773

Exploration

Biogeochemical, *Equisetum*, United States: Cannon, Helen L. 01034

Techniques, suggested improvements: Cook, Douglas R. 03844

Genesis

Layered rocks, syngeneses vs. epigenesis: Bain, George W. 05070

Replacement processes, lattice defects: McDougall, David J. 09430

Review: Smirnov, V. I. 04219

Geochemistry

Heavy, fixation in soils and waters, Mn, Fe oxide controls: Jenne, E. A. 03751

Ore deposits, general, ore-forming fluid: White, Donald E. 04224

Mexico

Jalisco and Colima, exploration, photogeologic: Garcia Castaneda, Fausto. 08913

Queretaro, La Negra area, occurrence: Sanchez Mejorada, Pedro. 11347

Montana

Castle Mountain mining district, occurrence, production: Winters, Allen S. 02560

Nevada

Eureka district, occurrence: Nolan, T. B. 05486

Gold Acres and Tenabo areas, distribution: Wrucke, Chester T. 02584

Lander County, southern, possibilities: Stewart, John H. 00911

Mill Canyon area, geochemical prospecting: Elliott, James E. 05159

Occurrence, relation to volcanic centers: Albers, John P. 00840

Sheep Creek Range, western, exploration: Gott, Garland B. 03996

Swales Mountain area, exploration: Ketner, K. B. 02595

Virginia City area, Comstock Lode district, exploration: Whitebread, Donald H. 03995

Western, occurrence: Hewitt, William Paxton. 05482

New Brunswick

Bathurst area, Captain copper-cobalt deposit: Tupper, W. M. 09118

New Mexico

Eagle Nest quadrangle, geochemical, biogeochemical prospecting: Misaqi, F. Leo 07627

Occurrence, genesis: Anderson, Charles A. 05380

Rio Arriba County, Hopewell and Bromide districts: Bingler, Edward C. 07897

Metals—Continued*New Mexico—Continued*

Southwestern, Monticello Box, geochemical prospecting: Griffiths, Wallace R. 05425

Ontario

Espanola area, occurrence: Card, K. D. 07866

Lake Township, occurrence, possibilities: Laakso, R. K. 00582

Ore deposits, general

Ore-forming fluids: Joralemon, Ira B. 06981

Reserves

Estimation, specific gravity, sampling: Dadson, A. S. 05314

Ore definition, reserves classification: Cox, Herbert H. 05240

Rocky Mountains

Northern, geologic setting: Hobbs, S. Warren. 05350

Saskatchewan

Beaverlodge uranium district, Precambrian formations, exploration: Trigg, Charles Murray. 09567

South Dakota

Black Hills, northern, occurrence, Paleozoic section: Shapiro, L. H. 05875

United States

Base, mining districts, characteristics, analysis: Bothol, Joseph Moses. 07185

Heavy, U.S. Geol. Survey program 1966-67: U.S. Geological Survey. 00356

Northeastern, general: Brown, John S. 05428

Pacific coastal region, general: Park, Charles F., Jr. 05358

Utah

Eastern and central, occurrence: Hewitt, William Paxton. 05482

Emery County, San Rafael Swell, occurrence: Hawley, C. C. 00941

Tintic mining district, occurrence: Morris, Hal T. 05374

Washington

Chevelah Mountain area, occurrence: Clark, Lorin D. 07057

Wyoming

South-central, occurrence: Tweto, Ogden. 05403

Metamorphic rocks*Amphibolite*

Genesis, sedimentary-metamorphic: Orville, Philip M. 07854

Geochemistry, alteration, from basic tuff, Ontario: vandeKamp, P. C. 07235

Mineral composition, layers, metasomatic, New York: Seyfert, Carl K. 08877

Petrology, Montana, Wyoming, Beartooth Mts.: Bentley, Robert D. 07821

Petrology, Puerto Rico, Bermeja complex: Tobisch, Othmar T. 08034

Petrology, South Dakota, Bear Mountain dome: Walawender, Michael J. 10273

Petrology, Wyoming, Medicine Bow Mts.: McCallum, M. E. 09148

Blastomylonite

Petrology, Connecticut, eastern: Lundgren, L. 07170

Charnockite

General description, Quebec, classification: Roach, R. A. 05663

Geochemistry, K-Rb ratios, New York: Whitney, P. R. 09951

Classification

Charnockite, nomenclature: Roach, R. A. 05663

Metamorphic rocks—Continued

Composition

British Columbia, Kootenay Lake amphibolites and schists: Dodds, C. J. 05527

Eclogite

Alteration, secondary, in kimberlite pipes: Berg, G. W. 06786

Geochemistry, definition: Church, W. R. 04647

Mineral composition, geochemistry, classification: Godovikov, Alexander A. 05295

Petrology, Alaska, Fairbanks area: Forbes, R. B. 11280

Petrology, Alaska, Nunivak Island: Hoare, J. M. 07889

Petrology, South Carolina, Newberry County: Libby, W. G. 10320

Emery

Petrology, Oregon, Cascade Range: White, Jack C. 09270

Fabric

Lineations, distinguished from those in sedimentary rocks: Stokes, William Lee. 03854

Gabbroic orbiculate

Textures, Washington, Jove Peak, genesis: Van-Diver, Bradford B. 09724

General

Absolute age, Colorado, Black Canyon: Hansen, Wallace R. 02717

Absolute age, Colorado, Eldora area, contact zone: Naeser, Charles Wilbur. 07197

Absolute age, Colorado, Utah, Uncompahgre Plateau: Hedge, Carl E. 02685

Alteration, cataclastic, Alberta, Precambrian shield: Watanabe, R. Y. 04092

Alteration, history, British Columbia, Bella Coola-Ocean Falls area: Baer, A. J. 07231

Alteration, history, Colorado, Morrison quadrangle: Gable, D. J. 02397

Alteration, Saskatchewan, Beaverlodge mining area: Tremblay, L. P. 01688

Fabric, British Columbia, Shuswap complex: Hyndman, Donald W. 01166

Fabric, Oregon, Klamath Mts.: Kays, M. A. 00534

Fabric, Wyoming, Laramie Range, foliation: King, John S. 10884

General description, absolute age, Oklahoma, basement rocks: Denison, Rodger E. 10069

General description, Colorado, Puma Hills: Wobus, Reinhard A. 10277

General description, Guatemala, western: Bradford, Douglas E. 08619

General description, Idaho, Albion Range: Armstrong, Richard L. 08571

General description, Idaho, Pioneer Mountains: Dover, James H. 10831

General description, Manitoba, Guay Lake area: Kornik, L. J. 08059

General description, Manitoba, Halfway Lake area: Godard, J. D. 08058

General description, New York, Connecticut, Hudson Highlands, Manhattan prong, parts: Prucha, John James. 11174

General description, Ontario, Lake Township: Laakso, R. K. 00582

General description, Precambrian and Paleozoic rocks, Idaho: Armstrong, Richard Lee. 03865

General description, Saskatchewan, Wapaweka Lake area: Padgham, W. A. 10674

Geochemistry, Washington, Okanogan Range, compositional trends: Hawkins, James W., Jr. 08724

Metamorphic rocks—Continued

General—Continued

Grain contact ratios: Mahan, Sheila N. 02210

Hydrogeology, Pennsylvania, Chester County: Poth, Charles W. 03192

Mineral composition, almandine and spessartine, equilibria: Hsu, L. C. 01933

Ontario, Lac des Iles area: Pye, E. G. 01043

Petrology, fabric, California, Mt. Eden area: Taylor, Bruce E. 09306

Petrology, Greenland, Agto area, complexes: Bondesen, E. 02065

Petrology, Michigan, Iron River-Crystal Falls district: James, H. L. 01692

Petrology, Michigan, Marquette-Sands quadrangles: Gair, Jacob E. 04113

Petrology, Minnesota, Babbitt-Embarrass area: Griffin, William Lindsay. 02631

Petrology, New Jersey, Byram Cove synform: Chapman, Diana F. 07978

Petrology, Ontario, Bancroft pegmatite area: Cunningham-Dunlop, Peter K. 02607

Petrology, Saskatchewan, Hanson Lake area: Gaskarth, Joseph William. 01745

Petrology, South Carolina, central, Piedmont belts: Secor, D. T. 04728

Petrology, structural features, Colorado, Mummy Range: Kirst, Paul W. 08593

Petrology, structural features, South Dakota, Berne quadrangle: Redden, Jack A. 01701

Petrology, Vermont, Waterbury-Thomaston quadrangles: Gates, Robert M. 05999

Petrology, Virginia, Buckingham quadrangle: Ern, Ernest H. 03194

Petrology, Washington, Okanogan Range: Hawkins, James W., Jr. 05261

Petrology, Wyoming, Medicine Bow Mts.: Houston, R. S. 10680

Physical properties, density, Precambrian rocks, Manitoba: Gibb, R. A. 02240

Physical properties, effective stress law, test: Brace, W. F. 03804

Physical properties, thermal conductivity, Canada: Mirkovich, V. V. 02354

Structural features, British Columbia, Shuswap Terrane: Hyndman, Donald W. 08592

Structural features, California, Klamath Mts.: Davis, G. A. 01993

Structural features, Ontario, Cutler area: Cannon, William Francis. 07186

Structural features, Ontario, Kashabowie area: Hodgkinson, J. M. 00586

Structural features, textures, Ontario, Halcrow-Ridout Lakes area: Donovan, J. F. 01008

Textbook, introductory: Bayly, Brian. 00727

Textbook, mineralogical and field aspects: Turner, Francis J. 03126

Geochemistry

Fe-Mg distribution, garnet and clinopyroxene: Saxena, S. K. 07555

Garnet-biotite pairs, Fe, Mg distributions: Grant, James A. 10900

Hafnium:zirconium ratios, Ontario: Currie, K. L. 02838

Hg concentration, geothermometer: Jovanovic, S. 00904

Minnesota, Ely Greenstone, K-Ar ratios in amphiboles: Griffin, W. L. 02440

Minnesota, Ely Greenstone, K-Rb ratios in amphiboles: Griffin, W. L. 00316

Minnesota, Ely Greenstone, K-Rb ratios in amphiboles: Hart, Stanley R. 02466

Ontario, sulfur isotopes: Speelman, Edwin L. 08045

Metamorphic rocks—Continued*Geochemistry—Continued*

Phase equilibria, chloritoid, staurolite stabilities: Ganguly, Jibamitra. 01011

Physical, textbook: Smith, F. Gordon. 05611
Strontium partition in feldspars: Virgo, D. 03451
Vermont, Ontario, calcite-dolomite, C-O isotopic ratios: Sheppard, Simon M. F. 10800

Gneiss

Absolute age, Minnesota, hornblende: Hanson, G. M. 00581

Absolute age, Montana, Jardine-Creville Mountain area: Brookins, Douglas G. 06974

Absolute age, New York: Abdel-Monem, Abdalla A. 02977

Absolute age, Rb-Sr, Baltimore Gneiss, orogeny effects: Wetherill, G. W. 01903

Alteration, migmatization, Washington, Skagit Gneiss: Misch, Peter. 02516

Alteration, retrograde metamorphism, Palmer Gneiss, Michigan: Gair, Jacob E. 05193

Alteration, Washington, Lake Wenatchee area: VanDiver, Bradford B. 08028

Composition, Wyoming, Laramie Range: Condie, Kent C. 00008

General description, Maryland, Harford County: Southwick, D. L. 08194

Geochemistry, calc-silicate, biotite-sphene reaction: Pratt, Howard R. 08846

Geochemistry, phase relations, analyses, Ontario, Gananoque area: Reinhardt, E. W. 01974

Grain contact ratios, cf granites: Mahan, Sheila N. 02210

Mineral composition, analysis, variance components: Schryver, K. 07522

Mineral composition, antiperthitic feldspar, New Jersey: Vogel, Thomas A. 07572

Mineral composition, Minnesota, Walberg Creek area: Viswanathan, S. 07823

Mineral composition, New England: Liese, Homer C. 05049

Petrology, Colorado, Rocky Mtn. Arsenal well: Wrucke, Chester T. 00787

Petrology, New York, Westchester County: Lessing, Peter. 01751

Petrology, Puerto Rico, Las Palmas basal complex: Tobisch, Othmar T. 01657

Petrology, Quebec, Mount Wright-Mount Reed area: Clarke, P. J. 09364

Petrology, structural features, New York, Ohio quadrangle: Nelson, Arthur E. 04003

Petrology, Wyoming, Grand Teton Natl. Park: Reed, John C., Jr. 07514

Structural features: Blackburn, W. H. 06781

Structural features, Arizona, Santa Catalina Mts.: Peterson, Richard Charles. 07200

Structural features, Greenland, Vesterland: Watterson, Juan. 07646

Structural features, New York, Bronx: Leveson, David J. 08214

Textures, genesis, Idaho, Idaho County: Greenwood, William Rucker. 06550

Textures, granulites, Quebec, Mont Tremblant Park: Katz, Michael. 02725

Granite

Petrology, potash metasomatism and granitization, Wisconsin: Gore, Dorothy J. 05078

Greenschist

General description, Yavapai Supergroup, Arizona: Anderson, C. A. 06500

Iron formation

Alteration, zoning, Minnesota, Biwabik Formation: French, Bevan M. 03189

Metamorphic rocks—Continued*Iron formation—Continued*

Fabric, Minnesota, Michigan, South Dakota: Rapp, George, Jr. 10117

Mineral composition, manganese assemblage, Michigan, Negaunee Formation: Babcock, Larry L. 09292

Low-grade

Structural features, layering oblique to bedding:

Talbot, J. L. 04435

Marble

Mineral composition, phlogopite crystals, growth, Quebec: Kretz, Ralph. 07424

Meta-arkose

Geochemistry, North Carolina, Tennessee, Thunderhead Sandstone: Allen, Gary C. 08597

Metagabbro

Petrology, Mecklenburg complex, North Carolina: Hermes, O. Don. 01732

Petrology, North Carolina, Mecklenburg complex: Hermes, O. Don. 05296

Metallic ores

Structural features, Vermont: Jenks, William F. 00835

Metasediments

Absolute age, Ontario, Gunflint Formation: Kovach, J. 10109

Alteration, metamorphism, Idaho, Beltian rocks: Reid, Rolland R. 05074

Geochemistry, alteration, Ontario, southeastern: vandeKamp, P. C. 07235

Structural features, age of deformation, New York, Stony Point area: Ratcliffe, Nicholas M. 01905

Metavolcanics

Alteration, British Columbia, Karmutsen Group: Surdam, Ronald C. 09710

Mineral composition, X-ray diffraction method: Bristol, Calvert C. 01992

Migmatite

General description, Wyoming, Wind River Mts.: Worl, R. G. 07972

Mineral composition, Washington, Skagit Gneiss, non-anatectic origin: Misch, Peter. 02516

Petrology, geochemistry, Washington, Okanogan Range: Hawkins, James W., Jr. 10002

Mineral assemblages

British Columbia, Kootenay Lake area, Proterozoic to Triassic: Crosby, Percy. 06321

Copper, prehnite, British Columbia: Surdam, Ronald C. 07641

Cordierite-anthophyllite, partial melting as source: Grant, James A. 05214

Garnet, clinopyroxene, Fe, Mg distribution: Saxena, S. K. 07555

Greenland, southern, Lilianmine area: Ghisler, Martin. 07700

Maine, Little Bigelow Mtn. quadrangle: Childs, John F. 10804

Maine, northwestern, staurolite to sillimanite transition: Guidotti, Charles V. 10000

Manganese minerals: Roy, Supriya. 06986

Manitoba, Watt Lake area, Precambrian: Crans-ton, Donald A. 07865

Michigan, Negaunee Iron-Formation, manganese: Babcock, Larry L. 09292

Minnesota, Dunka River area, Biwabik Iron Formation: Bonnichsen, Bill. 07824

New Brunswick, Bathurst area, Captain sulfide deposit, geochemistry: Tupper, W. M. 09118

Metamorphic rocks—Continued*Mineral assemblages—Continued*

- Northwest Territories, Benjamin Lake map-area: Davidson, Anthony. 00849
- Ontario, Gananogue area, pelitic gneiss, phase relations: Reinhardt, E. W. 01974
- Ontario, Heyson township, Red Lake gold mining area, Precambrian rocks: Ferguson, S. A. 01048
- Ontario, Whetstone Lake area: Carmichael, Dugald Macaulay. 03025
- Paragonite occurrence: Guidotti, Charles V. 06442
- Quebec, Cape Smith belt iron-formations: Hashimoto, T. 02737
- Texas, Llano County, wollastonite, occurrence: Workman, William Edward. 06560
- Virginia, Buckingham quadrangle, Precambrian-Paleozoic: Ern, Ernest H. 03194
- Virginia, Martinsville West quadrangle: Conley, James F. 05572
- Wyoming, Laramie Mountains: Hodge, Dennis S. 07891

Mineral facies

- Blueschist, P2 omphacites, P-T indicators: Clark, Joan R. 06462
- British Columbia, Kootenay Lake area, Proterozoic to Triassic: Crosby, Percy. 06321
- California, Cazadero blueschists, alkali amphiboles: Coleman, R. G. 01932
- Chloritoid, staurolite stabilities: Ganguly, Jibamitra. 01011
- Clinoamphiboles, crystal structure, exsolution: Ross, Malcolm. 00177
- Connecticut, south-central, field trip: Burger, H. Robert. 05922
- Idaho, Saint Joe area: Reid, Rolland R. 10253
- Lower grade: Coombs, Douglas S. 10725
- Maine, Cape Neddick, gabbro, contact alteration: Woodard, H. H. 00461
- New England: Thompson, James B., Jr. 07251
- New Jersey, Wanaque area, feldspar: Goodspeed, Robert Marshall. 07190
- North Carolina, Piedmont, eastern: Parker, John M., 3d. 04101
- Ontario, Peterborough County, zoned replacement body: Edgar, A. D. 06451
- Ontario, spatial equilibrium, extent: Blackburn, W. H. 05297
- Quebec, Mount Wright area, Precambrian pyroxene granulites: Roach, R. A. 05663
- Saskatchewan, Needle Falls area, Precambrian: Money, P. L. 05526
- South Carolina, Winnsboro area, origin: Wagoner, H. D. 04834
- Tennessee, North Carolina, Blue Ridge: Carpenter, Robert H. 10289
- Vermont, northern, metamorphic zones: Albee, Arden L. 07252
- Washington, Mount Olympus: Hawkins, James W., Jr. 08276
- Washington, San Juan Islands: Vance, Joseph A. 08343
- Washington, Skagit Gneiss, plagioclase: Misch, Peter. 02516

Orbiculite

- Petrology, Washington, Jove Peak: VanDiver, Bradford B. 00275

Phyllite

- Experimentally deformed, quartz-rich layers, folds, boudinage: Paterson, M. S. 01891

Metamorphic rocks—Continued*Physical properties*

- Colorado, Front Range, fracture permeability: Snow, David T. 10266
- Drillability: Bruce, William E. 07776

Polymica rocks

- Geochemistry, petrology, mineralogy: Rimsaite, J. 06055

Pseudotachylite

- Petrology, Greenland, Agto area: Jensen, Vagn. 02066

Quartzite

- Alteration, deformation by intergranular flow: Heard, Hugh C. 00274
- Fabric, cross-girdle orientations, c-axis, genesis: Sylvester, A. G. 04434
- Mineral composition, South Carolina, Little Mountain area: McKenzie, John C. 02555

Rodingite

- Alteration, mineralogy, Maryland: Larrabee, David M. 05194

Schist

- Absolute age, California, Klamath Mts.: Lanphere, Marvin A. 07928
- Absolute age, Montana, Jardine-Crevise Mountain area: Brookins, Douglas G. 06974
- Alteration, pelitic, Ontario, Sudbury area: Kwak, T. 03591
- General description, Oregon, Burnt River Canyon area: Ashley, Roger P. 09963
- Genesis, California, southern, deep burial by thrust sheets: Ehlig, Perry L. 04024
- Mineral composition, District of Columbia: Broughton, Paul L. 04098
- Mineral composition, geochemistry, age, California, Valley Ford: Keith, Terry E. 02709
- Petrology, California, Marin County, glaucophane: Dudley, Priscilla Perkins. 03029
- Petrology, fahllands: Boyle, R. W. 06978
- Petrology, New Mexico, Las Tablas quadrangle, Moppin Schist: Carpenter, John R. 02565
- Structural features, age, Alaska, Alaska Range: Wahrhaftig, Clyde. 01659

Serpentine

- Alteration, mineralogy, Maryland: Larrabee, David M. 05194
- Petrology, California, Burro Mtn. ultramafics: Burch, Stephen H. 01124
- Petrology, composition, California: Page, Norman J. 00800
- Petrology, Pennsylvania, Maryland, State Line Serpentine: McKague, H. Lawrence. 09803
- Petrology, Puerto Rico, Las Palmas basal complex: Tobisch, Othmar T. 01657
- Physical properties, magnetic, Maryland: Sasajima, Sadao. 08393

Skarn

- Genesis, Arizona, Christmas copper mine: Perry, David Vinson. 02637
- Petrology, reaction rims, Idaho-Montana, Idaho batholith: Nold, John. 10990

Slate

- Alteration, North Carolina, xenoliths in granodiorite: Beyer, Paul J. N. 06041

Structural features

- Idaho, Coeur d'Alene district, slaty cleavage: Clark, Bruce Robert. 02027
- Montana, Sheridan district, flow folding: Burger, Henry Robert, 3d. 08632

Metamorphic rocks—Continued

Taconite

General description, Wyoming, Wind River Mts.: Worl, R. G. 07972

Metamorphism*Amphibolitization*

Nevada, Snake Range, northern, kersantite sill, structural control: Nelson, Robert B. 02469

Annealing

Sulfides: Stanton, R. L. 07637

Chloritization

Ultramafic rocks, Maryland: Southwick, David L. 02716

Contact

Arizona, Gila County, Christmas copper mine: Perry, David Vinson. 02637

Assimilation, dispersal, Haiti, Terre-Nueve stock: Kesler, Stephen E. 05651

California, Panamint Range-Kingston Range talc belt: Wright, Lauren A. 07862

Coal, Colorado, Purgatoire River valley: Crelling, John C. 03828

Colorado, Creede Formation, travertine genesis, possible role: Steven, T. A. 00801

Colorado, effect on zircon ages: Davis, G. L. 04522

Magmatic heat, effect of volatiles: Kesler, Stephen E. 05338

Maine, Little Bigelow Mtn. quadrangle: Childs, John F. 10804

Maine, Waterville-Vassalboro area: Osberg, Philip H. 05444

Migration of elements, Cape Neddick Gabbro, Maine: Woodard, H. H. 00461

Minnesota, Biwabik Iron-Formation, zones, mineralogy: French, Bevan M. 03189

North Carolina, Chapel Hill quadrangle, Carolina Slate Belt: Mann, V. I. 10908

P-T conditions, effect on mineral ages: Hart, S. R. 04566

Skarn deposits: Titley, Spencer R. 04155

Skarn, geochemistry: Burt, D. M. 04136

Skarn, Mexico, Colima, Cerro Nahuatl: Neilson, James M. 04132

Skarn, P-T conditions, Haiti: Kesler, Stephen E. 10956

Textbook, mineralogical and field aspects: Turner, Francis J. 03126

Dynamic

Crustal deformation, energy conversion to heat: Reitan, Paul H. 05644

Enstatite polymorphism, effect of shearing, experimental: Munoz, J. L. 01543

North Carolina, Chapel Hill quadrangle, Carolina Slate Belt: Mann, V. I. 10908

Experimental studies

Chloritoid breakdown at 5-10 kb: Ganguly, J. 05090

Crustal deformation, energy conversion to heat: Reitan, Paul H. 05644

H₂O-CO₂ mixtures, generation method: Holloay, John R. 03824

Kyanite-sillimanite relations, isograd temperature: Richardson, S. W. 01548

Partial melting, cordierite-anthophyllite assemblage source: Grant, James A. 05214

Pelitic rocks, anatexis: Kilinc, I. A. 08762

Phase equilibria, chloritoid, staurolite stabilities: Ganguly, Jibamitra. 01011

Pyroxene, pressure-temperature relations: Coleman, R. G. 00276

Quartz, solubility: Renton, John J. 10338

Metamorphism—Continued

Experimental studies—Continued

Staurolite-quartz association, fluid pressures: Richardson, S. W. 01550

Geochemistry

Carbonates, carbon isotopes, compositional changes: Deines, P. 08660

Grade

Effect on K-Rb ratios in amphiboles, Minnesota: Griffin, W. L. 00316

Effect on K-Rb ratios in amphiboles, Minnesota: Griffin, W. L. 02440

Effect on K-Rb ratios in amphiboles, Minnesota: Hart, Stanley R. 02466

Glaucophane-schist facies, temperature of formation: Taylor, Hugh P., Jr. 05054

Indicator, garnet composition: Saxena, S. K. 06445

Indicator, strontium distribution coefficient in feldspars: Virgo, D. 03451

Kyanite-sillimanite, experimental studies: Richardson, S. W. 02442

Major-element distribution, relation to P, T: Saxena, S. K. 07555

Titanium in biotite, muscovite as indicator, Ontario: Kwak, Teunis A. P. 05366

History

British Columbia, Kootenay arc, central: Crosby, Percy. 06321

Idaho, Priest River-Hoodoo Valley area: Clark, Sandra Helen Becker. 06547

Idaho, Saint Joe area, Beltian rocks: Reid, Roland R. 05074

New York, Manhattan Prong: Hall, Leo M. 07130

Ontario, Cutler area: Cannon, William F. 09759

Precambrian basic intrusions, Greenland, Tasiussaq area: Dawes, Peter R. 01660

Puerto Rico, Bermeja complex: Tobisch, Othmar T. 08034

Migration of elements

Iron, New Jersey: Collins, Lorence G. 01900

Metamorphic differentiation, low-grade rocks: Talbot, J. L. 04435

Pyroxenes, related to original rocks: Coleman, R. G. 00276

Spatial extent, high-grade, Ontario: Blackburn, W. H. 05297

Mineral assemblages

North Carolina, meta-igneous rocks: Ragland, Paul C. 10335

Prehnitization

California, Novato quadrangle, Cretaceous sandstone: Berkland, James O. 08238

Prograde

Maine, Rangeley-Oquossoc areas: Guidotti, C. V. 06749

North Carolina, Tennessee, Thunderhead Sandstone, geochemistry: Allen, Gary C. 08597

P-T conditions

Aragonite as indicator, questioned, Washington: Vance, Joseph A. 01041

Melting, anatexis associated with tectonism: McConnell, R. B. 00006

Northwest Territories, Benjamin Lake map-area: Davidson, Anthony. 00849

Quachita deformation: Jackson, Kern C. 10074

P2 omphacites as indicator, Circumpacific mountain belt: Clark, Joan R. 06462

Quartz inclusions, almandine: Rosenfeld, John L. 10730

Tennessee, Ducktown: Kullerud, G. 08539

Washington, Okanogan Range: Hawkins, James W., Jr. 05261

Metamorphism—Continued*P-T conditions—Continued*

Wollastonite crystallization, Texas, Llano County: Workman, William Edward. 06560

Regional

Absolute age, California, Franciscan terrane: Suppe, John. 00013

Alabama, Tallapoosa and Chambers Counties, mafic-ultramafic belt: Neathery, Thornton L. 09440

Areal studies, Saskatchewan, Beaverlodge mining area: Tremblay, L. P. 01688

British Columbia, Revelstoke area, Shuswap Complex, facies: Ross, John V. 02740

British Columbia, Shuswap complex: Hyndman, Donald W. 01166

Connecticut, Long Hill and Bridgeport quadrangles: Crowley, William Patrick. 04302

Connecticut, southeastern, Late Paleozoic: Lundgren, Lawrence W., Jr. 08215

Effects, apparent retrograde assemblages: Carpenter, John R. 02565

Frederikshaabs Isblink area: Dawes, Peter R. 01866

Frictional heat effect, quantitative evaluation: Reitan, Paul H. 03800

Granulitic facies, Quebec, Mont Tremblant Park: Katz, Michael. 02725

Greenland, southwestern, Precambrian, early, three-fold chronology: Windley, B. F. 02069

History, Washington, Boulder Creek Formation: Lyons, David James. 01349

Idaho, Idaho batholith, northeastern border: Chase, Ronald B. 10218

Idaho, Idaho County, history: Morrison, Donald A. 10245

Idaho, southern, Mesozoic: Armstrong, Richard Lee. 03865

Idaho, Wallace Formation, diffusion limits: Hyndman, Donald W. 08744

Maine, Waterville-Vassalboro area: Osberg, Philip H. 05444

New England, Paleozoic: Thompson, James B., Jr. 07251

Ontario, Haliburton Highlands, Grenville rocks: Chesworth, Ward. 03613

Ontario, Whetstone Lake area: Carmichael, Donald Macaulay. 03025

Pelitic schists, variable μS_2 , significance: Guidotti, Charles V. 08715

Pennsylvania, northwestern, Precambrian basement complex, cf. Ohio, West Virginia: Saylor, Timothy E. 09077

Pennsylvania, South Mtn. anticlinorium: Fauth, John L. 06754

Penokean orogeny, Michigan, Marquette Iron Range: Babcock, Larry L. 07796

Precambrian history, Colorado, Morrison quadrangle: Gable, D. J. 02397

Quebec, Cape Smith belt iron-formations, sequence of reactions: Hashimoto, T. 02737

Temperatures, frictional generation, mathematical models: Reitan, Paul H. 08087

Textbook, mineralogical and field aspects: Turner, Francis J. 03126

Wyoming, Paradise Basin quadrangle: Perry, Kenneth, Jr. 10249

Metamorphism—Continued*Regional—Continued*

Wyoming, Wind River Mts., taconite: Worl, R. G. 07972

Retrograde

Apparent, structural deformation, influence: Carpenter, John R. 02565

Frederikshaabs Isblink area: Dawes, Peter R. 01866

Granulites, Quebec, Mount Wright area: Roach, R. A. 05663

Michigan, Marquette district, Palmer Gneiss: Gair, Jacob E. 05193

Minnesota, Granite Falls-Montevideo area: Himmelberg, Glen R. 09189

Quebec, Mont Tremblant Park, granulite to amphibolite facies: Katz, Michael B. 04444

Serpentinization

High-grade, low-grade metamorphic environment: Cerny, P. 06780

Shock

Alberta, Steen River structure, rocks, quartz: Short, Nicholas M. 07483

Arizona, Meteor Crater, drill cores: Brett, Robin. 05191

Crystalline solids, identifying features: DeCarli, Paul S. 11407

Experimental studies, quartz, plagioclase transformations: Ahrens, Thomas J. 07402

Granitic rocks, Quebec, Clearwater Lake islands: McIntyre, Donald B. 07504

Meteorite impact, diagnostic features: French, Bevan M. 07409

Natural materials, conference papers, 1966: French, Bevan M. 07404

Plagioclase, quartz, induced structural disorder: Bunch, T. E. 07482

P-T conditions, history, meteor craters: Chao, E. C. T. 07491

P-T conditions, mineral phase indicators: Bell, Peter M. 07412

Saskatchewan, Carswell circular structure: Currie, K. L. 07506

Zoning, Canada, Brent, East Clearwater Lake: Dence, M. R. 07492

Zoning

California, Coast Ranges: Compton, Robert R. 08253

Manganese minerals: Roy, Supriya. 06986

Migmatitic gneisses, Washington, Skagit Gneiss: Misch, Peter. 02516

Minnesota, Biwabik Iron-Formation, mineral: French, Bevan M. 03189

Replacement body, Ontario, Peterborough County: Edgar, A. D. 06451

Metasomatism*Amphibolite*

Layering, New York, Bronx: Seyfert, Carl K. 08877

Carbonate rocks

Amphibolite genesis: Orville, Philip M. 07854

Feldspar

Replacement in quartz monzonite pluton, California: Dickson, F. W. 07760

Ilvaite

Mexico, Michoacan, El Guaricho area, diabase contact: Pablo, Liberto de. 09223

Litchfieldite

Zoned replacement, Ontario: Edgar, A. D. 06451

Process

CO₂ liberation, California, Salton Sea geothermal system: Muffler, L. J. Patrick. 09868

Metasomatism — Continued*Process — Continued*

- Contact alteration, Cape Neddick Gabbro, Maine: Woodard, H. H. 00461
 Potash metasomatism in granitization, Wisconsin: Gore, Dorothy J. 05078
 Serpentinization, iron variation, California, Burro Mtn.: Page, Norman J. 10696
 Serpentinization, peridotite, California: Page, Norman J. 00800
 Serpentinization, peridotites: Cerny, P. 06780
Scheelite
 South Dakota, Harney Peak dome, southwestern: Kernaghan, James S. 06891
Ultramafic rocks
 Chloritization, Maryland: Southwick, David L. 02716

Meteor craters*Alberta*

- Northwestern, Early Cretaceous event, possibilities: Carriy, Maurice A. 07505

Arctic

- Distribution, age, Canada, Alaska, Greenland: Sandner, Werner. 06955

Arizona

- Meteor Crater, electrical survey: Wilkins, Joe, Jr. 08503
 Meteor Crater, quartz, shock-wave damage: Sclar, Charles B. 07458

Canada

- Brent, East Clearwater Lake, shock zoning, mechanism: Dence, M. R. 07492
 Canadian Shield, current investigations: Dence, Michael R. 07807
 Canadian Shield, field studies, 1965-66: Dence, M. R. 07503
 General, evidence, strain patterns in quartz and feldspar: Robertson, P. B. 07489
 Impact origin questioned: Currie, K. L. 01633
 Sudbury structure, diagnostic features: French, Bevan M. 07507

General

- Characteristic features, world inventory: Short, N. M. 07497
 Diagnostic criteria, shatter cones: Dietz, Robert S. 07498
 Impact features, shock metamorphism, conference: French, Bevan M. 07404
 Impact phenomena, diagnostic features: French, Bevan M. 07409
 Impact theory, asteroidal: Cohenour, Robert E. 00371
 Popular account: Ley, Willy. 09143
 Wall, rim rocks, study criteria: Seeger, C. Ronald. 11245

Hawaii

- Lanai, no impact evidence: Barringer, Brandon. 04832

Kentucky

- Jeptha Knob, origin: Seeger, C. Ronald. 04500

Ontario

- Brent Crater, quartz subfabric evidence: Gold, D. P. 07459
 Brent, K-Ar ages on rocks: Shafiqullah, M. 06360
 Sudbury astrobleme, shatter-cone criterion: Dietz, Robert. 06310

Quebec

- Charlevoix, structural geology: Rondot, Jehan. 05477
 Malbaie astrobleme, shatter-cone criterion: Dietz, Robert. 06310
 Mecatina Basin, origin questioned: Gold, D. P. 09782

Meteor craters — Continued*Tennessee*

- Flynn Creek crater, cometary impact: Roddy, David J. 07501
 Flynn Creek, impact structure: Roddy, David J. 08504
 Wells Creek structure, evidence: Stearns, Richard G. 07502

Texas

- Sierra Madera, central uplift, deformation pattern: Wilshire, H. G. 04305
 Sierra Madera, central uplift, shatter cone evidence: Howard, Keith A. 11306

Meteorites*Age*

- Achondrites, calcium-rich K-Ar, He-Ar: Heymann, Dieter. 06677
 Activation analysis, invalid for K determination: Rancitelli, Louis A. 03219
 Chondrites, H-, L-groups, formation events: Wanke, H. 08033
 Fission-track method: Fleischer, Robert L. 04709
 Four Corners, Toluca, silicate inclusions: Bogard, D. 00314
 Hypersthene chondrites, Rb-Sr: Gopalan, K. 04184
 Iodine-xenon dating, achondrites: Hohenberg, C. M. 00318
 K-Ar dates, and rare gas chronology, achondrites, pallasites: Megrue, G. H. 00649
 K-Ar method, effect of redistribution by thermal diffusion: Turner, G. 08023
 Silicate inclusions, experiments on dating: Burnett, D. S. 08032

Brenham

- Lanthanide abundances: Masuda, Akimasa. 04520

Campo del Cielo

- Deformation, impact-induced: Bunch, T. E. 07467

Canyon Diablo

- Arizona, composition, Ni, Ga, Ge, Ir: Wasson, John T. 00952
 Composition, Cu content: Vickers, Richard S. 11387
 Composition, xenon, concentration, isotopes: Alexander, E. C. 02675

Carthage

- Age, K-Ar technique: Kaiser, W. 01529

Chondrites

- Enstatite, mineralogical, chemical relations: Keil, Klaus. 04196

Collections

- Directory, world: UNESCO Group on Meteorites. 08929
 Oregon, authentic discoveries, identification: Lange, Erwin F. 09192
 University of New Mexico, Institute of Meteorites: Pokrzywnicki, Jerzy. 02014

Colomera

- Composition, K-feldspar phenocrysts: Wasserburg, G. J. 03058

Composition

- Achondrites, Fe-Mn-Al relations: Deuser, W. G. 03105
 Arizona, Canyon Diablo octahedrite, Ni, Ga, Ge, Ir: Wasson, John T. 00952
 Carbonaceous chondrites, Cr, Mn: Yates, Ann M. 06999
 Carbonaceous chondrites, indium abundances: Schmitt, R. A. 08042

Meteorites—Continued

Composition—Continued

- Carbonaceous chondrites type I, Fe abundance: Suess, Hans E. 08039
- Carbonaceous, xenon, neon, source: Pepin, Robert O. 08049
- Chemical processes in early solar system: Anders, Edward. 04345
- Chlorine, terrestrial contamination indicator: Berkeley, E. 08047
- Chondrites, fission xenon: Sabu, D. D. 01998
- Chondrites, irons, trace-elements in metal phases: Smales, A. A. 08045
- Chondrites, lithophile elements, fractionation: Ahrens, L. H. 08040
- Chondrites, ortho-, calcic-pyroxenes: VanSchmus, W. R. 08020
- Chondrites, rare earths, abundances: Haskin, Larry A. 08027
- Chondrites, Sb, Br, Hg: Ehmann, William D. 08044
- Chondrites, unequilibrated, noble gases: Heymann, D. 00297
- Copper and zinc, atomic absorption analysis: Nava, David Francis. 05510
- Copper, polarographic analysis technique: Vickers, Richard S. 11387
- Disordered pyroxene, chondrites: Pollack, Sidney S. 05367
- Feldspar, structural state, chondrites: VanSchmus, W. R. 06684
- Garnet, Coorara chondrite: Mason, Brian. 00596
- Ge, distribution, metal, silicate, sulfide phases: Wai, C. M. 06674
- Gold: Jones, Robert S. 04502
- Gold content, neutron activation analysis: Linn, T. A., Jr. 09424
- Gold, iridium distribution, cf. kimberlite: Ehmann, William D. 08043
- H-3 and He-3, cosmic-ray-produced: Kruger, S. T. 02358
- H, He, implantation in olivine and enstatite: Lord, H. C. 03227
- Helium, bibliography: Lipper, Harold W. 04104
- Hydrocarbons, evidence, validity: Urey, Harold C. 02956
- Hydrocarbons, genesis, solar nebula: Studier, Martin H. 00291
- Iodine, uranium abundances, cf. terrestrial: Bennett, J. H. 08500
- Irons, mercury, bismuth distributions: Tanner, James T. 08495
- Irons, silicate inclusions, rare gases: Alexander, E. C. 08490
- K, Ar, redistribution by thermal diffusion: Turner, G. 08023
- Krinovite, new silicate mineral: Olsen, Edward. 03064
- Lithium, distribution, isotopic abundance in stony: Balsiger, H. 10692
- Nepheline in chondrites: Fuchs, Louis H. 06361
- Nitrogen abundance, chondrites: Moore, Carleton B. 00031
- Nitrogen compounds, genesis, solar nebula: Hayatsu, Ryoichi. 00294
- Oldhamite, petrologic significance: Larimer, John W. 03903
- Organic matter, source and microstructures: Nagy, Bartholomew. 03095
- Pallasites, chondrites, Mo, W distributions: Niles, Gerald L. 08489
- Parent body, evolution: Wood, John A. 02904

Meteorites—Continued

Composition—Continued

- Pb:Pb ratios, Bondoc meteorite: Marshall, Royal R. 03929
- Platinum metals, abundances: SenGupta, J. G. 06987
- Platinum-group metals, determination: SenGupta, J. G. 02999
- Pyroxene minerals, cf. terrestrial pyroxenes: Mason, Brian. 00331
- Rare earths, abundance in chondrules: Schmitt, R. A. 08041
- Silicon abundance, activation analysis: Ehmann, William D. 01514
- Stony, fluorine analysis spectrophotometry, technique: SenGupta, J. G. 03566
- Trace elements, terrestrial modification: Berkeley, Edgar. 01763
- Uranium distribution, fission-track activation technique: Fleischer, R. L. 03902
- Vanadium, in irons and sulfide nodules: Linn, T. A., Jr. 01979
- Xe and Kr in Leighton bronzite chondrite: Meason, J. L. 00388
- Xenon, excess heavy, chondrites, source: Rowe, M. W. 06676
- Cosmic dust*
- Accretion rate, Ir and Os in deep-sea sediments: Barker, John L., Jr. 02338
- Atlantic Coastal Plain, magnetic spherules, sediments, electron probe analyses: Marvin, Ursula B. 09800
- Flux, measurements: Parkin, David W. 00176
- Flux, polar ice cf. satellite data: Hodge, Paul W. 05004
- Genesis, dynamics: Bandermaun, Lothar W. 11254
- Greenland, ice sheet, magnetic spherules: El-Goresy, Ahmed. 02272
- Magnetic spherules, deep-sea cores: Charm, Walter B. 04587
- Mass accretion rate, Ir in manganese nodules: Harriss, Robert C. 04893
- Physical properties, distribution: Singer, S. Fred. 08497
- Size-distribution change, polar ice sheets: Hamilton, Wayne L. 10953
- Denver*
- General description, fresh fall: Mason, Brian. 01507
- Experimental studies*
- Shock loading, 35-480 kb, effects: Comerford, Matthias F. 10441
- Fayetteville*
- Primordial gases, diffusion: Bieri, R. H. 09510
- Four Corners*
- Silicate inclusions, composition: Bence, A. E. 08492
- General*
- Collections, catalogs, research directory: UNESCO Group on Meteorites. 08929
- Identification, ages: Karner, Frank R. 04314
- Michigan, falls: Chamberlain, Von Del. 06970
- Olivine deformation: Carter, N. L. 03211
- Relation to planetary physics: Kaula, William M. 09412
- Genesis*
- Apollo asteroids, evaluation of hypothesis: Wetherill, G. W. 00077
- Carbonaceous chondrites: Schmitt, R. A. 08042
- Carbonaceous chondrites, lunar origin: Urey, Harold C. 03710
- Carbonaceous chondrites, types I, II: Urey, Harold C. 08038

Meteorites—Continued*Genesis—Continued*

Chemical processes in early solar system: Anders, Edward. 04345

Chondrites, LL-group, compositional evidence: Fredriksson, Kurt. 08035

Chondrites, parent bodies, Moon, Mars: Wanke, H. 08033

Cometary origin: Yokoyama, Y. 08901

Iron: Jaeger, Ralph Roger. 00878

Iron, significance of K-feldspar phenocrysts: Wasserburg, G. J. 03058

Pallasites, asteroid core: Buseck, Peter R. 00118

Parent body, evolution: Wood, John A. 02904

Parent body possibilities: Wetherill, George W. 08034

Shock history, correlation with Ga-Ge content and exposure age: Jaeger, Ralph R. 06920

Stony, time of fall, aphelion of source: Wetherill, G. W. 00110

Geochemistry

L-group chondrites, Ga, Ge, In, Ir variations: Tandon, S. N. 04867

Mercury as geothermometer: Jovanovic, S. 00904

Hexahedrites

Composition, structure, variations: Wasson, John T. 00905

Holbrook

Composition, organic, analyses: Hayes, J. M. 00295

Isotopes, lithium: Gradsztajn, Eli. 00212

Impact phenomena

Quartz deformation: Carter, Neville L. 01090

Irons

Shock effects, natural and artificial, review: Lipschutz, M. E. 07465

Structures, mechanical, thermal alteration: Axon, H. J. 07466

Isotopes

Chondrites, achondrites, Xe, Kr: Eugster, O. 08487

Pu-244, I-129, galactic nucleosynthesis: Reynolds, J. H. 05989

Rare gas chronology, hypersthene achondrites and pallasites: Megrue, G. H. 00649

Xe-129, formation interval: Reynolds, John H. 08048

Xenon, sources in achondrites: Munk, Miner N. 00206

Kodaikanal

Silicate inclusions, composition: Bence, A. E. 08492

Luminescence

Electron-excited, variations: Greer, Raymond T. 08711

Mineralogy

Feldspar, alkali: Bunch, T. E. 08630

Tridymite, crystal structure: Dollase, Wayne A. 07763

Mossbauer spectra

Irons, shocked and unshocked: Lafleur, L. D. 05151

Murray

Composition, hydrocarbons, genesis: Studier, Martin H. 00291

Composition, organic, analyses: Hayes, J. M. 00295

Newport pallasite

Mineralogy, mackinawite, pentlandite, Cu: Buseck, Peter R. 00469

North Dakota

Finds, recognition: Karner, Frank R. 04314

Meteorites—Continued*Norton County*

Geochemistry, lanthanide distribution: Masuda, Akimasa. 07871

Lithium concentration: Balsiger, H. 10692

Radioactivity, cosmic-ray produced, absolute age: Matsuda, Hideki. 07925

Octahedrites

Shock history, correlation with Ga-Ge content and exposure age: Jaeger, Ralph R. 06920

Odessa

Age, K-Ar technique: Kaiser, W. 01529

Organic matter

Analyses, mass spectrometric technique: Hayes, J. M. 00295

Biogenic and indigenous nature, terrestrial contaminant: Claus, George. 09365

Orgueil

Composition, hydrocarbons, genesis: Studier, Martin H. 00291

Composition, nitrogen compounds, genesis: Hayatsu, Ryoichi. 00294

Peace River

Radioactivity, cosmic-ray produced, absolute age: Matsuda, Hideki. 07925

Petrology

Chondrites, evolution: Larimer, John W. 05290

Phase equilibria

Olivine-garnet transformation, Coorara chondrite: Mason, Brian. 00596

Physical properties

Achondrites, basaltic, increased reflectance, brecciation: Elston, Donald P. 08675

Radioactivity

Chondrites, I-Xe cooling rate: Manuel, O. K. 08488

Research

1967, review: Wood, John A. 00001

Richardton

Composition, chondrules, rare earths: Schmitt, R. A. 08041

Saint Severin

Reaction with low energy particles: Marti, K. 10442

Shallowater

Age, iodine-xenon dating: Hohenberg, C. M. 00318

Sharps chondrite

Recrystallized chondrules, source: Dodd, R. T. 04868

Shergotty

Composition, maskelynite, genesis: Bunch, T. E. 07482

Magmatic and shock metamorphic features: Duke, Michael B. 07468

Shock effects

Iron: Jaeger, Ralph Roger. 00878

Kamacite barometer: Jaeger, Ralph R. 02994

Octahedrites, kamacite structures: Comerford, M. F. 08494

Odessa: Jain, A. V. 08493

Olivine deformation: Raleigh, C. B. 08099

Smithonia

Chlorine distribution, contamination indicator: Berkey, E. 08047

Composition, trace-element distribution: Berkey, E. 11228

Texture

Shock effects, irons: Jain, Anant V. 03932

Toluca

Composition, xenon, concentration, isotopes: Alexander, E. C. 02675

Meteorites—Continued*Toluca—Continued*

Cooling rate, Pu-244 fission tracks: Fleischer, R. L. 00298

Tombigbee River

Age, K-Ar technique: Kaiser, W. 01529

Chlorine distribution, contamination indicator: Berkey, E. 08047

Walltown chondrite

Composition, classification: Ehmann, William D. 11249

Weatherford

General description, composition: Mason, Brian. 02342

Weekeroo Station

Silicate inclusions, composition: Bence, A. E. 08492

Mexico*Absolute age*

C-14, ISOTOPES list: Buckley, James D. 03787

C-14, Texas University list: Valastro, S., Jr. 03043

C-14, UCLA list: Berger, Rainer. 03044

C-14, Yucatan, Campeche Bank, ORAU list: Noakes, John E. 03041

North-central, stocks, igneous rocks, zircon, Pb-alpha: Pantoja-Alor, Jerjes. 09220

Obsidian hydration analysis, artifacts: Friedman, Irving. 07288

Obsidian hydration analysis, artifacts: Meighan, Clement W. 01925

Obsidian, hydration analysis, artifacts: Meighan, Clement W. 07309

Providencia-Concepcion del Oro district, igneous rocks, minerals: Ohmoto, Hiroshi. 07851

Sonora, metamorphic events, orogenic pulses, K-Ar: Damon, Paul E. 09370

Sonora, Precambrian orogenies: Damon, Paul E. 02639

Sonora, Precambrian strata: Livingston, Donald E. 07460

Areal geology

Baja California, Concepcion Bay area: McFall, C. Carew. 02556

Baja California, mapping progress report: Gastil, Gordon. 11028

Baja California, southern tip, continental margin: Normark, William R. 04297

Durango, Cuencame area: Enciso de la Vega, Salvador. 02564

Mexico City area: Cserna, Zoltan de. 04885

Mexico City area: Schlaepfer, Carmen J. 06713

San Luis Potosi, El Salada area: Garcia-Calderon, Jorge. 07648

Yucatan Peninsula, physical geography: Furley, Peter. 02259

Zacatecas, El Salado (S.L.P.) area: Garcia-Calderon, Jorge. 07648

Earthquakes

Seismicity, Mexico City area, magnitude-frequency relation: Ferraes, Sergio G. 00204

Economic geology

Barite, occurrence: Jauregui, Luis A. 09527

Clays, San Luis Potosi area, refractory, genesis: Keller, W. D. 05567

Iron, Colima, Cerro Nahuatl: Neilson, James M. 04132

Metallogenetic provinces: Wilson, Ivan F. 04148

Metals, Durango, Mapimi district: Hoffman, Victor J. 11303

Metals, Jalisco and Colima, exploration, photogeologic: Garcia Castaneda, Fausto. 08913

Metals, Naica, Fresnillo: Villasenor, Luis. 04133

Mexico—Continued*Economic geology—Continued*

Metals, regional metallotectonic zoning:

Gabelman, J. W. 01617

Metals, Tayoltita, exploration: Randall, John A. 04197

Mineral resources, Coatzacoalcas drainage basin, possibilities: Medrano, Alberto. 09530

Natural gas, occurrence: Beebe, B. W. 02110

Natural gas, occurrence, exploration, reserves: Bullard, Freda Jean. 07864

Petroleum, exploration, 1966: Mina U., Federico. 09228

Petroleum, north-central, possibilities: Salas, Guillermo P. 01451

Petroleum, sulfur, southeast saline basin, geology: Salas, Guillermo P. 09227

Petroleum, Veracruz, Tampico embayment, Golden Lane fields: Viniegra, Francisco. 01205

Phosphate, occurrence: Sanchez Mejorada, Pedro. 09528

Polymetallic ores, Santa Eulalia district, occurrence, genesis: Hewitt, William Paxton. 01509

Queretaro, La Negra area: Sanchez Mejorada, Pedro. 11347

Salt, salt dome cap rock: Myers, John C. 07452

Silver, Catorce mining region, occurrence: Monroy Plovers, Salvador. 07365

Silver, gold, Pachuca-Real del Monte district: Geyne, Arturo R. 04882

Sulfur, general: Salas, Guillermo P. 04147

Sulfur, Isthmus salt basin, origin, stratigraphy, production: Folk, Stewart H. 09319

Uranium, Oaxaca, composition, metallurgy: Acevedo C., Alberto. 10914

Vein deposits, exploration, seismic, northeastern: Price, Federico J., Jr. 09526

Engineering geology

Dams, deformation, El Infurnillo, Netzahualcoyotl: Squier, Lyman Radley. 02611

Materials, properties, rockfill, laboratory tests: Marsal, Raul J. 01837

General

Graduate geologists, distribution, future: Lopez Ramos, E. 09229

Research, 1967-68, Mexico University Institute of Geology: Salas, Guillermo P. 10815

Geochemistry

Baja California, red beds, Fe-rich clay genesis: Walker, T. R. 07969

Durango, Cerro de Mercado area, fluorapatite: Young, E. J. 11135

Providencia, fluid inclusions: Rye, Robert O. 01914

San Luis Potosi, geochemical prospecting: Gomez, Manuel. 04115

Skarn, oxygen buffer: Burt, D. M. 04136

Yucatan, northern, chemical hydrology: Hanshaw, Bruce B. 08721

Zacatecas, Providencia, fluid inclusions: Rye, Robert O. 04116

Zacatecas, Providencia, ore deposits, fluid inclusions: White, Donald E. 04224

Geomorphology

Airphoto interpretation, Gemini space flights: U.S. Natl. Aeronaut. and Space Adm. 11366

Caves, new discoveries, exploration: Russell, William H. 08969

Coastal zones, deserts, research, appraisal: Schreiber, Joseph F., Jr. 08101

Karst areas, features and geology: Thompson, P. 07361

Karst evolution, cf. Europe: Enjalbert, H. 07985

Mexico—Continued

Geomorphology—Continued

- San Luis Potosi, Matehuala area, karst: Grande Lopez, Raul. 06792
 Sonora, Pinacate Mountains, volcanic craters: Townsend, Robert. 03735
 Sonoran Desert: Dunbier, Roger. 09496
 Tamaulipas, Laguna Madre, lagoon, barrier beach: Yanez, Amado. 09224

Geophysical surveys

- Baja California, continental margin, seismic: Normark, William R. 04297
 Baja California, gravity: Phillips, Richard P. 08364
 Baja California, gravity base stations: Phillips, Richard P. 08365
 Seismic methods, petroleum exploration: Fraga Purata, Jorge A. 09843
 Upper Mantle Project, 1966-67, gravity, aeromagnetic, volcanology: Maldonado-Koerdell, M. 09022

Hydrogeology

- Coahuila, Gomez Farias-El Vergel Valley, ground-water resources: Medina Rivero, Flavio. 11328
 Ground-water studies, classification, methods: Figueroa Vega, German E. 10809
 Sonoran Desert: Dunbier, Roger. 09496

Maps, geologic

- Baja California, Concepcion Bay area, reconnaissance: McFall, C. Carew. 02556
 Baja California, Rancho El Pinal area: Duffield, Wendell A. 10950
 Baja California, southern tip: Normark, William R. 04297
 Durango, Cuencame area: Enciso de la Vega, Salvador. 02564
 General: Sanchez Mejorada, Santiago Hernandez. 09511

- Mexico City area: Schlaepfer, Carmen J. 06713
 San Luis Potosi, Cardenas region and syncline: Myers, Ralph L. 07967

- San Luis Potosi, El Salado area: Garcia-Calderon, Jorge. 07648

- Sierra del Tunal, northeastern, San Luis Potosi and Nuevo Leon: Humara Gomez, Gilberto. 07363

- Zacatecas, El Salado (S.L.P.) area: Garcia-Calderon, Jorge. 07648

Maps, geomorphologic

- Bahia de Campeche area, relation to submarine topography: Uchupi, Elazar. 00607

Mineralogy

- Apatite, Durango, Cerro de Mercado: Paulick, J. 11338

- Apatite, Durango, Cerro de Mercado, composition: Newsely, H. 06378

- Apatite, Durango, Cerro Mercado area, infrared spectra: Bhatnagar, V. M. 01797

- Clay minerals, fractionated, cation equilibria: Fertl, Walter. 04745

- Durango, Mapimi district: Hoffman, Victor Joseph. 07192

- Fluorapatite, Durango, Cerro de Mercado area: Young, E. J. 11135

- Heavy minerals, Tamaulipas, Laguna Madre sediments: Schlaepfer, Carmen J. 09225

- Ilvaite, Michoacan, Arteaga area: Pablo-Galan, Liberto de. 10699

- Ilvaite, Michoacan, El Guaricho area, properties, genesis: Pablo, Liberto de. 09223

- Jalpaite, Tepic: Grybeck, Donald. 07539

- Mackayite, Sonora, Moctezuma area, iron tellurite, new data: Gaines, Richard V. 09221

Mexico—Continued

Mineralogy—Continued

- Perlite, Sonora, Alamos area, gem variety: Broughton, Paul L. 00358

- Poughite, Sonora, Moctezuma mine, new: Gaines, Richard V. 06747

- Sonoraitite, Sonora, Moctezuma mine, new: Gaines, Richard V. 07529

- Tellurite, Sonora, Moctezuma area, zeolite-type, crystal structure: Matzat, Eckhart. 10909

Paleomagnetism

- Cenozoic, lavas, Valley of Mexico: Nairn, Alan E. M. 08372

Paleontology

- Aves, Pleistocene, Sonora area, turkey: Cracraft, Joel. 02811

- Cephalopoda, Cretaceous, Albian, northern, ammonite zone: Young, Keith. 00496

- Cephalopoda, Ordovician, Tinu Formation, Oaxaca: Flower, Rousseau H. 03791

- Echinoidea, Mesozoic-Cenozoic, catalog: Buitron, Blanca Estela. 09180

- Fauna, Cretaceous-Quaternary, Baja California, mollusks, cirriped: Perrilliat Montoya, Maria del Carmen. 09131

- Foraminifera, Cretaceous, Upper, Baja California: Sliter, William V. 06699

- Foraminifera, Cretaceous, Upper, southern, new: Robinson, E. 05136

- Invertebrata, Cretaceous, Cardenas Fm.: Myers, Ralph L. 07967

- Invertebrata, Paleozoic, Lower, Oaxaca: Robison, Richard A. 11003

- Mammalia, Pliocene, Chihuahua, horses, evolution: Sondaar, P. Y. 07006

- Mammalia, Pliocene, Guanajuato, Ocotite fauna, horse teeth: Mosser, O. 01637

- Mammalia, Tertiary, Baja California: Morris, William J. 08996

- Mammalia, Tertiary, Baja California, provincial ages, correlation: Morris, William J. 09150

- Mollusca, Cambrian-Ordovician, Tinu Fm., Oaxaca: Yochelson, Ellis L. 03233

- Mollusca, Cretaceous, Alsitos Formation, Baja California: Allison, Edwin Chester. 00846

- Mollusca, Cretaceous, Semilla Sandstone, San Juan Basin: Dane, Carle H. 01035

- Mollusca, diatoms, Cenozoic, Baja California: Hertlein, Leo G. 04300

- Mollusca, Pacific coast, P. P. Carpenter types, British Museum: Keen, A. Myra. 02807

- Palynomorphs, Jurassic, Chinameca Limestone: Contreras V., H. 03354

- Porifera, Jurassic-Cretaceous, Rhaxella, distribution, correlation: Trejo, M. 09226

- Pteridophytes, Jurassic, Oaxaca area, glossopeter: Delevoryas, T. 02304

- Trilobites, Cambrian-Ordovician, Tinu Fm., Oaxaca, new: Robison, Richard A. 03232

- Vertebrata, Cretaceous, El Gallo Formation, Baja California: Morris, William J. 10024

Petrology

- Baja California, El Pinal tonalite: Duffield, Wendell A. 10950

- North-central, rhyodacitic porphyry and monzonite stocks, age: Pantoja-Alor, Jerjes. 09220

- Paricutin volcanic series, andesites: Tilley, C. E. 01566

- San Luis Potosi area, refractory clay, hydrothermal origin: Keller, W. D. 05567

Sedimentary petrology

- Baja California, northwestern, Tertiary succession, Franciscan detritus: Minch, John A. 08305

Mexico—Continued*Sedimentary petrology—Continued*

- Tamaulipas, Laguna Madre, sediments, composition, distribution: Yanez, Amado. 09224
 Tamaulipas, Laguna Madre, sediments, source, heavy minerals: Schlaepfer, Carmen J. 09225
 Tijuana area, Cretaceous-Cenozoic clastics, provenance: Peterson, G. L. 08843

Stratigraphy

- Cenozoic, Chihuahua, Hueco and Mesilla bolsons: Strain, William S. 10175
 Chihuahua, Juarez Mountains: Cordoba, Diego A. 10176
 Cretaceous, Cardenas Fm., San Luis Potosi, redefined: Myers, Ralph L. 07967
 Cretaceous, salt deposits, southern: Benavides G., Luis. 01014
 Cretaceous, Semilla Sandstone Member, Mancos Shale, San Juan Basin: Dane, Carle H. 01035
 Cretaceous, Upper, Chihuahua, biostratigraphy: Wolleben, James A. 09325
 Cretaceous-Cenozoic, Baja California, biostratigraphy, lateral facies: Allison, Edwin C. 10700
 Cretaceous-Tertiary, Santa Eulalia district: Hewitt, William Paxton. 01509
 Mesozoic, Quaternary, Sierra del Tunal area: Humara Gomez, Gilberto. 07363
 Permian-Cretaceous, salt deposits, northern: Salas, G. P. 01019
 Precambrian-Holocene, San Juan basin: Peterson, James A. 05606
 Precambrian-Mesozoic, Sonora, old massif and Mesozoic sequence, correlation: King, Philip B. 04022

Mica*North Carolina*

- Resources, review: Lesure, F. G. 01369

Ontario

- Occurrence, production, phlogopite deposits: Hewitt, D. F. 02514

Michigan*Absolute age*

- Mount Bohemia intrusion, cf. Duluth gabbro: Chaudhuri, Sambhudas. 03899
 Precambrian intrusions, Keweenaw fault area: Chaudhuri, S. 07816

Areal geology

- Huron, Michigan Islands, Seney National Wildlife Refuges: Dutton, Carl E. 00022
 Iron River-Crystal Falls district: James, H. L. 01692

Economic geology

- Construction materials, chert aggregates, properties: Johnson, Allan M. 09290
 Copper, Copper Harbor Conglomerate: Brecke, E. A. 01909
 Copper, Copper Harbor Conglomerate: Ohle, Ernest L. 01898
 Copper, Keweenaw district, associated clay alteration: Ruotsala, Albert P. 06961
 Copper, Nonesuch Shale: Joralemon, Ira B. 06981
 Copper, Nonesuch Shale, genesis: White, Donald E. 04224
 Copper, northern, genesis, experimental: Mackasey, William O. 09294
 Copper, northern, native deposits: White, Walter S. 05386
 Copper, White Pine area: Ensign, C. O., Jr. 05409
 Copper, White Pine mine, reserve estimation, grade control: Ensign, C. O., Jr. 05311

Michigan—Continued*Economic geology—Continued*

- Copper, White Pine mine, silver-bearing, resources, uses: Finlay, Walter L. 06318
 Iron, Iron River-Crystal Falls district: James, H. L. 01692
 Iron, Marquette district: Anderson, Gerald J. 05411
 Iron, Menominee district: Dutton, Carl E. 05413
 Natural gas, Michigan basin: Vary, J. A. 03409
 Petroleum and natural gas, fields, symposium: Michigan Basin Geological Society. 08018
 Petroleum, natural gas, producing zones: Champion, Beverly L. 07927
 Petroleum, natural gas, production, fields: Michigan Geological Survey. 03525
 Uranium, reconnaissance, 1952-56: U.S. Atomic Energy Commission. 08994

Engineering geology

- Gas storage, Michigan basin: Vary, J. A. 03409
 Waste disposal, Detroit area, Michigan basin, Mt. Simon sandstones: Briggs, Louis I., Jr. 05603
 Waste disposal, Midland area, underground, activated sludge: Shannon, E. S. 10771

General

- Education, Lake Superior State College, mineral identification: Kemp, C. Ernest. 07806
 Meteorite falls: Chamberlain, Von Del. 06970

Geochemistry

- Negaunee quadrangle, west-central, Cu, Pb, Zn, geochemical prospecting: Segerstrom, Kenneth. 04765
 Silurian carbonate rocks, Mg, Fe, Ca, Si, correlation: Sanford, John T. 04719
 Soils, magnesium release, uptake: Christenson, Donald Robert. 06529

Geomorphology

- Mason County, dune corridors, rillensteine on ventifacts: Whitney, Marion Isabelle. 03659

Geophysical surveys

- Application, subsurface surveying: Malott, D. F. 06879

- Houghton County, well-logging, Jacobsville Sandstone: Bacon, L. O. 07817

Glacial geology

- Leelanau County, drumlins: Lotan, James E. 03661

Hydrogeology

- Detroit area, urbanization effect on rain retention or runoff: Brater, E. F. 00394
 Gogebic County, ground-water resources: Doonan, C. J. 06989

Maps, geochemical

- Negaunee quadrangle, west-central, copper, lead, zinc: Segerstrom, Kenneth. 04765

Maps, geologic

- Bedrock: Kelley, R. W. 09506
 Gogebic County, surficial, water availability: Doonan, C. J. 06989
 Iron River-Crystal Falls district: James, H. L. 01692
 Marquette and Sands quadrangles: Gair, Jacob E. 04113
 Negaunee quadrangle, west-central: Segerstrom, Kenneth. 04765

Maps, isopach

- Michigan basin, Devonian formations: Sanford, B. V. 03177

Maps, oil and gas

- Fields: Michigan Basin Geological Society. 08018

Michigan—Continued

Maps, structure

- Albion oil and gas field, Trenton Group: Buehner, J. H. 07928
 Belle River Mills gas field, Salina anhydrite: Lundy, C. L. 07929
 Columbus gas field, Salina-Niagaran: Corden, Bruce B. 11272
 Deep River oil and gas field: Lundy, C. L. 07931
 Enterprise oil and gas field: Wirth, J. A. 07933
 Headquarters oil and gas field: Sutton, D. G. 07934
 Northville oil and gas field: Checkley, W. G. 09362
 Norwich oil field: Fugate, R. J. 07932
 Overisel oil and gas field: Checkley, W. G. 07936
 Peters oil and gas field: Kiddoo, Gordon. 07937
 Porter oil and gas field, Dundee Limestone: Helmboldt, D. 07938
 Ray gas field, Niagaran and reef complex: Adams, A. R. 07939
 Reed City oil and gas field, Detroit River Group: Upp, J. E., Jr. 07940
 Salem oil and gas field: Checkley, W. G. 07941
 Scipio oil and gas field, Trenton Group: Buehner, J. H. 07928
 Six Lakes gas field: Upp, J. E., Jr. 07942
 Stony Lake oil field, Traverse Limestone: Fortin, J. L. 07943
 Wayland oil field: Barbour, R. F. 07944
 Winterfield oil and gas field: Checkley, W. G. 07945

Mineralogy

- Calcite, Upper Peninsula: Gutman, Carlton W. 00017
 Dolomite, Michigan basin, Ordovician carbonates, composition: Bubbs, J. N. 10098
 Laumontite, Houghton County, vein deposit: Brothers, Jack A. 09289
 Manganese minerals, Marquette County, Negaunee Iron-Formation: Babcock, Larry L. 09292
 Menominee Range, collecting: Brower, Edson. 08109
 Serpentine, crystals, mass area, popular account: Fairbanks, Ernest E. 08111

Paleomagnetism

- Precambrian, Keweenawan lavas, reversals: Vincenz, S. A. 00512
 Precambrian, Portage Lake lavas, Keweenaw Peninsula: Vincenz, S. A. 00519

Paleontology

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 Anthozoa, Devonian, Traverse Group, nomenclature: Stumm, Erwin C. 00603
 Brachiopoda, Devonian, Traverse Group, stegidial plates: Cowen, R. 01009
 Conodonts, Devonian, Michigan basin: Orr, Robert William. 01737
 Crinoidea, Devonian, Bell Shale, scytalocrinid: Kesling, Robert V. 06942
 Crinoidea, Devonian, Silica Formation, n.sp.: Kesling, Robert V. 06939
 Fossils, problematic, Precambrian, Nonesuch-Copper Harbor Formations: Jost, Manfred. 05015
 Gastropoda, Devonian, Anderdon Limestone, southeastern, new: Linsley, Robert M. 03053
 Palynomorphs, Holocene, bottom sediments, Lake Superior: Benninghoff, W. S. 07802

Michigan—Continued

Paleontology—Continued

- Trilobita, Devonian, Alpena Limestone, new species: Stumm, Erwin C. 04201

Petrology

- Marquette County, Siamo Slate, sandstone dikes: Powell, C. McA. 11341
 Marquette district, Palmer Gneiss, retrograde metamorphism: Gair, Jacob E. 05193
 Marquette Range, Negaunee Iron-Formation, magnetite rich sequence: Sundeen, Stanley Paul. 02043
 Marquette-Sands quadrangles, Precambrian rocks: Gair, Jacob E. 04113

Sedimentary petrology

- Detroit area, Salina salt, primary bedding features: Dellwig, Louis F. 01237
 Houghton County, Jacobsville Sandstone, physical properties: Bacon, L. O. 07817
 Isle Royale National Park, Mott Island Conglomerate: Larson, Robert J. 09293
 Lake Superior, bottom cores, post-glacial sediment distribution: Farrand, William R. 07801
 Michigan basin, evaporites: Briggs, Louis I. 07441
 Northern, Keweenawan clastics: Hite, David Marcel. 02633
 Saint Clair County, Silurian reefs, carbonate-evaporite beds: Jodry, R. L. 01168
 Sylvania Sandstone, directional properties, provenance: Hatfield, Craig B. 01469

Stratigraphy

- Devonian, Michigan basin: Sanford, B. V. 03177
 Devonian, Sylvania Sandstone, southeastern, paleoecology: Hatfield, Craig B. 01469
 Jurassic, Michigan basin: Shaffer, Bernard L. 10083
 Ordovician, Middle, northern, biostratigraphy: Guldenzopf, E. Charles. 07191
 Precambrian, Keweenawan, northern, correlation: Hubbard, Harold A. 10955
 Precambrian-Jurassic, sections: Kelley, R. W. 09506
 Silurian, Niagaran carbonates, Grand Traverse County: Sanford, John T. 01194

Structural geology

- Marquette County, sandstone dikes, Siamo Slate: Powell, C. McA. 11341
 Marquette Iron Range, Penokean orogeny: Babcock, Larry L. 07796
 Marquette-Sands quadrangles: Gair, Jacob E. 04113

*Micropaleontology**Cenozoic*

- Atlantic Ocean, Plio-Pleistocene boundary, zonation: Berggren, W. A. 09126
 Atlantic-Gulf Coastal Plain, in venericard pelecypods, paleoecology: Park, Richard A. 05673
 Caribbean Sea, Plio-Pleistocene boundary, nannoplankton, zonation: Hay, W. W. 10985
 Caribbean Sea, Plio-Pleistocene fauna, paleotemperatures: Bolli, H. M. 01070
 Gulf of Mexico, Sigsbee Knolls area: Pyle, Thomas E. 11048
 North America, nannoplankton, correlation with Europe: Lipps, Jere H. 02018

Cretaceous

- Colorado, northern: Kent, Harry C. 05719

Micropaleontology—Continued*Cretaceous—Continued*

New Jersey, Red Bank Formation, *Ophiobolus lapidaris*, planktonic egg case: Evitt, William R. 10983

Northwest Territories, Somerset Island, Idlorak Formation, plants: Dineley, D. L. 02724

Devonian

Ontario, southern: Winder, C. G. 02887

Experimental studies

Foraminifera, production of pollen-sized from normal-sized: Cohen, Arthur D. 05014

General

Developments, trends, outlooks: Moore, Raymond C. 06031

Information-retrieval system, Am. Museum Natural History: Cousminer, Harold L. 10892

Methods

Sample disaggregating, detergent Quaternary "O": Zingula, R. P. 05670

Mississippian

Newfoundland, Codroy Group: Mamet, B. L. 06935

Pennsylvanian

Texas, Strawn-Canyon boundary: Echols, Joan. 09297

Photography

Fossil pollen, scanning electron microscope: Drew, Charles M. 05259

Precambrian

Michigan, White Pine area: Jost, Manfred. 05015

Minnesota, Biwabik and Soudan Iron-Formations: Cloud, Preston E., Jr. 10986

Quaternary

Caribbean region, Pleistocene, coccolith and discoasterid species: Cohen, C. L. D. 05624

Hawaii, Oahu, boreholes, Pleistocene: Resig, Johanna M. 08851

Iowa, Lake Okoboji, postglacial sediments: Dodd, John D. 07590

Silurian

New York, Rochester, Maplewood Shale: Cramer, Fritz H. 07292

Tertiary

Northwest Territories, Somerset Island, Idlorak Formation, plants: Dineley, D. L. 02724

Trinidad, Cipero section, calcareous nanoplankton, zonation: Bramlette, M. N. 09129

Microscope methods*Fabric analysis*

Coarse clastic sediments, optical scanning and digitizing: Smith, Alan R. 06135

Fossil material, identification

Algal filaments, Animikie cherts, darkfield illumination: Moorhouse, W. W. 07803

Ammonoid suture line drawing: Palframan, D. F. B. 05691

Protista, coccolithophorids: Gartner, Stefan, Jr. 09385

Vertebrate teeth, measurement of angles: Slaughter, Bob H. 05698

Instruments

Diatoms, stereoscan electron microscopy: Hanna, G. Dallas. 10964

Interference microscopy

Sand grains, surface features: Warnke, D. A. 10430

Microtopographic study

Mineral and rock fracture surfaces, scanning electron microscope: Willard, Robert J. 05335

Microscope methods—Continued*Mineral identification*

Anorthoclase, staining: Ford, Arthur B. 02222

Cordierite, feldspars, staining: Boone, Gary M. 02209

Refractive-index determination, Chaules method: Miller, Arthur. 00564

Sedimentary rocks, cf. X-ray diffraction: Kaye, M. J. 03553

Modal analysis

Point counting: Schryver, K. 07522

Paleobotany

Diatoms, opaline gems, diatomite: Hanna, G. Dallas. 10963

Photography

Low power, thin sections: Heron, S. Duncan, Jr. 03617

Microradiography, apparatus: Ledley, Robert S. 09236

Photomacrography, micromineral specimens: Gregory, Gardiner E. 10980

Preparations

Carbonate rocks, acetate peels: Ali, Syed A. 05612

Porous materials, high pressure epoxy impregnation: Sinkankas, John. 02228

Slide making, unconsolidated sediments, mountant: Orlansky, Ralph. 06611

Thin sections on plastic: Zeidler, W. 07553

Water-miscible mountant for palynology: Wilson, L. R. 02528

Spindle stage

Immersion cell and improved crystal holder: Jones, Francis T. 06750

Microseisms*Causes*

Gravity waves, ocean surfaces: Cook, Richard K. 10563

Interpretation

Long-period noise, structures, LASA: McCamy, Keith. 02802

Mode structure, sources, LASA, Montana: Toksoz, M. Nafi. 00174

Train source, New Mexico, Rio Grande Valley: Sanford, Allan R. 00475

Recording

High-frequency seismographs: Oliver, Jack. 08309

Microwave methods*General*

Spectral tables: Cord, Marian S. 04357

Instruments

Microwave radiometer, capabilities, techniques: Ewen, H. I. 06394

Microwave radiometer, phased arrays for spaceborne: Louapre, Merlin E. 06395

Interpretation

Soil moisture determination: Janza, Frank J. 10418

Soils, microwave characteristics: Edgerton, A. T. 06390

Military geology*Methods*

Scales for determining slope from topographic maps: Thrower, Norman J. W. 02508

Ontario

Camp Petawawa training area, terrain analysis, vehicles, mobility studies: Parry, J. T. 08882

Terrain evaluation

Statistical methods: Benn, Bob O. 08881

United States, history, cf. England, South Africa, Australia: Aitchison, G. D. 11005

Mineragraphy*Instruments*

Durener automatic polisher, Canada Geological Survey: McLeod, C. R. 02058

Mineral identification

Characteristics, impurities, textural relations: Petruk, W. 11149

Polishing technique

Canada Geological Survey, Mineral Deposits Section: McLeod, C. R. 02058

Polished thin sections: Moreland, Grover C. 07524

Reflectivity

Gold, fineness, determination: Eales, Hugh V. 04120

Sample preparation

Mounting, sectioning, polishing, small particles: Finkelman, Robert B. 06453

Textures

Colloform, interpretation: Roedder, Edwin. 04230

Copper ore, Haiti: Kesler, Stephen E. 10956

Fe-Ti oxides, diabase: Davidson, A. 07640

Silver ores, Ontario: Petruk, William. 09450

Sulfides, basalt, Hawaii: Desborough, George A. 04124

Sulfides, deformation: Stanton, R. L. 07637

Titanium minerals, New York, Benson mines: Hagni, Richard D. 01883

Mineral collecting*Appalachians*

Mineral and gem trails: Zeitner, June Culp. 08134

Piedmont, gems and minerals, guide to localities: French, Alice E. 01329

California

Hunt Canyon area, zeolites, associated minerals, Vasquez Formation: Pemberton, H. Earl. 00802

Los Angeles County: Carnahan, Veryl. 10689

Los Angeles County, Sterling Borax mine, borates and other minerals: Pemberton, H. Earl. 01613

Guides

Connecticut, popular account: Ryerson, Kathleen H. 08131

Gems and precious stones, North America, occurrences, collections: Kunz, George Frederick. 02596

Mineral and gem trails, Appalachians: Zeitner, June Culp. 08134

Ontario, Quebec, Kingston to Lac St-Jean region: Sabina, Ann P. 02677

Practical prospecting methods: Storm, Barry. 10827

Vermont: Grant, Raymond W. 04339

Illinois

North-central sites: Scheffel, Mildred D. 01847

Iowa

Raymond area, Pint's quarry: Menzel, Muriel. 00010

Maine

Paris-Buckfield area, Mount Mica mine and quarries: Gregory, Gardiner E. 08130

Rumford area, Black Mtn. pegmatite quarries: Gregory, Gardiner E. 00365

Michigan

Menominee Range: Brower, Edson. 08109

Upper Peninsula, calcite: Gutman, Carlton W. 00017

Mineral collecting—Continued*Nebraska*

Lincoln-Seward area, Cedar Bluffs till, iron-formation fragments: Stevenson, T. H. 02472

Nevada

Stonewall Pass area, petrified wood: Strong, Mary Frances. 08138

New Hampshire

Strafford area, Parker Mountain, mica mine: Gregory, Gardiner E. 08137

Ontario

Kingston-Montreal area, guidebook: Sabina, Ann P. 02677

Quebec

Montreal-Lac St-Jean region, guidebook: Sabina, Ann P. 02677

Utah

Southern, concretions, ironstone and limonite: Doelling, Hellmut H. S. 06129

Mineral data*Acmite*

Melting, incongruent, pressure effect: Gilbert, M. C. 07427

Actinolite-hornblende-Na-amphibole

Chemical discontinuities: Klein, Cornelis, Jr. 11034

Adularia

Structure, refinement: Colville, Alan A. 02208

Aegirine

Synthetic scandium analog, physical properties: Ito, Jun. 06783

Akermanite

Stability, igneous-rock origin: Yoder, H. S., Jr. 01570

Alamosite

Structure: Boucher, M. L. 09555

Albite

California, Valley Ford area, analyses, structure: Keith, Terry E. 02709

Order-disorder transformation, thermodynamics: Holm, J. L. 02200

Phase equilibria data: Newton, M. S. 04498

Solubility in supercritical water: Currie, K. L. 02449

Twinning: Fisher, D. Jerome. 07562

Alkaline-earth silicate

Pseudowollastonite structure: Prewitt, C. T. 08093

Allactite

Structure: Moore, Paul B. 06466

Allanite

Optical properties, X-ray data, U.S., western: Izzett, G. A. 07538

Amarantite

Structure: Susse, P. 09652

Amber

North America, infrared spectra, catalog: Langenheim, Jean H. 04786

Amphibole

California, glaucophane schist: Coleman, R. G. 07790

Cation distribution, X-ray diffraction determination: Borg, Iris. 08614

Cation site disorder: Gibbs, G. V. 07426

Chemical analyses, representation in 11-dimensional space: Perry, Kenneth, Jr. 07414

Composition, California, Cazadero blueschists: Coleman, R. G. 01932

Composition, catalog of analyses, nomenclature, associated minerals: Leake, Bernard E. 06320

Composition, crystal chemistry, phase relations, occurrence: Ernst, W. G. 01771

Mineral data—Continued*Amphibole*—Continued

- Ferro-magnesian, crystal structure, chemistry: Finger, Larry Wayne. 02619
 Geochemistry, series and pairs: Klein, Cornelis, Jr. 04813
 Miscibility gaps: Klein, Cornelis, Jr. 07914
 Paramagnetic susceptibility, magnetic moment of Fe²⁺: Parks, George A. 05931
 Zincian, manganese, New Jersey, Franklin orebody: Klein, Cornelis, Jr. 06782

Analcime

- California, San Joaquin Valley, occurrence in granitic alluvium soils: Baldar, N. A. 01851
 Composition, Wyoming, Green River Formation: Iijima, Azuma. 02217
 Geochemistry, K-Na substitution: Wilkinson, J. F. G. 05298
 Phase equilibria data: Newton, M. S. 04498

Anatase

- Conversion to TiO₂-II: Dacheil, Frank. 07534

Andradite

- Composition, Ti, relations with Fe, Si: Isaacs, Thelma. 05094
 Quebec, Gatineau Park pegmatites, yttrian: Kasowski, M. A. 03650
 Synthetic scandium analog, physical properties: Ito, Jun. 06783

Anhydrite

- Physical properties, thermoluminescence, traps and emission centers: Medlin, W. L. 03965

Anorthite

- Equilibrium studies: Hariya, Y. 00645
 Structure, out-of-step domains, boundary orientations: Ribbe, Paul H. 09052

Anorthoclase

- Heating effect, reverse changes at room temperature: Bahat, Dov. 03652

Antigorite

- Composition: Page, Norman J. 02216

Antimonian groutite

- X-ray diffraction pattern, corrections: Klein, Cornelis, Jr. 09413

Apatite

- Atlantic Coastal Plain, northern, diagenetic: Adams, John K. 08595
 Carbonate substitution: LeGeros, Racquel Zapanta. 04449
 Carbonate substitution: Simpson, Dale R. 08048
 Composition, experimental study: Simpson, Dale R. 07517
 Composition, fluctuations, X-ray diffraction analysis monitoring: Skinner, H. C. W. 04272
 Composition, infrared spectra: Bhatnagar, V. M. 01797
 Composition, Mexico, Durango, Cerro de Mercado: Newesely, H. 06378
 Crystal chemistry: McClellan, Guerry H. 08797
 Crystal properties, vs. composition and reactivities: Lehr, J. R. 06379
 Fission track annealing: Naeser, C. W. 00004
 Fossil bone, analyses, chemical, X-ray, infrared: Brophy, Gerald P. 05970
 Infrared spectra, hydroxy and fluorapatites: Bhatnagar, Vijay Mohan. 06376
 Maryland, ultramafic body: Southwick, David L. 02716
 Mexico, Cerro de Mercado, relation to iron ore: Paulick, J. 11338
 Single crystals, infrared reflectance spectra: Klein, Edward. 03512
 Spectral properties, carbonate, infrared absorption: LeGeros, Racquel Z. 03511

Mineral data—Continued*Apatite*—Continued

- Synthetic potassium-bearing system, properties, analyses: Simpson, Dale R. 05969
 Synthetic, stoichiometry and crystal chemistry: Kreidler, Eric Russell. 01764

Aragonite

- Equilibria with calcite, transition boundary: Boettcher, A. L. 03450
 Infrared spectra, pressure dependence: Shock, Robert N. 07533
 Transformation from vaterite: Bischoff, J. L. 00278
 Transformation to calcite: Bischoff, J. L. 00277
 Transformation to calcite, kinetics: Metzger, William J. 02232

Ardennite

- Structure, relation to epidote: Donnay, Gabrielle. 01574
 Structure, Si₃O₁₀ groups: Donnay, Gabrielle. 02559

Arsenides

- Structure, stability, ligand field theory: Nickel, Ernest H. 03447

Artinite

- New York, Staten Island, serpentine: Reasenberg, Julian R. 09093

Augelite

- Structure, California, Mono County: Araki, T. 06788

Axinite

- Minnesota, Mesabi Range, chemical variations: French, Bevan M. 07729
 Nomenclature, group name, members: Sanero, E. 06752
 North Carolina, Mitchell County, occurrence: Brannock, K. C. 08136

β spodumene

- Structure: Li, Chi-Tang. 09553

Bannisterite

- General description: Smith, Marie Lindberg. 09057

Barian florencite

- X-ray data, Virginia: Mitchell, Richard S. 04890

Barite

- Cleavage planes, etching, differences: Patel, A. R. 03653
 Geochemistry, frequency distribution of composition: Hanor, Jeffrey S. 06772

Basaluminite

- Composition, occurrence, Kansas, southeastern: Tien, Pei-Lin. 06465

Beraunite

- Parameters, Florida, Polk County: Blanchard, Frank N. 07527

Beryl

- Cesium, chemistry, structure: Evans, Howard T., Jr. 07713
 Color, cause of red, Utah, Topaz Mtn.: Nassau, K. 06459
 Infrared spectroscopy, water molecules, low-frequency vibrations: Safford, G. J. 09259
 Synthesis of scandium analog, parameters: Frondel, Clifford. 06585
 Synthetic, structure, refinement, anhydrous, hydrous: Gibbs, G. V. 05645
 Visible and infrared absorption, color centers: Wood, D. L. 06456

Beryllium minerals

- Canada, composition, properties, distribution, exploration: Mulligan, Robert. 06082

Berzeliite

- Synthetic, X-ray diffraction data: Ito, Jun. 09408

Mineral data—Continued

Bikitaite

Parameters, North Carolina, King's Mtn.:
Leavens, Peter B. 06770

Billingsleyite

Parameters, composition, Utah, East Tintic,
new: Frondel, Clifford. 07541

Biotite

California, Cartridge Pass pluton, analyses, oc-
currence: Dodge, F. C. W. 00797

Composition, analyses: Frondel, Clifford. 07548

Composition, Fe, Mg distribution, coexisting
minerals: Saxena, S. K. 06445

Composition, Mn distribution, plutonic rocks:
Greenland, L. Paul. 05293

Composition, Ti, metamorphic grade indicator,
Ontario: Kwak, Teunis A. P. 05366

Geochemistry, oxidation of ferrous iron, potassi-
um fixation: Barshad, Isaac. 05028

New Mexico, ash flows, chemical variations:
Giles, David L. 07738

Paramagnetic susceptibility, magnetic moment
of Fe²⁺: Parks, George A. 05931

Phase equilibria, experimental: Rutherford, Mal-
colm John. 05495

Potassium release, experimental: Scott, A. D.
02260

Radioactive halos, fossil alpha-recoil analysis:
Gentry, Robert V. 01927

Weathering, granitic rocks, California: Clark,
Malcolm M. 08644

Borax

Structure, refinement: Giese, Rossman F., Jr.
03588

Braitschite

Parameters, Utah, Grand County, new: Raup,
Omer B. 06787

Brazilianite

Crystal structure: Finney, J. J. 08687

Brochantite

Heat of formation: Heald, Emerson F. 07962

Bromellite

Synthetic, trace impurities, effects on quality:
Hill, V. G. 08730

Brookite

Conversion to TiO₂-II: Dachtler, Frank. 07534

Buetschliite

Properties, synthesis, wood-ash stone, relations:
Mrose, Mary E. 07832

Bunsenite

Stability, system Ni-Mg-Si-O: Campbell, F. E.
02199

Bustamite

Absorption spectra: Manning, P. G. 03461

Bytownite

Parameters, composition, Greenland, Cape Par-
ry: Wenk, E. 07554

Cacoxenite

Parameters, Florida, Polk County: Blanchard,
Frank N. 07527

Calaverite

Composition, minor elements: Cabri, L. J.
03756

Calcite

Cleavage surface energy, experimental study,
rock failure: Santhanam, A. T. 02353

Composition, determination, air comparison
pycnometer: Zenger, Donald H. 03568

Composition, Mg, X-ray diffraction cf. electron
probe: Weber, Jon N. 01470

Crystal growth, pH effects: McCauley, J. W.
07876

Mineral data—Continued

Calcite—Continued

Electron spin resonance, CO₂-molecule-ions,
motional effects: McMillan, J. A. 09256

Electron spin resonance spectrum, CO₂-
molecule ions, F⁻ ions, interactions: Marshall,
S. A. 09582

Electron spin resonance spectrum, CO₃²⁻-
molecule-ion: Marshall, S. A. 09258

Electron spin resonance spectrum, Mn²⁺, super-
hyperfine interaction C-13: Hodges, J. A.
09581

Equilibria with aragonite, transition boundary:
Boettcher, A. L. 03450

Formation from aragonite, kinetics: Metzger,
William J. 02232

Geochemistry, 15-kb phase transition: Pesel-
nick, Louis. 04371

Geochemistry, kinetics of nucleation: Bischoff,
James L. 00969

Geochemistry, stability, aqueous solubility:
Langmuir, Donald. 02978

Grain surface area measurement by C-14 tracer:
Anderson, Thomas F. 05291

Infrared spectra, pressure dependence: Shock,
Robert N. 07533

Michigan, Upper Peninsula, crystal forms: Gut-
man, Carlton W. 00017

New Jersey, thermoluminescent: Modreski,
Peter J. 09089

Phase transition to 20 kb and 180°C: Wang, Chi-
Yuen. 02019

Physical properties, thermoluminescence,
growth curves: Medlin, W. L. 03973

Physical properties, thermoluminescence, ul-
traviolet light effect: Vaz, J. E. 03974

Primary rhombohedrons in carbonate sedi-
ments: Perkins, R. D. 06613

Transformation from aragonite: Bischoff, J. L.
00277

Carbides

Physical properties, indentation microhardness
anisotropy: Westbrook, J. H. 07535

Carbonates

Physical properties, indentation microhardness
anisotropy: Westbrook, J. H. 07535

Physical properties, thermoluminescence, traps
and emission centers: Medlin, W. L. 03965

Precipitation, low temperature, pressure, experi-
ment: Conrad, Eric H. 00922

Cassiterite

Magnetic properties, remanence, origin: Baner-
jee, Subir K. 08388

Cavansite

General description, Oregon, new: Staples,
Lloyd W. 09698

Celestite

Geochemistry, frequency distribution of com-
position: Hanor, Jeffrey S. 06772

Solubility, 50°-250°C, 100-1500 bars: Blount,
Charles W. 07828

Celsian

Polymorphism: Lin, H. C. 09423

Chalcocite

Stability, system Cu-Pb-S: Craig, James R.
02218

Chalcopyrite

Properties, annealing: Stanton, R. L. 07637

Chevkinite

Optical properties, X-ray data, U.S., western:
Izett, G. A. 07538

Mineral data—Continued

Chlorite

Arkansas, Saline County, Anderson talc deposit:
Wu, Dahncheng. 09303

Maryland, ultramafic body: Southwick, David L.
02716

Chloritoid

Absorption spectra, cause of pleochroism: Faye,
G. H. 06769

Thermal stability at 5-10 kb, experimental: Gan-
guly, J. 05090

Chlorophoenicite

Parameters: Moore, Paul B. 06740

Chrysotile

Activity-product constant: Hostettler, P. B.
01978

Composition: Page, Norman J. 02216

Geochemistry, thermodynamic solubility: Hostet-
tler, P. B. 08739

Structure, cylindrical lattice, X-ray diffraction
data: Toman, K. 02060

Structure, cylindrical lattice, X-ray diffraction
data: Toman, K. 02061

Clevelandite

Twinning: Fisher, D. Jerome. 07562

Clinoamphibole

Exsolution lamellae, optic orientation, Mas-
sachusetts-New Hampshire: Jaffe, Howard W.
01088

Structure, exsolution in metamorphic rocks:
Ross, Malcolm. 00177

Clinoclrorite

Structural decomposition, acid dissolution:
Ross, G. J. 03651

Clinoestatite

Synthesis, stability, hydroxylated: Sclar, C. B.
08872

Clinopyroxene

Bonding, isostructural with diopside: Clark, Joan
R. 07078

Clinozoisite

Structure, refinement: Dollase, W. A. 07545

Colemanite

Hydrogen bonding: Giese, R. F., Jr. 11287

Copper, native

Occurrence, British Columbia: Surdam, Ronald
C. 07641

Copper-iron sulfides

High temperature equilibria: Kullerud, G. 01552

Copper-iron-nickel sulfides

High temperature equilibria: Craig, J. R. 01554

Copper-nickel sulfides

High temperature equilibria: Kullerud, G. 01553

Cordierite

Absorption spectra, cause of pleochroism: Faye,
G. H. 06769

Crystal structure and polymorphism: Meagher,
Edward Patrick. 01706

Paramagnetic susceptibility, magnetic moment
of Fe²⁺: Parks, George A. 05931

Structure, tetrahedral magnesium: Meagher, E.
P. 08802

Corundum

Asterism, cause: Nassau, K. 09439

Elastic constant data, pressure and temperature
derivatives: Anderson, Orson L. 06109

Stability with quartz: Carr, R. M. 07526

Covellite

Melting relations, high-pressure: Kullerud, G.
01563

Solubility: Romberger, Samuel Bergstresser.
05511

Mineral data—Continued

Covellite—Continued

Stability, system Cu-Pb-S: Craig, James R.
02218

Cristobalite

Correction to 1960, 1965 descriptions: Fisher,
D. Jerome. 06454

Crocidolite

Crystal chemistry, Fe cations, infrared spectra:
Burns, Roger G. 06581

Cryolite

Geochemistry, activity product constant: Rober-
son, C. E. 06683

Geochemistry, Raman spectrum, complex ions,
molten and crystalline states: Solomons, C.
09580

Properties, melting point: Foster, Perry A., Jr.
09248

Dawsonite

Infrared spectra: Estep, Patricia A. 02230

Physical properties, thermal, behavior, analysis
procedure: Schmidt-Collerus, Josef J. 06151

Delafossite

Composition: Wiedersich, H. 09051

Dense minerals

Shock-wave equation of state: Anderson, Don L.
03826

Diaboleite

Synthetic, cf. natural: Winchell, R. E. 09058

Diamond

Chrome-pyropo inclusion, composition: Meyer,
Henry O. A. 01917

Inclusions, orientation relation, precession
camera study: Meyer, H. O. A. 01579

Refractive index, variation with pressure:
Schmidt, E. D. D. 06751

Synthetic: Dawson, J. B. 04228

Synthetic, method: Dickinson, S. K. 07584

Diaphorite

Nevada, Morey district, structure: Williams, Sid-
ney A. 03754

Digenite

Stability, system Cu-Pb-S: Craig, James R.
02218

Diopside

Ferri-diopside, synthesis, stability: Huckenholz,
H. G. 01537

Djurlite

Stability, system Cu-Pb-S: Craig, James R.
02218

Dolomite

Composition, determination, air comparison
pycnometer: Zenger, Donald H. 03568

Composition, Michigan, Ordovician carbonates:
Bubb, J. N. 10098

Geochemistry, Texas, pluvial lakes: Parry, W. T.
10078

Identification by rhombic habit questioned: Per-
kins, R. D. 06613

Phase relations, X-ray diffraction data: Rosen-
berg, P. E. 06582

Synthetic, genesis at low temperature, model:
Donahue, Jack D. 07765

Emerald

Synthetic, structure, refinement, anhydrous,
hydrous: Gibbs, G. V. 05645

Visible and infrared absorption, color centers:
Wood, D. L. 06456

Empressite

Composition, physical properties: Stumpfl, E. F.
07559

Enargite

Structure, refinement: McLean, Willis John.
06517

Mineral data—Continued

Enstatite

- Composition, rare gases in melts: Kirsten, T. 00657
 H and He ion implantation from solar wind: Lord, H. C. 03227
 Polymorphism, shearing effect at high P-T: Munoz, J. L. 01543
 Stability, system Ni-Mg-Si-O: Campbell, F. E. 02199
 Synthetic, natural, shear strengths: Riecker, Robert E. 08054

Epidote

- Composition, parameters, California, Salton Sea geothermal system: Keith, Terry E. C. 07537

Erythrite

- Pleochroism, origin: Faye, G. H. 03760

Eucryptite

- Parameters, North Carolina, King's Mtn.: Leavens, Peter B. 06770

Eveite

- Structure, isotopy with andalusite, olivinite: Moore, Paul B. 11330

Fairchildite

- Properties, synthesis, wood-ash stone, relations: Mrose, Mary E. 07832

Faujasite

- Compositional variation: Wright, Alan C. 06785
 Crystal chemistry, hydrated Ca-exchanged: Bennett, J. M. 06307
 Crystal chemistry, La-exchanged: Bennett, J. M. 04789

Fayalite

- Mossbauer spectra, shocked and unshocked: Laffleur, L. D. 05151
 Parameters, atomic: Birle, J. D. 06460
 Stability at high P-T: Wones, D. R. 01551

Feldspar

- Alkali, variations in structural state, Montana: Tilling, Robert I. 05084
 Alteration, shock loading, meteor craters: Robertson, P. B. 07489
 Antiperthite, genesis, New Jersey: Vogel, Thomas A. 07572
 Argon, introduction, diffusion, experimental study: Laughlin, A. W. 10762
 California, Inyo Mountains, growth in monzonite pluton: Dickson, F. W. 07760
 Chemical analyses, graphic representation: Perry, Kenneth, Jr. 05650
 Composition, barium-zoned, California: Dickson, F. W. 09991
 Composition, California, Sierra Nevada batholith, analyses: Piwinski, A. J. 02522
 Composition, structural state, chondritic meteorites: VanSchmus, W. R. 06684
 Composition, structure, New Jersey, plutonic rocks: Goodspeed, Robert Marshall. 07190
 Experimental study, calorimetric data: Waldbaum, D. R. 09947
 High pressure phases, experimental: Ahrens, Thomas J. 07402
 Lead, isotope ratios: Stacey, J. S. 06945
 Maine, Tunk Lake Granite, mantled: Karner, Frank R. 07907
 Meteorites: Bunch, T. E. 08630
 Montana, Rader Creek pluton, perthitization: Tilling, Robert I. 08033
 Montana, Yogo Peak pluton, textural, compositional relations: Woodward, Lee A. 09741
 Northwest Territories, Kaminak Lake, intergrowth with nephelite: Davidson, A. 03585

Mineral data—Continued

Feldspar—Continued

- Pegmatites, uranium distribution, fission track method: Schwarzer, R. R. 10669
 Peristerite, exsolution and schiller, electron microscopy: Monroe, E. A. 08811
 Perthitic, chemical weathering, experimental: Manus, Ronald Warren. 09848
 Properties, thermodynamic, alkali, enthalpy of fusion: Waldbaum, D. R. 09246
 Strontium partition, in metamorphic rocks: Virgo, D. 03451
 Structural state, evidence of meteorite impact: Aitken, F. K. 07463
 Structure, composition, determination from cell dimensions and 2V: Wright, Thomas L. 02225
 Structure, composition, X-ray method: Wright, Thomas L. 02224
 Thermodynamic properties of alkali, high-temperature: Waldbaum, D. R. 02517
- Ferrierite*
 Nevada, Pershing County, occurrence: Sand, L. B. 08079
- Ferroselite*
 Physical properties, hardness, reflectivity: Santos, E. S. 07556
 Synthetic: Warren, C. Gerald. 04235
- Ferrosilite*
 Synthetic, crystal structure: Burnham, Charles W. 07776
- Fizelyite*
 Nevada, Morey district, structure: Williams, Sidney A. 03754
- Fluoborite*
 California, Hope area, composition: Flamini, A. 11175
- Fluorapatite*
 Geochemistry, properties, Mexico, Durango: Young, E. J. 11135
 Synthetic, growth, crystal chemistry: Mazelsky, R. 07581
- Fluorides*
 Physical properties, indentation microhardness anisotropy: Westbrook, J. H. 07535
- Fluorophlogopite*
 Synthetic, crystal structure: McCauley, J. W. 08796
- Forsterite*
 Elastic constant data, pressure and temperature derivatives: Anderson, Orson L. 06109
 Inclusions in diamond, orientation relation, precession camera study: Meyer, H. O. A. 01579
 Optical absorption bands, band gap: Shankland, T. J. 01918
 Parameters, atomic: Birle, J. D. 06460
 Stability, system Ni-Mg-Si-O: Campbell, F. E. 02199
- Francolite*
 North Carolina, Beaufort County, phosphate deposit: Rooney, Thomas Peter. 01757
- Fuchsite*
 Structure, transition metal ion sites, optical absorption spectra: Faye, G. H. 02168
- Gageite*
 Structure, X-ray diffraction analysis, New Jersey: Moore, Paul B. 09850
- Galena*
 Genesis, nuclear explosion, GNOME: Gard, Leonard M., Jr. 04059
 Properties, annealing: Stanton, R. L. 07637
 Stability, system Cu-Pb-S: Craig, James R. 02218

Mineral data—Continued

Galena—Continued

Trace elements, Mississippi Valley: Hall, Wayne E. 04122

Ganophyllite

General description: Smith, Marie Lindberg. 09057

Garnet

British Columbia, Cassiar district, tin-bearing: Mulligan, R. 03462

British Columbia, Kootenay Lake area, Paleozoic rocks: Dodds, C. J. 05527

Cell dimensions, variations, applications, till provenance: McDonald, Barrie C. 03761

Composition, chrome-pyroxene inclusion in diamond: Meyer, Henry O. A. 01917

Composition, Fe, Mg distribution, coexisting minerals: Saxena, S. K. 06445

Composition, Maine: Warner, Jeffrey. 09731

Elastic constant data, pressure and temperature derivatives: Anderson, Orson L. 06109

Geochemistry, analysis by laser probe, in matrix: Blackburn, W. H. 03445

Occurrence in meteorite: Mason, Brian. 00596

Physical properties, trace elements, Arizona: Gavasci, Anna T. 07634

Synthesis of grossularite-spessartite series: Ito, Jun. 06449

Synthetic, yttrium iron, perovskite structure, possible existence: Shimada, M. 09255

General

Minerals and man, popular and elementary account: Hurlbut, Cornelius S., Jr. 06657

Thermodynamic properties, 298.15°K, 1 atm.: Robie, Richard A. 02434

Goethite

Magnetic properties, thermoremanence: Strangway, D. W. 03909

Germanate

Pseudowollastonite structure: Prewitt, C. T. 08093

Gersdorffite

Structure, temperature effects: Bayliss, P. 03611

Glaucinite

British Columbia, Queen Charlotte Sound, bottom sediments: Murray, J. W. 01970

Maryland, pellets, morphology, similar X-ray patterns: Tapper, M. 04742

Glaucophane

California, Valley Ford area, analyses, structure: Keith, Terry E. 02709

Structure, composition, refinement: Papike, J. J. 06768

Gold

Fineness, determination: Eales, Hugh V. 04120

Graftonite

Structure: Calvo, C. 06463

Structure, cf. other divalent metal ion phosphates: Calvo, Crispin. 06374

Grautoniite

Geochemistry, low-temperature dimorph of jordanite: Roland, George W. 04428

Greigite

Parameters, composition, physical properties: Williams, Sidney A. 07518

Guettardite

Ontario, new: Jambor, J. L. 03755

Halite

Structure, defects: Shlichta, Paul J. 01115

Harstigit

Structure, X-ray diffraction analysis, cf. gageite: Moore, Paul B. 09850

Mineral data—Continued

Hauerite

Synthetic, transition dichalcogenides, properties: Bither, T. A. 05487

Hedenbergite

High pressure and temperature studies: Lindley, D. H. 07428

Hedenbergite-ferrosilite series

Subsolidus relations, join at low pressures: Lindley, D. H. 01541

Synthetic, Mossbauer absorption study: Dundon, Robert. 01542

Hematite

Elastic constant data, pressure and temperature derivatives: Anderson, Orson L. 06109

Magnetic properties, thermoremanence, spontaneous magnetization: Strangway, D. W. 03909

Mexico, magnetite growth, topotactical relations, X-ray diffraction: Baro, Raymond. 05988

Properties, elastic constants as function of pressure to 3 kb: Liebermann, Robert C. 03938

Properties, magnetic, intergrowths, with maghemite: Porath, H. 04369

Hemihedrite

General description, Arizona: Anthony, John W. 10200

Structure, refinement: McLean, Willis John. 06517

Hendricksite

Composition, analyses: Frondel, Clifford. 07548

Hessite

Composition, physical properties: Stumpfl, E. F. 07559

Heulandite

Crystal structure: Merkle, Arthur Beiser. 01707

Structure: Merkle, A. B. 06766

Hinsdalite

Composition, electron-probe analysis, Montana, Butte area: Mead, Cynthia W. 05232

Hornblende

California, Sierra Nevada batholith: Dodge, Frank C. W. 07761

Composition, Fe, Mg distribution, coexisting minerals: Saxena, S. K. 06445

Composition, Mn distribution, plutonic rocks: Greenland, L. Paul. 05293

Crystal chemistry, potassium and aluminum: Papike, J. J. 08834

Elastic shear compliances, compositional effects: DeVore, George W. 08522

Stability, upper mantle pressures: Lambert, I. B. 03919

Hortonolite

Parameters, atomic: Birlle, J. D. 06460

Humite group

Composition, electron probe: Jones, N. W. 08755

Crystal group: Ribbe, P. H. 09059

Hyalosiderite

Parameters, atomic: Birlle, J. D. 06460

Hydrobasaluminite

Composition, occurrence, Kansas, southeastern: Tien, Pei-Lin. 06465

Hydrobiotite

Genesis, experimental study, Montana: Boettcher, A. L. 07753

Hydrous sodium silicates

Geochemistry, possible precursors to chert: Eugster, Hans P. 08679

Mineral data—Continued

- Hydroxyapatite*
Dielectric properties: Pollard, Charles O., Jr. 09064
- Idocrase*
Synthetic, composition: Walter, Louis S. 07972
- Ilmaussite*
Greenland, description, new silicate: Semenov, E. I. 09858
- Ilmenite*
Alteration, magnetization, red bed genesis: Van-Houten, Franklyn B. 01085
Composition, MgO content, petrologic environment: Lovering, J. F. 02840
Geochemistry, diabase: Davidson, A. 07640
- Ilmenite-hematite minerals*
Magnetic properties, coercivity, origin of TRM: Merrill, Ronald T. 05277
- Ilvaite*
Mexico, Michoacan, Arteaga area: Pablo-Galan, Liberto de. 10699
Mexico, Michoacan, crystallography, composition: Pablo, Liberto de. 09223
- Indium hydrogarnet*
Synthetic, parameters, technique: Ito, Jun. 07573
- Indium silicate*
Synthetic, parameters, technique: Ito, Jun. 07573
- Iron sulfides*
Lead, sulfur isotope ratios, Great Slave Lake area, Northwest Territories: Robertson, D. K. 05431
- Iron-titanium oxide minerals*
Ontario, Hearst area, new: VanLoan, Paul R. 03604
Quebec, LaBlache Lake, oxidation-exsolution: Anderson, A. T. 04432
- Jadeite*
Phase equilibria data: Newton, M. S. 04498
Stability, in presence of silicate liquids: Boettcher, A. L. 03930
Thermodynamic properties: Hlabse, T. 06784
- Jalpaite*
Parameters, new occurrences, Colorado, Mexico: Grybeck, Donald. 07539
- Joesmithite*
Structure: Moore, P. B. 09053
- Jordanite*
Stability, composition: Roland, George W. 04428
- Kaersutite*
General description, Arizona: Mason, Brian. 09062
- Kamacite*
Geochemistry, X-ray diffraction study: Jaeger, Ralph R. 02994
- Kimberlite minerals*
New occurrences: Dawson, J. B. 04228
- Kobellite*
Solid-solution series, bismuth to antimony members: Harris, D. C. 11295
- Krennerite*
Composition, silver, minor elements: Cabri, L. J. 03756
- Krinovite*
Meteorite occurrence, new silicate: Olsen, Edward. 03064
- Kyanite*
High-pressure behavior: Birle, John David. 01705

Mineral data—Continued

- Kyanite-sillimanite*
Equilibrium from 700°-1500°C, applications: Richardson, S. W. 01548
- Laumontite*
Michigan, Houghton County, vein deposit: Brothers, Jack A. 09289
- Laurionite*
Genesis, nuclear explosion, GNOME: Gard, Leonard M., Jr. 04059
- Layer silicates*
Crystal chemistry, iron analysis, Mossbauer spectroscopy: Taylor, G. L. 06960
- Lepidocrocite*
Occurrence, keratose sponge granules: Towe, Kenneth M. 03847
- Lepidolite*
Structure, transition metal ion sites, optical absorption spectra: Faye, G. H. 02168
- Leucite*
Structure, high temperature diffractometer study: Peacor, Donald R. 09651
- Leucite group*
Thermal expansion in natural and synthetic: Taylor, D. 07571
- Limonite*
General description, leached outcrops: Blanchard, Roland. 03143
- Lizardite*
Composition: Page, Norman J. 02216
Single layer, structure: Krstanovic, Ilija. 09557
- Loellingite*
Composition, synthesis: Radcliffe, Dennis. 11243
- Mackayite*
Mexico, Sonora, composition, structure, X-ray: Gaines, Richard V. 09221
- Mackinawite*
Lake sediments, genesis: Doyle, Roger W. 05337
Occurrence in Newport pallasite: Buseck, Peter R. 00469
- Madocite*
Ontario, new: Jambor, J. L. 03755
- Magadiite*
Composition, California, Trinity County, cf. kenyaite: McAtee, J. L., Jr. 07528
- Maghemite*
Properties, magnetic, intergrowths, with hematite: Porath, H. 04369
- Magnesium silicate*
Olivine, spinel forms, stability, structural reasons: Kamb, Barclay. 08758
- Magnetite*
Alteration, magnetization, red bed genesis: Van-Houten, Franklyn B. 01085
Formed on hematite, topotactical relations, X-ray diffraction: Earo, Raymond. 05988
Geochemistry, diabase: Davidson, A. 07640
Magnetic properties, remanence, internal stress effects: Lowrie, William. 02610
Martitization process: Davis, B. L. 02447
Structure, omission solid solution: Kullerud, G. 01578
- Manganese berzelite*
Synthetic, X-ray powder diffraction data: Ito, Jun. 09408
- Manganese layer silicates*
Structure, composition, comparison: Wuensch, Bernhardt J. 09625

Mineral data—Continued

Manganese minerals

- Crystal-field spectra, chemical bonding: Keester, Kenneth L. 07423
- Geochemistry: Roy, Supriya. 06986
- Magnetic susceptibility: Powell, H. E. 00036
- Michigan, Negaunee Iron-Formation: Babcock, Larry L. 09292

Manganese-bearing chain silicates

- Absorption spectra: Manning, P. G. 03461

Marcasite

- Transition to pyrite, cross-twinning mechanism: Kullerud, G. 01580

Martite

- Fabric study, Minnesota, Michigan, South Dakota: Rapp, George, Jr. 10117
- Structure, fabric, genesis: Davis, B. L. 02447

Maskelynite

- Natural, formation by shock pressures: Bunch, T. E. 07482

Melanostibite

- General description: Moore, Paul B. 08813
- Parameters: Moore, Paul B. 06775

Melanotekite

- Synthetic scandium analog, physical properties: Ito, Jun. 06783

Meta-aluminite

- Parameters, Utah, Temple Mtn., Fuemrole mine: Frondel, Clifford. 06574

Metaheinrichite

- Unit-cell data: deAbeledo, M. E. J. 11274

Metallic minerals

- Magnetic susceptibility of group IVB, VB, and VIB: Powell, H. E. 00037

Metamorphic minerals

- Crystal-field stabilization energy, trace element distributions: Schwarcz, Henry P. 08071

Metanovacekite

- Unit-cell data: deAbeledo, M. E. J. 11274

Metazeunerite

- Unit-cell data: deAbeledo, M. E. J. 11274

Mg-gedrite

- Synthesis, stability at 10-25 kb: Schreyer, W. 01547

Mica

- Composition, silica content of phengitic, control: Brown, E. H. 02518
- Composition, silica content of phengitic, metamorphic significance: Velde, Bruce. 02519
- Di octahedral, stacking sequences, mechanism: Guven, N. 01576
- Geochemistry, petrology, mineralogy: Rimsaite, J. 06055
- K-depleted, K-uptake, effects on basal spacing: Weed, S. B. 02270
- Quebec, lithium-bearing: Rimsaite, J. 03601
- Structure, lattice spacings, particle-size effect, X-ray diffraction: Reynolds, Robert C., Jr. 00939
- Synthesis, low temperature, ammonium phase: Levinson, A. A. 04521

Mimetite

- Infrared spectra: Adler, Hans H. 07546

Minnesotaitite

- British Columbia, composition: Perrault, Guy. 03599

Montgomeryite

- Formula, electron-probe analysis, Utah: Mead, Cynthia W. 05232

Mineral data—Continued

Mullite

- Formation from kaolinite, fluoride effects: Shutt, T. C. 11023

Muscovite

- Composition, Ti, metamorphic grade indicator, Ontario: Kwak, Teunis A. P. 05366
- Geochemistry, Na:Na+K, relations to metamorphic grade: Guidotti, Charles V. 08716
- Pseudomorph after staurolite: Guidotti, C. V. 06749
- Structure, Georgia, cf. California phengite: Guven, N. 01575
- Structure, high-resolution microscopy: Brown, John L. 03038
- Structure, refinement: Birle, John D. 09055
- Structure, transition metal ion sites, optical absorption spectra: Faye, G. H. 02168

Muscovite-biotite

- Geochemistry, metamorphic rocks: McKay, David S. 10726

Natroalunite

- Genesis, composition, occurrence, Texas: Ross, Clarence S. 06597

Naujakasite

- Greenland, Ilimaussaq intrusion: Petersen, Ole V. 07289

Nepheline

- Cell dimension-composition relations, ordering effects: Smith, J. V. 09693
- Occurrence, chondrites: Fuchs, Louis H. 06361
- Phase equilibria data: Newton, M. S. 04498

Nickel

- Magnetic properties, internal stress effects: Shive, Peter N. 08386
- Thermoremanence, destruction by deformation: Shive, Peter N. 05043

Niobium minerals

- Glossary, classification by chemical type: Parker, Raymond L. 04103

Nissanite

- California, new: Mrose, Mary E. 07831

Nuffieldite

- Physical properties, crystallography, composition, British Columbia: Kingston, P. W. 03657

Oldhamite

- Meteorites, petrologic significance: Larimer, John W. 03903

Oligoclase

- Structure, North Carolina: Colville, A. A. 11234

Olivine

- Geochemistry, terrestrial, extraterrestrial: Buseck, Peter. 08634
- H and He ion implantation from solar wind: Lord, H. C. 03227
- Meteorites, deformation: Raleigh, C. B. 08099
- Properties, deformational, plastic: Raleigh, C. B. 03216
- Properties, deformational, stony meteorites: Carter, N. L. 03211
- Structure, regression analysis: Louisnathan, S. J. 09063
- Thermal conductivity: Fujisawa, Hideyuki. 02331
- Trace elements, distribution: Simkin, Tom. 08001
- Translation lamellae, genesis: Gibb, Fergus G. F. 09060

Omphacite

- Structure, cation ordering: Clark, Joan R. 06462

Mineral data—Continued

Orthoclase

- Electrostatic-charge distribution measurements: Grossman, J. J. 10439
- Exsolution dislocations, micropertite boundaries: Grossman, J. J. 10509
- Structure, refinement: Colville, Alan A. 02208

Orthopyroxene

- Cell dimensions, X-ray diffraction: Stephenson, D. A. 07429
- Composition, ferrous Fe distribution, Mossbauer spectra: Virgo, David. 02835
- Geochemistry, Mg-Fe order-disorder kinetics: Hafner, Stefan. 10903

Owyheeite

- Nevada, Morey district, structure: Williams, Sidney A. 03754

Oxides

- Physical properties, indentation microhardness anisotropy: Westbrook, J. H. 07535
- Physical properties, pressure dependence of shear modulus: Anderson, O. L. 05009

Oxyapatites

- Synthesis, composition, range: Ito, Jun. 06457

Paragonite

- Rarity of occurrence: Guidotti, Charles V. 06442

Parahopeite

- Structure: Kumbasar, Isik. 09049

Parawollastonite

- Structure: Trojer, Felix J. 09653

Pegmatite minerals

- Virginia, Amelia area, assemblages, zoning: Sinkankas, John. 05971

Pendletonite

- Correction to original description: Murdoch, Joseph. 06455

Pentlandite

- Occurrence in Newport pallasite: Buseck, Peter R. 00469

Periclase

- Elastic constant data, pressure and temperature derivatives: Anderson, Orson L. 06109
- Equation of state, Birch's velocity-density relation: Wang, Chi-Yuen. 00640

Perrierite

- Optical properties, X-ray data, U.S., western: Izett, G. A. 07538

Petzite

- Composition, changes during electron-probe microanalysis: Rucklidge, John. 01614

Pharmacosiderite

- Crystal structure, composition: Buerger, M. J. 07755

Phengite

- Composition, silica content, variability, control: Brown, E. H. 02518
- Composition, silica content, variability, metamorphic grade: Velde, Bruce. 02519
- Structure, California, cf. Georgia muscovite: Guven, N. 01575

Phlogopite

- Composition, analyses: Frondel, Clifford. 07548
- Genesis, growth steps in marble, edges: Kretz, Ralph. 07424
- Stability relations: Wones, David R. 07997

Phosphate minerals

- Crystal chemistry, carbonate substitution: LeGeros, Racquel Z. 09420
- Physical properties, differences, structural origin: Young, R. A. 06375

Mineral data—Continued

Pigeonite

- Structure, refinement: Morimoto, N. 01577

Plagioclase

- Composition, determination, infrared spectroscopy: Thompson, C. Sheldon. 00872
- Composition, determination, Tsuboi method: Vogel, Thomas A. 09945
- Composition, electron-probe analysis: Corlett, M. 10293
- Composition, Greenland, Gardar dikes: Bridgwater, D. 05026
- Convolute zoning, phenocrysts in basalts, California: Blackerby, Bruce A. 06441
- Desilication, hydrothermal, experimental study: Adams, John B. 07743
- Dispersion curves, optical properties: Morse, S. A. 02207
- Electron microscopy, etching: Seifert, K. E. 08875
- Idaho, west-central, basalt flow, compositional variations: Hoffer, Jerry M. 08590
- Infrared spectra, composition, relations: Angino, Ernest E. 08604
- Order-disorder relation, Columbia River Basalts, Idaho: Hoffer, Jerry M. 06458
- Solubility: Adams, John B. 07561
- Structural disorder, shock induced: Bunch, T. E. 07482
- Vermont, Giles Mountain Formation, equilibria: Crawford, Maria Luisa. 08225
- X-ray powder patterns, An_{60} , 29, 80, 100: Borg, I. Y. 07540

Playfairite

- Ontario, new: Jambor, J. L. 03755

Poughite

- Parameters, Mexico, Honduras, new: Gaines, Richard V. 06747

Prehnite

- British Columbia, Karmutsen Group, solid solution: Surdam, Ronald C. 08036
- Crystal structure: Papike, J. J. 07859
- Domains, space groups, Connecticut, Farmington area: Aumento, F. 03654
- Native-copper inclusions, British Columbia: Surdam, Ronald C. 07641
- Pennsylvania, Cornog area, unusual habit: Haefner, Richard C. 09094

Proustite

- Crystal growth, experimental: Wehmeier, F. H. 03153
- Synthetic, crystal growth: Gentile, A. L. 07582

Pumpellyite

- Stability, hydrothermal decomposition: Landis, C. A. 06450

Pyrargyrite

- Crystal growth, experimental: Wehmeier, F. H. 03153
- Idaho, Kellogg area, Bunker Hill mine: Kenzy, G. W. 00403

Pyrite

- Colorado, Slick Rock district, Mancos Shale: Shawe, Daniel R. 02720
- Synthetic, transition dichalcogenides, properties: Bither, T. A. 05487
- Transition from marcasite, cross-twinning mechanism: Kullerud, G. 01580

Pyrite-cattierite

- Composition, Fe, Co, variations: Riley, John F. 02233

Mineral data—Continued

Pyrochlore

- Greenland, varieties, Ilimaussaq intrusion: Semenov, E. I. 09857
 Quebec, composition and structure: Perrault, Guy. 03459

Pyromorphite

- Crystal chemistry: Bhatnagar, Vijay Mohan. 07675

Pyrophyllite

- Stability, upper limit: Kerrick, Derrill M. 00646

Pyroxene

- Analysis, electron probe: Boyd, F. R. 01536
 British Columbia, Cassiar district, tin-bearing: Mulligan, R. 03462
 California, glaucophane schist: Coleman, R. G. 07790
 California, Valley Ford area, analyses, structure: Keith, Terry E. 02709
 Chondrites, disordered: Pollack, Sidney S. 05367
 Coexisting types, exsolution, electron-probe study: Boyd, F. R. 01540
 Composition, variations, diabase sill, Arizona: Smith, Douglas. 09691
 Crystallization, calc-alkalic magmas: Best, Myron G. 07824
 Diopsidic, isotype, experimental study: Peacor, Donald R. 09558
 Elastic shear compliances, compositional effects: DeVore, George W. 08522
 Fe-Mg ratio, indicator of metamorphic grade: Virgo, D. 03451
 Genesis, blueschist facies, California: Coleman, R. G. 00276
 Hedenbergite-wollastonite equilibria, Greenland: Lindsley, D. H. 01539
 Jadeite-acmite, synthetic, cell parameters: Gilbert, M. C. 01545
 Meteoritic, cf. terrestrial: Mason, Brian. 00331
 Paramagnetic susceptibility, magnetic moment of Fe²⁺: Parks, George A. 05931
 Pigeonitic, inversion relations: Brown, G. M. 01538
 Spodumene-type, crystal chemistry, crystal structure: Appleman, D. E. 07750

Pyroxmangite

- Absorption spectra: Manning, P. G. 03461

Pyrrhotite

- Magnetic phases: Schwarz, E. J. 03093
 Minimum melting relations, Ni-bearing: Craig, J. R. 01555
 Miscibility gap with troilite at 140°C: Yund, Richard A. 03130
 Structure, superstructures of synthetics: Fleet, M. E. 05480
 Synthetic, parameters, composition, technique: Fleet, M. E. 07544

Pyrrhotite group

- Polymorphs, low-iron: Corlett, Mabel. 09556

Quartz

- α - β inversion: Coe, R. S. 10510
 Alteration, dynamic deformation, impact origin: Carter, Neville L. 07490
 Alteration, shock loading, deformation structures: Horz, Friedrich. 07496
 Alteration, shock loading, meteor craters: Robertson, P. B. 07489
 Alteration, shock-wave damage, Arizona, Meteor Crater: Sclar, Charles B. 07458
 Alteration, subfabric, Ontario, Brent Crater: Gold, D. P. 07459

Mineral data—Continued

Quartz—Continued

- British Columbia, Oliver area: Sinclair, A. J. 10978
 Deformation, experimental, impact texture study: Christie, J. M. 07471
 Deformation, intergranular, experimental: Heard, Hugh C. 00274
 Deformation, meteorite impact: Carter, Neville L. 01090
 Elastic constant data, pressure and temperature derivatives: Anderson, Orson L. 06109
 High pressure phases, experimental: Ahrens, Thomas J. 07402
 High-low inversion, lambda transition, thermodynamics: Klement, William, Jr. 01129
 High-low inversion, scaling laws: Klement, William, Jr. 02337
 Microtwinning, Dauphine type: Shapiro, S. M. 04783
 Physical properties, thermoluminescence, traps and emission centers: Medlin, W. L. 03965
 Solubility, under pressure: Renton, John J. 10338
 Stability with corundum: Carr, R. M. 07526
 Structural disorder, shock induced: Bunch, T. E. 07482
 Synthetic on prism faces, morphology, hillocks: Joshi, M. S. 06461
 Techniques, separation from matrix for isotope analysis: Syers, J. K. 03926
 Transition, α - β , light scattering: Shapiro, S. M. 04783

Quartz, α

- Elastic properties, variation with pressure and temperature: Soga, Naohiro. 00085

Rhabdophane

- Analyses, optical data, Idaho, Valley County: Adams, John W. 00786
 X-ray data, Virginia: Mitchell, Richard S. 04890

Rhodizite

- Crystal chemistry: Buerger, M. J. 07425

Rhodochrosite

- Geochemistry, stability relations, Mn-C-O system: Huebner, J. Stephen. 08743

Rhodonite

- Absorption spectra: Manning, P. G. 03461

Robinsonite

- British Columbia, bismuthian: Jambor, J. L. 03456

Rock-forming minerals

- California, Red Mountain-De Puerto ultramafic complex: Himmelberg, G. R. 02710
 Thermal diffusivity, 300° to 1,100°K: Kanamori, Hiroo. 00060

Rutile

- Anion polarizability, correlation with bond nature: Pollard, Charles Oscar, Jr. 00859
 High-pressure polymorphism: Jamieson, John C. 03068
 Polymorphism: Dacheville, Frank. 07534

Safflorite

- Composition, synthesis: Radcliffe, Dennis. 11243
 Intergrowths with skutterudite: Radcliffe, Dennis. 03648

Sanidine

- Composition, absolute age, Utah, northeastern: Best, Myron G. 06576
 Geochemistry, ion-exchange data: Thompson, J. B., Jr. 07519
 Geochemistry, volume data: Waldbaum, D. R. 07520

Mineral data—Continued*Sanidine*—Continued

Rhyolite, excess silica, solid solution, experimental: Carman, J. H. 08640

Saponite

Atlantic Ocean, Mid-Atlantic Ridge, basalt: Banks, Harold H., Jr. 08230

Scapolite

Geochemistry: Evans, Bernard W. 10511

Sulfur coordination: Chappell, B. W. 07557

Sedimentary minerals

Oxygen, hydrogen isotope ratios: Savin, Samuel M. 10799

Senaite

Parameters, polytypism: Rouse, Roland C. 07005

Serandite

Absorption spectra: Manning, P. G. 03461

Serendibite

Structure, New York: Susse, P. 01596

Serpentine

Composition, origin, properties, structure, gem quality: McKague, H. Lawrence. 05251

Composition, polymorphism questioned: Page, Norman J. 02216

Crystals, Michigan, popular account: Fairbanks, Ernest E. 08111

Structure, Manitoba, Setting Lake-Moak Lake area, varieties: Coats, Colin J. A. 03460

Unit-cell parameters: Jahanbagloo, I. Cyrus. 02211

Shattuckite

Crystal structure: Evans, Howard T., Jr. 07714

Siderite

Washington, southwestern, coprolite-like bodies, origin: Danner, Wilbert R. 03614

Silica hydrate

Synthetic, possible precursor of chert: Greenwood, Robert. 10073

Silicate-apatite group

Synthesis, composition, range: Ito, Jun. 06457

Silicates

Crystal chemistry, structure theory: Huggins, Maurice L. 04348

Mineral-water equilibria in weathering: Kramer, James R. 06053

Physical properties, indentation microhardness anisotropy: Westbrook, J. H. 07535

Properties, adhesion, cleaved in ultrahigh vacuum: Ryan, J. A. 04487

Sheet, pleochroism, absorption spectra of iron: Faye, G. H. 03448

Synthesis of Pb-Ca-Zn type, X-ray data: Ito, Jun. 02214

Silver sulfosalts

Synthetic: Hall, H. T. 01907

Skutterudite

Crystal chemistry: Nickel, Ernest H. 03598

Structure and composition, safflorite intergrowths: Radcliffe, Dennis. 03648

Smithite

Crystal growth, experimental: Wehmeier, F. H. 03153

Sodalite

Ontario, Bancroft area, vein origin: James, R. S. 03590

Sonoraite

Parameters, composition, new mineral, Mexico: Gaines, Richard V. 07529

Sphalerite

Color banding, relation to Fe, Northwest Territories: Roedder, Edwin. 07567

Geochemistry: Wiltse, M. A. 10505

Mineral data—Continued*Sphalerite*—Continued

Geochemistry, carbonate rocks, trace elements: Sangster, D. F. 02908

Geochemistry, Quebec, Quemont mine: Campbell, F. A. 06975

Geochemistry, subsolidus: Chernyshev, L. V. 06979

Geologic thermometry, 330°-580° C: Scott, S. D. 08873

Iron-bearing, magnetic interaction of iron atoms: Keys, J. D. 03753

Mixed-ion doping, absorption studies: Manning, P. G. 03457

New York, central, Lockport Formation: Labuz, Adrian. 09090

Paramagnetic susceptibility, magnetic moment of Fe²⁺: Parks, George A. 05931

Properties, annealing: Stanton, R. L. 07637

Textures, colloform, interpretation: Roedder, Edwin. 04230

Trace elements, Mississippi Valley: Hall, Wayne E. 04122

United States, central, eastern, trace elements: Jolly, Janice L. 05981

Sphene

Fission track annealing: Naeser, C. W. 00004

Synthetic, structure, cf. natural: Robbins, C. R. 03714

Spinel

Elastic constant data, pressure and temperature derivatives: Anderson, Orson L. 06109

Ferromagnesian, lattice-parameters, pressure dependence: Mao, Ho-kwang. 02973

Optical emission spectrum, Cr³⁺ ions: Wood, D. L. 09257

Order-disorder: Datta, R. K. 07570

Stability, basaltic melts: Hill, Robin. 10906

Synthetic, growth: Lipson, Herbert G. 07580

Thermal conductivity: Fujisawa, Hideyuki. 02331

Spodumene

Alpha-beta transition: Edgar, A. D. 07421

Heated crystals, electron paramagnetic resonance spectra, Mn: Holuj, F. 09101

High pressure stability relations: Munoz, J. L. 01544

Natural, electron paramagnetic resonance spectra, Mn: Holuj, F. 09102

Structure, high-quartz solid solution: Li, Chi-Tang. 09654

Synthetic scandium analog, physical properties: Ito, Jun. 06783

Staurolite

Composition, sector-zoned, British Columbia: Hollister, Lincoln S. 11126

Fe-, synthesis, stability: Richardson, Stephen W. 08053

Stability, experimental: Richardson, Stephen W. 04811

Stability relations of Fe-staurolite + quartz: Richardson, S. W. 01550

Structure, composition: Smith, J. V. 06767

Synthesis, stability at 10-25 kb: Schreyer, W. 01547

Synthetic, composition, cf. natural: Richardson, S. W. 01549

Stellerite

General description: Erd, Richard C. 08678

Stilpnomelane

General description: Smith, Marie Lindberg. 09057

Mineral data—Continued

Stutzite

Composition, physical properties: Stumpf, E. F. 07559

Sulfates

Coal, efflorescences: Nuhfer, Edward B. 08830

Sulfides

Composition, basalt magma, Hawaii: Desborough, George A. 04124

Physical properties, indentation microhardness anisotropy: Westbrook, J. H. 07535

Stoichiometry: Barnes, H. L. 11257

Structure, stability, ligand field theory: Nickel, Ernest H. 03447

Trace elements, zonation, Illinois, Cave-in-Rock district: Hughes, Travis Hubert. 09406

Sulfoborite

Crystal structure: Giese, R. F., Jr. 10899

Sulfosalts

Ontario, Madoc and synthetic, paragenesis: Jambo, J. L. 03755

Sulfospinel

Crystal chemistry, physical properties: Tressler, Richard Ernest. 03033

Svanbergite

California, Imperial County, Vitrefax formation: Pemberton, H. Earl. 02085

Sylvanite

Composition, silver: Cabri, L. J. 03756

Sylvite

Rb content, effect of temperature and Bi: McIntire, W. L. 01106

Talc

Parameters, New York, Gouverneur district: Ross, Malcolm. 06568

Tamarugite

Structure: Robinson, Paul D. 08856

Tantalum minerals

Glossary, classification by chemical type: Parker, Raymond L. 04103

Tellurite

Mexico, Sonora, Moctezuma area, zeolite-type, crystal structure: Matzat, Eckhart. 10909

Tetrahdrates

Fluoride, sulfate, structures: McLean, Willis John. 06517

Tintinaite

Yukon, new, kobeinite antimony analog: Harris, D. C. 11295

Tirodite

Parameters, New York, Gouverneur district: Ross, Malcolm. 06568

Titanaugite

Composition, California: Fischer, Joseph F. 09995

Titanium minerals

New York, Benson mines: Hagni, Richard D. 01883

Titanium-oxide minerals

Polymorphism: Simons, Philip Yale. 01708

Tourmaline

Absolute orientation, anomalous dispersion of X-rays: Barton, Randolph, Jr. 07818

Absorption spectra, cause of pleochroism: Faye, G. H. 06769

North Carolina, pyrophyllite deposits, acicular, filiform morphology: Furbish, William J. 09092

Trechmannite

Synthesis, X-ray data, optical properties: Roland, George W. 06771

Mineral data—Continued

Tremolite

Mn impurities, electron spin resonance: Manoo-
gian, A. 09103

Parameters, New York, Gouverneur district: Ross, Malcolm. 06568

Trydimite

Meteoritic, crystal structure: Dollase, Wayne A. 07763

Nova Scotia, Dunbrack mineralized zone: Friedlaender, C. G. I. 03587

Triplite

Structure, Colorado, Mica Lode pegmatite: Waldrop, L. 01675

Triploidite

Structure: Waldrop, L. 02512

Troilite

Miscibility gap with pyrrhotite at 140°C: Yund, Richard A. 03130

Ultramafic minerals

Geochemistry, isotopes, North Carolina: Stueber, Alan M. 09709

Geochemistry, K, Rb, Sr, Ba abundances: Griffin, W. L. 02986

Valleriite

Structure, crystal chemistry: Evans, Howard T., Jr. 09647

Vaterite

Transformation to aragonite: Bischoff, J. L. 00278

Transformation to calcite during grinding: Northwood, D. O. 07525

Vauxite

Composition, structure: Baur, W. H. 06447

Veatchite

Structure: Clark, Joan R. 07322

Vermiculite

Genesis, experimental study, Montana: Boettcher, A. L. 07753

Vesuvianite

Green, octahedrally bonded Fe³⁰, absorption spectra: Manning, P. G. 02174

Villamaninite

Composition, redefinition: Ypma, Peter J. M. 09489

Vivianite

Absorption spectra, cause of pleochroism: Faye, G. H. 06769

Atlantic Coastal Plain, northern, diagenetic: Adams, John K. 08595

Walstromite

Structure: Dent Glasser, L. S. 02201

Wavellite

Crystal structure: Araki, Takaharu. 08226

Differential thermal analysis: Blanchard, Frank N. 04200

Weinschenkite

X-ray data, Virginia: Mitchell, Richard S. 04890

Weloganite

Quebec, Montreal Island, new, description: Sabina, Ann P. 03655

Whewellite

Composition, occurrence, X-ray crystallography: Leavens, Peter B. 06755

Wickenburgite

Parameters, composition, Arizona, Wickenburg area, new: Williams, Sidney A. 07568

Wolframite

Paramagnetic susceptibility, magnetic moment of Fe³⁰: Parks, George A. 05931

Mineral data—Continued*Wollastonite*

Low-temperature formation, California, metamorphic rocks: Stuart-Alexander, Desiree E. 09708

Synthetic, high-pressure polymorph, structure: Trojer, Felix J. 03519

Texas, Llano County, metamorphic rocks: Workman, William Edward. 06560

Yoderite

Synthesis, stability: Schreyer, W. 01546

Yttrialite

Composition, synthesis: Ito, Jun. 07516

Zeolites

Alteration products of eclogites: Berg, G. W. 06786

Analysis, method, DTPA-arsenago III: Marsh, William W., Jr. 06742

British Columbia, Yellow Lake area: Sinclair, A. J. 10978

California, Coast Ranges, Obispo Formation: Surdam, Ronald C. 08335

Chemical potential of water from optic angle: Eberlein, G. Donald. 05027

Crystal chemistry, faujasite-type framework: Bennett, J. M. 04789

Faujasite, Ca-exchanged, crystal chemistry: Bennett, J. M. 03715

Genesis, Nevada, nuclear test site: Hoover, D. L. 06798

Synthesis, low temperature, analcime: Levinson, A. A. 04521

Synthetic replacement by kaolinite: deKimpe, C. R. 02215

United States, western, Tertiary volcanics: Sand, L. B. 09928

Zinc-copper aluminum silicate

General description, New Mexico: Rosenzweig, Abraham. 11076

Zincite

Elastic constant data, pressure and temperature derivatives: Anderson, Orson L. 06109

Zinnwaldite

Mossbauer absorption: Herzenberg, C. L. 03160

Structure, octahedral ordering: Rieder, Milan. 01930

Zircon

Composition, absolute age, Mt. Wheeler mine area: Lee, Donald E. 05195

Composition, zoned, New Hampshire: Richardson, Keith A. 10738

Crystallization in igneous rocks, diverse P-T conditions: Dietrich, R. V. 00330

Fresh, decayed rocks, variations: Harris, Rae L., Jr. 08587

Geochemistry, lead loss, kinetic model: Craig, Harmon. 00121

New Mexico, Hillsboro area, Copper Flat intrusion, growth trends: Wilbanks, John R. 10993

Structure, computer analysis: Greenwood, William R. 00425

Th-Pb ages, acid-washing procedure, effects: Steiger, Rudolf H. 09701

Zoisite

Structure, refinement: Dollase, W. A. 07545

Mineral deposits, genesis*Antimony*

United States, western, hot springs: Dickson, Frank W. 05281

Barite

North America, eastern, regional control: Hanor, Jeffrey S. 08720

Mineral deposits, genesis—Continued*Beryllium*

Utah, Spor Mountain district: Shawe, Daniel R. 05379

Boron

California, Los Angeles County, Tick Canyon colemanite: Pemberton, H. Earl. 01613

Breccia pipes

Copper, Arizona, Bisbee area: Bryant, Donald G. 00540

Uranium, Arizona: Gavasci, Anna T. 07634

Brucite

Nevada, Gabbs area: Schilling, John H. 05363

Chromite

Montana, Stillwater Complex: Jackson, Everett D. 05356

Classification

Developments since 1933, literature review: Ridge, John Drew. 11346

Epigenetic, paramagnetic deposits: White, William H. 08904

Epigenetic vs. syngenetic deposits: Ridge, J. D. 06853

Lindgren's classification, modern views: Graton, L. C. 05282

Relation to magmas, geosynclines: Smirnov, V. I. 04219

Contact metamorphic

Copper, Haiti: Kesler, Stephen E. 10956

Iron, Mexico, Colima, Cerro Nahuatl: Neilson, James M. 04132

Oxygen buffer reaction: Burt, D. M. 04136

Copper

Alaska, Clearwater Mountains: Glavinovich, Paul Stephen. 09833

Alaska, Cosmos Hills area, Ruby Creek prospect: Runnells, Donald D. 08061

Arizona, Christmas mine, igneous processes: Perry, David Vinson. 02637

Arizona, Magma mine area: Hammer, Donald F. 05347

Arizona, Silver Hill mine, malachite: Beane, Richard E. 10205

Michigan, northern, experimental: Mackasey, William O. 09294

Michigan, northern, native deposits: White, Walter S. 05386

Michigan, White Pine area: Ensign, C. O., Jr. 05409

Nevada, Mountain City mine: Coats, Robert R. 05375

Ontario, Manitouwadge area, dike effects on sulfide bodies: Graham, R. A. F. 01969

Tennessee, Ducktown district: Magee, Maurice. 05415

Utah, Bingham district: Rubright, R. D. 05483

Copper-gold-silver

Nevada, Lander County: Sayers, R. W. 09461

Copper-lead-zinc

Arizona, Banner mining district: Eastlick, John T. 05381

Copper-manganese-zinc

Montana, Butte district: Meyer, Charles. 05351

Emery

New York, Peekskill area, Cortlandt complex: Davis, James F. 01880

Epigenetic deposits

Metals and gangue elements, sources, processes: Boyle, R. W. 03147

Evaporites

Transport function of ground-water flow systems: Williams, Roy E. 07904

Mineral deposits, genesis—Continued

Experimental studies

- Celestite as gangue mineral solubility: Blount, Charles W. 07828
 Cinnabar-stibnite, solubilities: Learned, R. 11416
 Copper sulfides, covellite solubility: Romberger, Samuel Bergstresser. 05511
 Cu-Fe-Ni-S system, high temperature relations: Craig, J. R. 01554
 Cu-Fe-S system, high-temperature relations: Kullerud, G. 01552
 Cu-Ni-S system, high-temperature relations: Kullerud, G. 01553
 Fe-S-O system, magma composition: Naldrett, A. J. 01556
 Galena-pyrite-pyrrhotite assemblages, melting relations: Brett, Robin. 07802
 Iron-nickel sulfides, isothermal diagram, 400°C: Craig, J. R. 01562
 Iron-nickel sulfides, partial pressure of sulfur: Naldrett, A. J. 01561
 Iron-nickel sulfides, pentlandite exsolution: Naldrett, A. J. 07862
 Iron-nickel sulfides, violarite stability: Craig, J. R. 01560
 Mercury, cinnabar-quartz solubilities: Learned, R. 10013
 Mercury minerals, solubilities, sodium sulfide solutions: Learned, Robert Eugene. 01750
 Ni-pyrrhotite, temperature of emplacement: Craig, J. R. 01555
 Paragenesis, mineral assemblages: Craig, J. R. 01559
 Polymetallic ores, equilibria: Naldrett, A. J. 01557
 Polymetallic ores, silicate and sulfide liquids, coexistence: Kullerud, G. 01564
 Pyrrhotite-magnetite assemblages, melting, water effect: Naldrett, A. J. 01558
 Stibnite, solubility, temperature dependence: Raab, W. J. 08096
 Sulfide melts, phase relations, 200°-700°C: Craig, J. R. 08650

Fluorite-lead-zinc

- Illinois-Kentucky district: Grogan, Robert M. 05406

General

- Colloform textures, interpretation: Roedder, Edwin. 04230
 Geochemistry, applications: Kalliokoski, J. 04242
 United States: Ridge, John D. 05427

Geochemical affinities

- Tin belts around Atlantic Ocean, content in biotite of granites: Schuiling, R. D. 07651

Gold

- Nevada, Carlin area: Hausen, Donald M. 05484
 North Carolina, Slate Belt, volcanogenic: Worthington, J. E. 06863
 Ontario, Porcupine district, Hollinger mine: Jones, W. A. 01779
 Ontario, Porcupine district, McIntyre mine: Griffiths, A. T. 01768
 Placers: Tuck, Ralph. 01899
 Placers, bedrock values: Gunn, Christopher B. 00479
 Placers, bedrock values: Krook, Leendert. 06980
 South Dakota, Homestake mine: Slaughter, A. L. 05902

Mineral deposits, genesis—Continued

Gold—Continued

- United States, southeastern, enrichment, migration: Kinkel, Arthur R., Jr. 05190

Gold-silver

- Washington, Republic mining district: Full, Roy P. 05355

Igneous processes

- Arizona, Ithaca Peak: Eidel, J. James. 07708
 Copper, Utah, Bingham: Moore, W. J. 04239
 General, review: Smirnov, V. I. 04219
 Granitic plutons, base metal concentration, California: Putnam, George W. 00816
 Iron, Pennsylvania: Davidson, A. 07640
 Lead, Utah: Stacey, J. S. 06945
 Minnesota, Duluth Gabbro, sulfide assemblage: Hall, Henry T. 08719
 Molybdenum, New Mexico: Giles, David L. 04154
 Molybdenum, New Mexico: Thompson, Tommy B. 07639
 Montana, Boulder batholith: Doe, B. R. 07636
 Porphyry copper: Wadsworth, William B. 01910
 Porphyry copper, Arizona: Nielsen, Richard L. 00471
 Quebec, Noranda area, Horne mine, massive sulfide-diorite dike relations: Mookherjee, Asoke. 01986
 Volcanic centers, Nevada: Albers, John P. 00840

Iron

- Alabama, Birmingham district: Simpson, Thomas A. 05384
 California, Eagle Mountain mine area: DuBois, Robert L. 11276
 Lake Superior region: Marsden, Ralph W. 05410
 Michigan, Iron River-Crystal Falls district: James, H. L. 01692
 Michigan, Marquette district: Anderson, Gerald J. 05411
 Michigan, Menominee district: Dutton, Carl E. 05413
 Michigan, Negaunee Iron-Formation, magnetite rich sequence: Sundeen, Stanley Paul. 02043
 Minnesota: Lepp, Henry. 00472
 Minnesota, brown ore: Bleifuss, Rodney L. 07827
 Minnesota, Mesabi Range: Marsden, R. W. 05412
 Minnesota, Vermilion district, Zenith mine: Machamer, Jerome F. 01689
 Missouri, Iron Mountain mine: Murphy, John E. 05414
 Missouri, Pea Ridge deposit: Emery, John A. 05405
 New York, Saint Lawrence County, Benson mines: Crump, Robert M. 05417
 New York, Sanford Lake district, titaniferous: Gross, Stanford O. 05422
 Pennsylvania, Berks County, Grace mine: Sims, Samuel J. 05420
 Pennsylvania, Cornwall deposit: Lapham, Davis M. 05418
 Pennsylvania, Lehigh County, Friedensville mine: Callahan, William H. 05419
 Utah, Iron Springs district: Mackin, J. Hoover. 05372
 Wyoming, Iron Mountain: Hagner, Arthur F. 05402
 Wyoming, Iron Mountain deposit: Reinking, Robert Louis. 01353

Mineral deposits, genesis—Continued

Lead

- Missouri, Southeast district: Snyder, Frank G. 05404
 New York, Balmat area, isotope study: Reynolds, P. H. 05471

Lead-zinc

- Colorado, Gilman district: Radabaugh, R. E. 05401
 Colorado, Leadville district: Tweto, Ogden. 05387
 Colorado, San Juan Mountains, western: Burbank, Wilbur S. 05388
 Glaciation, cause: McGinnis, L. D. 04220
 Illinois-Wisconsin-Iowa, Upper Mississippi Valley district: Heyl, Allen V. 05408
 Missouri-Kansas-Oklahoma, Tri-State district: Brockie, Douglas C. 05407
 Northwest Territories, Pine Point: Beales, F. W. 07752
 Utah, Bingham district: Rubright, R. D. 05483
 Washington, Metline district: McConnel, Roger H. 05354
 Washington, Van Stone mining district: Cox, Manning W. 05357

Lead-zinc-silver

- Idaho, Coeur d'Alene district: Hobbs, S. Warren. 05346

Magnesite

- Nevada, Gabbs area: Schilling, John H. 05363

Manganese

- General, review: Roy, Supriya. 06986
 United States, southwestern, hypogene veins: Hewett, D. F. 00136

Massive sulfide

- British Columbia, Bluebell mine: Ohmoto, H. 10684
 Canada, geological concepts, 1930-67: Sullivan, C. J. 09212
 Copper, Vermont, volcanics: Jenks, William F. 00835
 Quebec, Delbridge deposit, solfataric activity: Boldy, J. 07758
 Sulfurization, Sudbury-type areas: Cheney, Eric S. 07788

Mercury

- California, New Idria mining district: Linn, Robert K. 05364
 Halos around other ores: Dickson, F. W. 05071
 United States, western, hot springs: Dickson, Frank W. 05281

Metallogenic maps

- North America: Guild, P. W. 00841

Metallogenic provinces

- Mantle convection: Keith, M. L. 04117

Metals

- Alaska, Alaska and Aleutian range, plutonic belt: Reed, Bruce L. 00010
 Appalachians, southern, review: Laurence, Robert A. 06302
 Arizona, Mineral Park district: Eidel, J. J. 05430
 Canada, Precambrian shield cf. Africa and Australia: Sarcia, Jacqueline A. 02906
 Colorado, San Juan Mountains, western: Burbank, Wilbur S. 05388
 Layered rocks, syngeneses vs. epigeneses: Bain, George W. 05070
 Mexico, contact metamorphic: Hoffman, Victor J. 11303
 Mexico, general: Wilson, Ivan F. 04148

Mineral deposits, genesis—Continued

Metals—Continued

- Montana, Castle Mountain mining district: Winters, Allen S. 02560
 New Brunswick, Captain area, sulfides, paragenesis: Tupper, W. M. 09118
 New Mexico, Central mining district: Hernon, Robert M. 05382
 Utah, Tintic district: Shepard, W. M. 05485

Metamorphism

- Canada, fahlbands: Boyle, R. W. 06978
 Iron, New Jersey: Collins, Lorence G. 01900
 South Carolina, Little Mountain area, kyanite quartzite: McKenzie, John C. 02555
 Sulfides, annealing rates: Stanton, R. L. 07637
 Tennessee, Ducktown: Salotti, C. A. 06856

Mexico

- Santa Eulalia district, polymetallic ores, replacement: Hewitt, William Paxton. 01509

Minnesota

- Aitkin County, Cuyuna sulfide deposit: Han, Tsu-Ming. 03131

Molybdenum

- Colorado, Climax area: Wallace, Stewart R. 05400
 Colorado, Front Range: Taylor, Richard B. 05126
 Colorado, Red Mountain: Wallace, Stewart R. 11248
 New Mexico, Questa mine area: Carpenter, Robert H. 05349

Nickel

- Canada, exploration, sulfur, key element: Chamberlain, J. A. 11146
 Oregon, Riddle area, Nickel Mtn. mine: Cumberlandidge, John T. 05365

Nickel-copper

- Ontario, Sudbury irruptive: Stevenson, John S. 05079

Ni-Co-Ag

- Ontario, Cobalt area: Kulkarni, P. H. 04732

Ore transport

- Gold-quartz veins: Helgeson, Harold C. 04125
 Mercury, California: Joralemon, Peter. 04240
 Mercury, California: Moiseyev, Alexis N. 01884

Ore-forming fluids

- British Columbia, Bluebell mine: Ohmoto, Hiroshi. 04153
 Copper, British Columbia: Chrismas, L. 09363
 General: White, Donald E. 04224
 Generation mechanism, granitic intrusion: Darling, Richard. 09986
 Illinois, Cave-in-Rock district: Hughes, Travis Hubert. 09406
 Illinois, Cave-in-Rock district: Pinckney, D. M. 11242

- Mexico, Providencia: Rye, Robert O. 01914
 Mexico, Zacatecas, Providencia: Rye, Robert O. 04116

- Mississippi Valley: Sawkins, F. J. 07638
 New Mexico, Hansonburg district: Roedder, Edwin. 04223

- Origin, general: Joralemon, Ira B. 06981
 Sulfide-oxide with noritic intrusions, Ontario, Sudbury area: Naldrett, A. J. 05036
 United States, central: Heyl, Allen V. 09395
 Zinc, lead, Northwest Territories: Roedder, Edwin. 04231

Ores in igneous rocks

- Thermoluminescence, hydrothermal and metasomatic effects: McDougall, David J. 03959

Mineral deposits, genesis—Continued

Ores in sedimentary rocks

Phosphate, United States, Atlantic and Gulf Coastal Plains: Cathcart, J. B. 10982

Paleogeographic controls

Iron: Curtis, C. D. 01916

Pegmatite

South Dakota, Black Hills, Berne quadrangle:

Redden, Jack A. 01701

Wyoming: Proctor, Paul Dean. 10940

Phosphate

Tennessee, central: Collette, W. J. 09105

United States, "Florida" type, Atlantic and Gulf Coastal Plains: Cathcart, J. B. 10982

Polymetallic ores

Arizona, Iron King mine: Gilmour, Paul. 05429

Mexico, Mapimi district: Hoffman, Victor Joseph. 07192

Nevada, Tem Piute deposit: Buseck, Peter R. 08581

New Mexico-Arizona: Anderson, Charles A. 05380

Newfoundland, Whalesback mine: Kanehira, K. 07239

Nickel and iron sulfides, low temperatures: Fitzhugh, Edward F., Jr. 07722

Nickel sulfides, high sulfur pressures: Chamberlain, J. A. 03612

Ontario, Thunder Bay district, Great Lakes

Nickel intrusion: Mainwaring, P. R. 07790

System Ag-Fe-S, phase equilibria: Taylor, Lawrence A. 05496

Tennessee, Ducktown district: Magee, Maurice. 05415

Porphyry copper

Arizona, Mineral Park deposit, fluid inclusion study: Ypma, P. J. M. 10682

Hydrothermal alteration: Guilbert, John M. 04139

New Mexico, Santa Rita area: Nielsen, Richard L. 00471

Structural controls: Guilbert, John M. 02667

Potash

Evaporite basin, metasomatic concentration:

Goldsmith, Louis H. 01227

Saskatchewan, Esterhazy area, barren halite bodies: McIntosh, R. A. 05473

Pyrometasomatic

Geochemistry: Titley, Spencer R. 04155

Silver

General: Boyle, R. W. 04720

Nevada, Morey district: Williams, Sidney A. 03754

United States, southwestern, hypogene veins: Hewett, D. F. 00136

Silver-gold

Mexico, Tayoltita orebodies: Randall, John A. 04197

Silver-lead-zinc

Nevada, Pioche district: Gemmill, Paul. 05378

Utah, Park City district: Barnes, Marvin P. 05376

Sodium sulfate

Saskatchewan, Ingebrigt deposit: Rueffel, P. G. 07887

United States, Canada, Great Plains: Grossman, I. G. 01653

Source rocks

Strontium, isotopes: Reesman, R. H. 06990

Strata-bound

Alberta, Precambrian rift valley: Kanasewich, E. R. 03119

Mineral deposits, genesis—Continued

Strata-bound—Continued

Base-metal ores, changing concept, review:

King, H. F. 05106

Copper, Maine: Greenwood, Robert. 01897

Copper, Michigan: Brecke, E. A. 01909

Copper, Michigan: Ohle, Ernest L. 01898

Metals, biologic concentration: Boyle, R. W. 04234

Mississippi Valley: Hall, Wayne E. 04122

Ontario-Quebec, iron formations: Kalliokoski, J. 05434

Sulfides, isotopes, abundances, cf. ancient sea water: Sangster, D. F. 04714

Zinc, lead, Canada, western: Evans, T. L. 04222

Structural controls

Arizona, Bisbee district: Nye, Thomas Spencer. 07198

Copper, Michigan: Ohle, Ernest L. 01898

Illinois, Cave-in-Rock district: Pinckney, D. M. 11242

Intrusive centers: Landwehr, W. R. 07687

Lattice defects: McDougall, David J. 09430

Metals, Appalachians, zoning: Gabelman, John W. 04992

Mexico, Naica, Fresnillo: Villaseñor, Luis. 04133

Mexico, Queretaro: Sanchez Mejorada, Pedro. 11347

Molybdenum, New Mexico: Clark, K. F. 04226

Newfoundland, regional unconformity: Cumming, L. M. 07765

Silver, Mexico, Pachuca-Real del Monte district:

Geyne, Arturo R. 04882

United States, central: Heyl, Allen V. 09395

Utah, fault trends: Stokes, William Lee. 06985

Sulfur

Gulf Coastal Plain, salt-dome cap rock: Taylor, Ralph E. 07454

Mexico, general: Salas, Guillermo P. 04147

Worldwide, volcanic areas: White, James A. L. 03843

Supergene processes

Copper, adsorption: Clement, Stephen C. 04237

Porphyry copper, Arizona: Livingston, Donald E. 00541

Uranium, deposition from artesian water: Bowles, C. Gilbert. 05868

Uranium, New Mexico, Burro Mts.: Gillerman, Elliot. 01915

Temperature

British Columbia, Rossland area, polymetallic ores: Thorpe, Ralph Irving. 01357

Colorado, Boulder County, telluride ore: Kelly, William C. 07911

Magmatic heat sources at intrusive contact: Kesler, Stephen E. 05338

Polymetallic ores, Alabama, Cragford district: Neathery, Thornton L. 07863

Tennessee, Sweetwater district, fluorite mineralization: Nadeau, Joseph E. 10327

Theoretical studies

Kinetics: Brown, Bahngrell W. 10285

Tin

Lode deposits, review: Sainsbury, C. L. 07650

Tin-beryllium

Alaska, Seward Peninsula, York Mts.: Sainsbury, C. L. 05360

Titanium

Quebec, LaBlache Lake, magnetic deposit: Anderson, A. T. 04432

Mineral deposits, genesis—Continued

Tungsten

- California, Pine Creek area, Inyo County, contact-metasomatic: Darling, Richard Graydon. 05515
 Idaho, Big Creek, xenothermal, with gold, silver: Leonard, B. F. 00525
 Northwest Territories, Flat River area, skarn: Blusson, S. L. 08055
 South Dakota, Harney Peak dome, southwestern, metasomatic: Kernaghan, James S. 06891

Uranium

- Arizona-Utah, Monument Valley and White Canyon districts: Malan, Roger C. 05392
 Colorado Plateau: Fischer, R. P. 05389
 Colorado, Uravan mineral belt: Motica, J. E. 05393
 New Mexico, Grants region: Kelley, Vincent C. 05390
 New Mexico, Jackpile Sandstone: Nash, J. Thomas. 06991
 New Mexico, San Juan basin mineral belt: Granger, Harry C. 01655
 North America, types of deposits: Little, H. W. 11145
 Ontario, Bancroft area, pegmatites: Cunningham-Dunlop, Peter K. 02607
 Saskatchewan, Beaverlodge area: Koeppl, V. 02056
 Saskatchewan, Beaverlodge mining area: Tremblay, L. P. 01688
 South Dakota-Wyoming: Harshman, E. N. 05394
 South Dakota-Wyoming, Black Hills area: Hart, Olin M. 05395
 South Dakota-Wyoming, Black Hills area, Edgemont district: Bowles, C. Gilbert. 05868
 Texas, Coastal Plain: Eargle, D. Hoye. 08991
 Texas, Karnes area: Weeks, Alice D. 06692
 Utah, Kane Creek: Davidson, Donald M., Jr. 09371
 Utah, Lisbon Valley area: Wood, Hiram B. 05391
 Utah, Marysvale area: Kerr, Paul F. 05373
 Wyoming, Gas Hills and Crooks Gap areas: Rackley, R. I. 09455
 Wyoming, Powder River basin: Mrak, Vernon A. 05396
 Wyoming, Shirley Basin: Harshman, E. N. 05397

Vanadium

- Colorado Plateau: Fischer, R. P. 05389
 Colorado, Uravan mineral belt: Motica, J. E. 05393

Veins

- Manganese, Nevada, Nye County: Hewett, D. F. 04221
 Silver, Ontario, Cobalt area: Petruk, William. 04130
 Silver, Ontario, Cobalt district: Petruk, William. 09450
 Uranium, New Mexico, Burro Mts.: Gillerman, Elliot. 01915

Zinc

- New York, Balmat-Edwards district: Lea, Edgar R. 05383
 Ontario, Manitouwadge area, dike effects on sulfide bodies: Graham, R. A. F. 01969
 Pennsylvania, Lehigh County, Friedensville mine: Callahan, William H. 05419
 Tennessee, Mascot-Jefferson City district: Crawford, Johnson. 05416

Mineral deposits, genesis—Continued

Zinc—Continued

- Tennessee, Mascot-Jefferson City district: Ridge, John Drew. 02554
 Virginia, Austinville-Ivanhoe district: Brown, W. Horatio. 05423

Mineral economics

Canada

- Mineral industry, influence on national economy: Drolet, J.-P. 09219
 Petroleum and natural gas industry: Hilborn, James D. 07079
 Petroleum and natural gas, present and future: Sproule, J. C. 05162
 Production, 1967: Toombs, R. B. 09597

Coal

- Pennsylvania, production history, industrial development, reserves: Edmunds, William E. 07076
 United States, Black Hills area: Levene, Harold. 05920

Continental margin

- Exploration, legal aspects, offshore oil and gas: Stone, Oliver L. 05111
 Exploration rights, offshore depth limit, international problem: Goldie, L. F. E. 05110

Development

- Value of mineral surveys: Herfindahl, Orris F. 06842

Energy fuels and minerals

- Revolution in science and technology: Travis, Maury M. 06972

Fluorspar

- Illinois, southeastern: Bradbury, J. C. 01518

Gas, natural

- Canada, exploration, production, 1967: Fraser, J. W. 09599
 Reserves, estimation: Stephenson, Eugene A. 03401

General

- Discovery-development barrier: Wendel, Clarence A. 05759

Illinois

- Production, 1966 values: Busch, W. L. 00605

Manganese

- Deep-sea nodules, potential: Brooks, David B. 05109

Ocean resources

- Exploration and exploitation problems: Fye, Paul M. 07485

Petroleum

- Canada, exploration, production, 1967: Fraser, J. W. 09599
 Continental margin, public policy, coastal-national boundaries: Hedberg, Hollis D. 06108
 Continental margin, U.S., exploration and production: Barrow, Thomas D. 06106
 Economic success of well, factors: Hardin, George C., Jr. 05718
 Mississippi, Pascagoula River basin, production, possibilities: Arndt, Robert H. 02459
 Underseas drilling and production, status: Coene, G. T. 06107

Phosphate

- Marine phosphorite deposits, minability: Cathcart, James B. 09110
 Underseas, exploration problems: Overall, M. P. 03658

Property evaluation

- Lignite reserves, Montana, North Dakota: Carmichael, Virgil W. 01911
 Metals, debatable assumptions: Lovering, Thomas S. 00135

Mineral economics—Continued*Property evaluation—Continued*

Ore reserves, grade control, conference: Canadian Inst. Mining and Metallurgy. 11268

Pre-evaluation of exploration profitability: Brant, Arthur A. 01618

Reserve estimation, improvement: Mickle, David G. 07774

X-ray analyzer, portable, and drillhole probes: Campbell, W. J. 06833

Resource development

Policies, objectives and measures, developing countries: McKelvey, V. E. 05757

Salt

Gulf Coastal Plain: Hawkins, M. E. 07448

Underseas mining

Environments, technology, future possibilities: Coene, G. T. 06107

Feasibility vs. land mining, Mn, Ni, S, P resources: Brooks, David B. 06102

United States

Metals, Paley report reexamined, future outlook: Cameron, Francis. 03842

World perspective: Patton, Donald J. 08175

Uranium

Canada, exploration, production, reserves, 1967: Williams, R. M. 09598

Exploration developments, Canada and United States: Griffith, John William. 09565

Production, reserves, Canada: Robertson, David S. 09559

Saskatchewan, Beaverlodge district, production history: Stephens, Fred H. 09566

Mineral exploration*Automatic data processing*

Potential, computer techniques: Lea, Graham. 00951

Techniques, computer analysis: Rychkun, Edward A. 06884

Techniques, storage, retrieval: Eimon, Paul I. 09377

General

Developments, 1967: Erickson, Ralph L. 00002

Discovery-development barrier: Wendel, Clarence A. 05759

Marine environment, current, review: Cruickshank, Michael J. 03668

Ore bodies, concealed, "baseline" program: Peters, W. C. 06852

Regional mineral belts, prospecting zones, Nevada: Archbold, N. L. 08232

Research: Mitcham, Thomas W. 00834

Statistical methods, accuracy, applications: Kelly, A. M. 09564

Statistical methods and remote sensing, 1967: Gjelsteen, Thor. 09571

United States, 1967, review: Simpson, T. A. 03836

Geochemical methods

Appalachians, southern, soils, copper indicators: Tan, Li-Ping. 08908

Canada, development: Boyle, R. W. 09214

Canada, nickel, genesis, sulfur, key element: Chamberlain, J. A. 11146

Future applications, technology, speculation: Worthington, Joseph E. 00068

General: Andrews-Jones, D. A. 06706

General discussion: Kalliokoski, J. 04242

Mexico, San Luis Potosi: Gomez, Manuel. 04115

Permafrost soils, Greenland, mercury halo dispersion: Lehnert-Thiel, Klaus. 01824

Radioactive minerals, review: U.S. Bureau of Mines. 04881

Mineral exploration—continued*Geochemical methods—Continued*

Simulation technique: Dahlberg, Eric C. 04236

Soils, A horizon: Boyle, R. W. 04232

Stream sediments, element distribution in heavy minerals: Boyle, R. W. 02055

Thermoluminescence, carbonate rocks, hydrothermal ores: MacDiarmid, Roy A. 03950

Tin, associated heavy metals, lode deposits: Sainsbury, C. L. 07650

Trace metals in stream sediments, multivariate analysis: Dahlberg, Eric Charles. 07159

Trace-element distributions, igneous rocks: Neuerburg, G. J. 06851

Trend-surface analysis: Garrett, Robert G. 04233

Worldwide review, 1967: Cavender, Wayne S. 04375

Geological methods

Mexico, Naica, Fresnillo: Villaseñor, Luis. 04133

Mexico, Pachuca-Real del Monte district: Geyne, Arturo R. 04882

Geometric methods

Hinge-line ore bodies, tracing, multiple-fold areas: Stauffer, Mel R. 02172

Geophysical methods

Alaska, Bering Sea, bottom sediments: Hopkins, David M. 09845

Canada: Seigel, Harold O. 09213

Continental margin, offshore drilling for gas and oil: Little, C. H. 09621

Electromagnetic, inductive, rough terrain: Alexander, Paul B. 06984

Future applications, technology, speculation: Worthington, Joseph E. 00068

Gamma-ray logging, uranium: Hawkins, William K. 11299

Gamma-ray spectrometry, advantages: Adams, J. A. S. 06826

Greenland, Ilimaussaq intrusion, uranium-thorium, beryllium, instruments: Lovborg, Leif. 01860

Handbook: Heiner, Lawrence E. 09838

Magnetic, limitations: Neilson, James M. 04132

Placers, Bering Sea: Hopkins, D. M. 06844

Radioactive minerals, review: U.S. Bureau of Mines. 04881

Radiometric technique, integral and differential spectrometers: Pemberton, Roger. 05343

Review, 1967: Corbett, J. D. 09366

Seismic, vein deposits, Mexico: Price, Federico J., Jr. 09526

Sequence, instrumentation: Hings, Donald L. 09568

Space technology, future applications: Scharon, LeRoy. 00045

History

Canada, mining claims, prospectors: Shannon, Len. 09560

Metallogenic provinces

Mexico: Wilson, Ivan F. 04148

Mineral belts

Intrusive centers: Landwehr, W. R. 07687

Mineral valuation

Diamonds, kimberlite: Dawson, J. B. 04228

Offshore methods

Sea floor sediments, sampling program: Libby, Fred. 09595

Ore guides

Alteration zones, porphyry copper deposits, Arizona: Guilbert, J. M. 11117

Mineral exploration—Continued*Ore guides—Continued*

- Arizona, southeastern, dome-fracture intersections: Wertz, Jacques B. 05029
- Borax deposits, California: Smith, Ward C. 07635
- Canada, sulfides, geological concepts, 1930-67: Sullivan, C. J. 09212
- Faulted segment, Arizona: Lowell, J. David. 04123
- Florida, phosphate deposits, Tertiary districts: Freas, Donald H. 09104
- Geosynclines, magmatism: Smirnov, V. I. 04219
- Gold veins, geochemistry: Helgeson, Harold C. 04125
- Heavy minerals, surficial expression of kimberlite: Mannard, G. W. 04716
- Hydrothermal alteration, zoning: Guilbert, John M. 04139
- Hydrothermal feldspar dikes, Mexico: Randall, John A. 04197
- Instruments, X-ray analyzer, drillhole probes: Campbell, W. J. 06833
- Leached outcrops: Blanchard, Roland. 03143
- Maine, Somerset County, polymetallic ores, structural analysis: Delaney, John R. 09767
- Marine phosphorites, genetic, environmental, stratigraphic clues: McKelvey, V. E. 09106
- Metallogenic provinces, origin: Keith, M. L. 04117
- Mettolotect concept: Guild, P. W. 00841
- Nevada, gold deposits: Wrucke, Chester T. 00838
- Practical prospecting: Storm, Barry. 10827
- Prospecting, drilling, mining methods, popular account: Northern Miner Press Limited. 06161
- Research, strata-bound base-metal deposits: King, H. F. 05106
- Structural, Arizona: Wertz, J. B. 09863
- Structural, fold geometries, orogenic belts: Brown, Severn P. 09359
- Unconformities, porphyry copper: Livingston, Donald E. 00541
- United States, central: Heyl, Allen V. 09395
- Utah, fault trends: Stokes, William Lee. 06985
- Vermont, copper: Jenks, William F. 00835
- Volcanic centers, Nevada: Albers, John P. 00840
- Wyoming, Shirley basin, uranium: Bailey, R. V. 00001

Philosophy

- Motivation, future: Gonzalez, Richard J. 11430

Photogeologic methods

- Future applications, technology, speculation: Worthington, Joseph E. 00068
- Mexico, Jalisco and Colima, metals: Garcia Castaneda, Fausto. 08913
- Oil and gas structures, Oklahoma-Texas, Anadarko basin: Trollinger, William V. 01646
- Orbital photography, potential applications: Wobber, Frank J. 08172
- Quebec, Ungava, periglacial region: Avias, J. 11037
- Space photography, Gemini IX example: Carter, William D. 02377
- Space photos: Fischer, William A. 00352

Placer sampling

- Hydraulic equivalence concept, applications: Tourtelot, Harry A. 00112

Placers

- General: Daily, Arthur F. 02393

Mineral exploration—Continued*Programs*

- British Columbia, Cominco mines, ore estimation: Swanson, C. O. 05227
- Canada, deposits under Quaternary sediments: Robinson, S. C. 11147
- Canada Geological Survey, Mineral Deposits Section: Gross, G. A. 11144
- Canada, geophysical methods: Hood, Peter. 09600
- Continental margin, offshore drilling for gas and oil: Little, C. H. 09621
- Deposit evaluation, optimum effort, determination: Yegulalp, Tuncel Mustafa. 07163
- Development drilling and bulk sampling, surface mines: Waterman, Glenn C. 02389
- Game theory: Brooke, John P. 09575
- Greenland, Gronlands Geol. Undersogelse, private cooperation: Ellitsgaard-Rasmussen, K. 01639
- Planning problems: Celasun, Merih. 02614
- Planning, requirements: Bailly, Paul A. 02387
- Union Pacific Railroad, United States, western: Melbye, Charles E. 04316
- United States, government supported: Kiilsgaard, Thor H. 05760

Remote-sensing methods

- Emission measurement, lunar applications: Low, M. J. D. 11140
- General: Pecora, W. T. 05638
- Orbital survey for resources: Fischer, William A. 07310

Statistical methods

- Factor analysis, orebody delineation: Klován, J. E. 01033
- Game theory: Brooke, John P. 09575
- Gold, valuation surfaces, weighted moving average technique: Krige, D. G. 05225
- Ore reserve calculation: Blais, Roger A. 05226
- Ore reserve calculation, probability models: Hazen, Scott W., Jr. 05224

Surface mine prospects

- Evaluation, preliminary: Sundeen, Stanley P. 09859

Techniques

- Improvement, suggestions: Cook, Douglas R. 03844

Mineral resources*Continental margin*

- Popular account, shelf: Bodenhorn, Gregory S. 10825
- United States, eastern, exploration: Emery, Kenneth O. 07996

Disrubition

- Realities, need for research: Cloud, Preston E., Jr. 00157

General

- Future supply and demand: McGee, D. A. 09505

Kansas

- Lawrence area, construction materials, urban development: Kansas Geological Survey. 09203

Marine

- Exploration, recovery, review: Cruickshank, Michael J. 03668
- Exploration and exploitation problems: Fye, Paul M. 07485
- Offshore portions, possibilities: Weeks, Lewis G. 05432

Mineral resources—Continued*Ore deposits, general*

Definition, reserves classification: Cox, Herbert H. 05240

Oregon

Production, 1967: Mason, R. S. 09261

Reserves

Estimation, automatic data processing: O'Brian, D. T. 05218

Estimation, sample weighting, interpolation: David, M. 05222

Estimation, statistical methods: Blais, Roger A. 05226

Estimation, statistical methods, probability models: Hazen, Scott W., Jr. 05224

United States, exhaustion questioned: Cameron, Francis. 05030

Sea water

World production and potential: Shigley, C. M. 06105

Submarine

General: Ocean Industry. 01603

United States

Continental shelf, potential: McKelvey, V. E. 11325

Exploration, 1967, review: Simpson, T. A. 03836

Reserves, outlook: Cameron, Francis. 03842

World ocean

Deep ocean, geomorphic subdivisions, potential: James, Harold L. 06104

Symposium: Keiffer, Elisabeth. 06115

Mineral zoning*Carbonate replacement*

Mexico, Durango, Mapimi district: Hoffman, Victor J. 11303

General

Mexico, regional metallotectonic: Gabelman, J. W. 01617

Granite

Maine, southeastern, Tunk Lake pluton: Karner, Frank R. 00458

Manganese deposits

General, geochemistry: Roy, Supriya. 06986

Mercury, gold

California, Wilbur Springs: Joralemon, Peter. 04240

Pegmatite

Wyoming: Proctor, Paul Dean. 10940

Polymetallic ores

British Columbia, Rossland area, controls, hypogene sulfides: Thorpe, Ralph Irving. 01357

Porphyry copper

Aluminum silicates, New Mexico: Nielsen, Richard L. 00471

Arizona, San Manuel district: Lowell, J. David. 04123

Hydrothermal alteration: Guilbert, John M. 04139

New Mexico, Rialto stock: Thompson, Tommy B. 07639

Quartz monzonite

New Mexico, Santa Rita stock: Nielsen, Richard L. 07835

Regional

Trace elements, Mississippi Valley: Hall, Wayne E. 04122

Veins

New Mexico, silver, nickel, Burro Mts.: Gillerman, Elliot. 01915

Ontario, Cobalt district: Petruk, William. 09450

Mineral zoning—Continued*Veins—Continued*

Ontario, Cobalt-Gowganda area: Petruk, William. 04130

Zeolites

Nevada, Pahute Mesa-Yucca Flat area: Hoover, D. L. 06798

Mineralogy*Automatic-data processing*

Powder patterns, recognition program: Johnson, G. G., Jr. 08749

Catalogs

Amphibole analyses: Leake, Bernard E. 06320

Classification

Amphibole, catalog of analyses, nomenclature, associated minerals: Leake, Bernard E. 06320

Composition

Air comparison pycnometer, calcite, dolomite: Zenger, Donald H. 03568

Computer program, chemical analyses by end member molecules: Perry, Kenneth, Jr. 01482

Feldspar, chemical analyses, graphic representation: Perry, Kenneth, Jr. 05650

Crystal growth

Aragonite, transformed from vaterite, ion effect: Bischoff, J. L. 00278

Beryllium oxide, hydrothermal: Hill, Vincent G. 07887

Calcite, kinetics of nucleation: Bischoff, James L. 00969

Calcite, pH effects: McCauley, J. W. 07876

Calcite, transformed from aragonite: Bischoff, J. L. 00277

Colloform texture, interpretation: Roedder, Edwin. 04230

Diamond, synthesis: Dickinson, S. K. 07584

Dislocation-strain energy, effect: Shlichta, P. J. 07422

Experimental, high-pressure multi-purpose furnace: Wenckus, J. F. 07583

Fluid inclusions, leakage: Roedder, Edwin. 06943

Fluorapatite: Mazelsky, R. 07581

Ice, stress-generated: LaChapelle, E. 02544

Proustite and related minerals, Czochralski method: Gentile, A. L. 07582

Proustite, smithite, pyrrargyrite, experimental: Wehmeier, F. H. 03153

Ring crystals, popular account: Oldenburg, J. A. 09091

Spinel, experimental: Lipson, Herbert G. 07580

Sulfides, annealing: Stanton, R. L. 07637

Synthetic, popular account: Weaver, Kenneth F. 08139

Thermal imaging, high temperatures: Field, William G. 08685

Twinning: Donnelly, Thomas W. 02226

Twinning, energy factors: Carstens, Harald. 02227

Gems

Popular account: Bauer, Max. 06182

General

Dictionary of terms: Thrush, Paul W. 11362

Minerals and man, popular and elementary account: Hurlbut, Cornelius S., Jr. 06657

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History

Research, contributions of M. J. Buerger: Azaroff, Leonid V. 09644

Identification techniques

Crystals, interfacial angles, computer program: Fabregat, Francisco J. 09222

Mineralogy—Continued*Identification techniques—Continued*

- Electron paramagnetic resonance: Schindler, Peter. 09009
 Electron paramagnetic resonance, silicate minerals: Ghose, Subrata. 09010
 Gems, popular handbook: Pearl, Richard M. 08132
 Heavy minerals, gravity separation device: Modarresi, Hassan G. 01456
 Microspecimens, photomacrography: Gregory, Gardiner E. 10980
 Mossbauer effect: Hafner, Stefan S. 09013
 Mossbauer effect, nonsilicate minerals, Fe-57 resonance: Hafner, Stefan S. 09015
 Mossbauer effect, silicate minerals: Ghose, Subrata. 09014
 Mossbauer effect, tin minerals, Sn-119 resonance: Ghose, Subrata. 09016
 Multi-component systems, X-ray data, computer identification: McCaleb, Stanley B. 08795
 Nuclear magnetic and nuclear quadrupole resonance: Hafner, Stefan S. 09012
 Nuclear magnetic, nuclear quadrupole, and electron paramagnetic resonance: Proctor, Warren G. 09008
 Nuclear magnetic resonance, quadrupole effects: Brinkmann, Detlef. 09011
 Ore minerals: Petruk, W. 11149
 Quick-key guide: Bowser, Carl J. 06188
 Refractive-index determination, Chaulnes method: Miller, Arthur. 00564
 Seaman method, cleavage basis, Lake Superior State College, Mich.: Kemp, C. Ernest. 07806

Instruments

- Goniometer, polaroid adapter for Weissenberg: Rudman, Reuben. 04574
 Lapping machine attachment, oriented crystals: Johnson, Donald E. 09233
 Microradiographic apparatus: Ledley, Robert S. 09236

Inversion

- Vaterite to calcite: Northwood, D. O. 07525

Nomenclature

- Axinite, ferroaxinite, manganaxinite, tizenite: Sanero, E. 06752
 High and low silica faujasite: Wright, Alan C. 06785
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Polymorphism

- TiO₂: Dacheille, Frank. 07534

Pseudomorphism

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Mineralogy—Continued*Textbooks—Continued*

- Introductory: Desautels, Paul E. 06180
 Mineral analysis, techniques, chemical, spectrographic: Maxwell, John A. 07301

Theoretical studies

- Mineral bond strength, anion polarization: Polard, C. O., Jr. 10333

Mining geology*Automatic data processing*

- Computer systems, applications: Kaas, L. Michael. 05223
 Open pits, computer applications: Adams, B. W. 06865

Evaluation

- Asbestos, cores, visual method: Dean, A. W. 05339
 Development data, correlation, surface mines: Phelps, E. R. 02390
 Development drilling and bulk sampling, surface mines: Waterman, Glenn C. 02389
 Economic and geotechnical program, Quebec: Nichols, Lee. 07329
 Gold reserves, statistical methods: Krige, D. G. 05225
 Ore definition, reserves classification: Cox, Herbert H. 05240
 Ore reserves, automatic data processing: O'Brian, D. T. 05218
 Ore reserves, British Columbia, Cominco mines: Swanson, C. O. 05227
 Ore reserves, grade control, conference: Canadian Inst. Mining and Metallurgy. 11268
 Ore reserves, Newfoundland, Whalesback mine: Agterberg, F. P. 05217
 Ore reserves, Newfoundland, Whalesback mine: Agterberg, F. P. 05228
 Ore reserves, Newfoundland, Whalesback mine: Piloski, M. J. 05315
 Ore reserves, sample weighting, interpolation: David, M. 05222
 Ore reserves, specific gravity, sampling: Dadson, A. S. 05314
 Ore reserves, statistical methods: Blais, Roger A. 05226
 Phosphate, marine phosphorite deposits: Cathcart, James B. 09110
 Popular and elementary account: Northern Miner Press Limited. 06161
 Reserves, improvement of method: Mickle, David G. 07774
 Statistical methods, probability models: Hazen, Scott W., Jr. 05224
 Surface mine prospects: Sundeen, Stanley P. 09859
 Trend-surface analysis, block-grid calculation: Phillips, R. J. 09563

Exploration

- Geophysical activity, 1967, world statistics: Hood, Peter J. 06144

General

- Dictionary of terms: Thrush, Paul W. 11362

Practice

- Mine surveyors, professional status: Vaca Altorre, Alfonso. 06790

Production control

- Minnesota, Mesabi Range: Owens, John S. 06881
 Phosphate, marine phosphorite deposits: Cathcart, James B. 09110

Programs

- Industrial minerals: Wimpfen, Sheldon P. 02392

Mining geology—Continued*Research*

Present and future needs, applied: Reed, John J. 07772

Subsidence

Prediction and control, analysis, model study: Pariseau, William G. 06350

Technology

Block caving, sand box model: McCormick, R. J. 09593

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Chemical explosions, taconite physical properties: Gnirk, Paul F. 07472

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Maps, gravity

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Minnesota—Continued*Petrology—Continued*

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Mississippian—Continued

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Missouri—Continued

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Mississippian, Lower, revision, biostratigraphy:
Canis, Wayne F. 02197
Ordovician-Mississippian, Maxville quadrangle:
Stinchcomb, Bruce L. 02934
Pennsylvanian, Cherokee Group, Krebs and
Cabaniss formations: Branson, Carl C. 10872
Pennsylvanian, Desmoinesian Series, Bates
County, cyclothem: Gentile, Richard J.
08064
Pennsylvanian, Pleistocene, Independence
quadrangle: Parizek, Eldon J. 02917
Pennsylvanian, Pleistocene, Saint Joseph area:
Association of Missouri Geologists. 08126
Pleistocene, Ferrelview Formation,
northwestern: Howe, W. B. 02313

Structural geology

Bates County, Pennsylvanian anticlines, subsur-
face faults: Gentile, Richard J. 08064
Crust, seismic profiles: Stewart, S. W. 00480
Forest City basin, history: Anderson, K. H.
00265
North Fork River, Bryant Creek basins, drainage
controls: Skelton, John. 02701
Ozark uplift, east flank, faulting: Tikrity, Sammi.
11068
Saint Francois Mountains, tectonic style: Zim-
merman, R. A. 01452

Missouri—Continued

Weathering

Loess, montmorillonite:kaolinite ratio, Mg dis-
tribution: Protz, R. 05965
Rolla quadrangle, stone accumulation:
Schroeder, Walter A. 08140

*Mohorovicic discontinuity**Mohole project*

Deep-drilling program: Mekhtiyev, Sh. F. 11154

Movement

Calculation as function of time: O'Connell,
Richard J. 03922
Calculation as function of time: vandeLindt, W.
J. 03923

Seismic studies

Alaska, central interior: Hanson, Kenneth.
04827
Filtering effects, models: Howell, B. F., Jr.
07899
Idaho-Oregon-Tufts Abyssal Plain: Dehlinger, P.
03623
Theoretical vs. natural, Bering Sea: Helmberger,
Donald V. 00378

*Mollusca**Aulachochiton praecursor*, n.sp.

Cretaceous, Puerto Rico, San German Forma-
tion: Smith, Allyn G. 02900

Bivalvia

Evolution, siphon formation: Stanley, Steven M.
08003

Cambrian-Ordovician

Mexico, Oaxaca, Tinu Fm., pelagiellacean,
hyolithid: Yochelson, Ellis L. 03233

Cenozoic

Mexico, Baja California: Hertlein, Leo G. 04300

Chiton (Chiton) berryi, n.sp.

Cretaceous, Georgia, Ripley Formation: Smith,
Allyn G. 02900

Chiton (Chiton) rossi, n.sp.

Cretaceous, Puerto Rico, San German Forma-
tion: Smith, Allyn G. 02900

Cretaceous

Kansas, Kiowa Formation, central: Scott, Robert
W. 01354
Mexico, Baja California, Alsitos Formation: Al-
lison, Edwin Chester. 00846
New Mexico, Semilla Sandstone, San Juan
Basin, fauna: Dane, Carle H. 01035

Evolution

Shell calcification, phylogenetic tree: Matheja,
Johann. 10958

Jurassic-Pleistocene

California, San Diego County, guide: Moore,
Ellen J. 04354

Monoplacophora

Devonian, New York, morphology: Rollins, H.
B. 00623

Morphology

Coelom, origin and function, flatworm an-
cestors: Salvini-Plawen, Luitfried von. 02926
Shell growth bands, periodic patterns, Pennsylv-
anian to present: Pannella, Giorgio. 05858

Oligocene-Miocene

California, Carrizo Plain-Temblor Range, cor-
relation: Addicott, Warren O. 04037

Pennsylvanian

Oklahoma, Wann Formation, paleoecology: Mc-
Coy, Scott, Jr. 00419

Permian

United States, western, Phosphoria rock com-
plex: Yochelson, Ellis L. 00126

Mollusca—Continued*Polytopia billingsi*

Ordovician, Tennessee, Minnesota, redescribed:
Yochelson, Ellis L. 01146

Precambrian

Organic shells, later calcification: Matheja,
Johann. 10958

Quaternary

Arizona, Winona area, lake sediments:
Batchelder, George L. 04388

Kentucky, Peoria loess, Henderson County:
Browne, Ruth G. 01681

New Mexico, Rio Grande valley, Caballo Dam
area, alluvial deposits: Metcalf, Artie L.
11047

Ontario, Wasaga Beach, glacial lake Nipissing
fauna: Farrand, W. R. 10975

South Dakota, Pickerel Lake, sediment core:
Watts, W. A. 01999

Texas, Rio Grande valley, El Paso area, alluvial
deposits: Metcalf, Artie L. 11047

United States, northeastern, faunas: Richards,
Horace G. 08202

Washington, Lower Grand Coulee, nonmarine:
Landye, James J. 00406

Sinuotopsis acutilira

Devonian, New York, Skaneateles Formation:
Rollins, H. B. 00623

Taxonomy

Mexico, Pacific coast, P.P. Carpenter types,
British Museum: Keen, A. Myra. 02807

Miocene, California: Fritsche, A. Eugene. 09997

Tentaculites

Devonian, Alaska, McCann Hill Chert and Sal-
montrout Limestone: Churkin, Michael, Jr.
02888

Tentaculitidae

Devonian, evolution, stratigraphic significance:
Boucek, Bedrich. 02969

Tertiary

California, Fernando Group, paleoecology:
Meade, Robert Francis. 02037

Molybdenum*Abundance*

Meteorites, magnetic, non-magnetic fractions,
distributions: Niles, Gerald L. 08489

Analysis

Spectrochemical, water, Colorado, Clear Creek:
Mallory, Edward C., Jr. 00775

Use of dithiol, rapid method: Marshall, N. J.
01908

Arizona

Mineral Park district, occurrence, genesis: Eidel,
J. J. 05430

San Manuel district, exploration, guides: Lowell,
J. David. 04123

British Columbia

Brenda mines, exploration, electrical: Fountain,
D. K. 01097

Endako deposit: Matheson, H. J. 11152

Exploration, geochemical: Horsnail, R. F. 06845

Exploration, geophysical methods: Fountain,
David K. 07754

Colorado

Climax area, occurrence, genesis: Wallace,
Stewart R. 05400

Front Range, genesis: Taylor, Richard B. 05126

Rabbit Ears Range, Poison Ridge stock, explora-
tion: Kinney, Douglas M. 03994

Red Mountain, occurrence: Wallace, Stewart R.
11248

Molybdenum—Continued*Exploration*

Chemical analysis, rapid: Marshall, N. J. 01908

Field kit, analysis: Barakso, John. 04118

Field kit, analysis: Bloom, Harold. 00473

Field kit, analysis: Lapointe, Guy. 04241

Hydrothermal alteration, zoning: Guilbert, John
M. 04139

Mexico

Sonora, Chihuahua: Wilson, Ivan F. 04148

New Mexico

Lincoln County, genesis: Thompson, Tommy B.
07639

Questa mine area, occurrence, genesis: Car-
penter, Robert H. 05349

Questa mine, reserve estimation, sampling:
Hymas, K. I. 05312

Red River district, Questa mine, occurrence:
Clark, K. F. 04226

Sierra Blanca, occurrence, genesis: Giles, David
L. 04154

Ontario

Resources, limited: Johnston, F. J. 07661

Quebec

Abitibi County: Wilson, Arnold. 11066

Preissac mines: Watt, Peter D. 10139

Monazite*Florida*

Bone Valley Fm., potential: Stow, Stephen H.
07688

United States

Southeastern, placers, possibilities: Overstreet,
William C. 00323

Montana*Absolute age*

Artifacts, Quaternary, Altitheal: Husted, Wil-
fred M. 02328

Belt Series, chronology: Obradovich, J. D.
07487

Boulder batholith, emplacement time span:
Tilling, Robert I. 04441

Gallatin Range, Eocene volcanism: Chadwick,
Robert A. 10217

Helena area, Elkhorn Mountain volcanics:
Robinson, G. D. 06502

Jardine-Crevise Mountain area, Precambrian
rocks: Brookins, Douglas G. 06974

Little Belt and Beartooth Mts., zircon, in-
terpretation: Catanzaro, E. J. 04708

Rocky Mountains area, Precambrian chrono-
logy: Giletti, Bruno J. 04710

Stillwater complex, Rb-Sr, K-Ar: Kistler, R. W.
08763

Sun River area, Missoula Group, Rb-Sr, K-Ar:
Obradovich, John D. 09152

Wolf Creek, Sappington, volcanic glass, K-Ar:
Hanna, William F. 10369

Yellowstone Valley, basalt, K-Ar: Bush, John H.
10213

Areal geology

Beartooth Mountains-Gallatin Range, guide-
book: Wayne State University. 07680

Black Hills area, guidebook: Wyoming Geologi-
cal Association. 05903

Deer Lodge Valley: Konizeski, R. L. 04376

Gallatin Range and Yellowstone Valley, field
trip: Chadwick, Robert A. 07682

Kalispell Valley: Konizeski, R. L. 03621

Lubrecht Experimental Forest: Brenner, Robert
L. 05619

Meagher County, west-central: Birkholz, Donald
O. 10209

Montana—Continued

Areal geology—Continued

Sawtooth Range, Ford Creek area: Langfield, P. M. 04067

Southeastern, field trip log: Mohl, K. L. 05881

Earthquakes

1965, Yellowstone-Hebgen Lake region: Eaton, J. P. 08263

Microseisms, mode structure, sources: Toksoz, M. Nafi. 00174

Economic geology

Chromite, Stillwater Complex: Jackson, Everett D. 05356

Clays, shale, Helena, Great Falls, and other areas, evaluation: Berg, R. B. 09121

Coal, Black Hills area, resources, evaluation: Levene, Harold. 05920

Coal, Fort Union Formation, reserves: Groff, S. L. 01912

Coal, Great Falls-Lewistown field, reserves: Silverman, Arnold. 08000

Coal, strippable deposits, Powder River County: Matson, Robert E. 05660

Copper, Butte, geochemistry: Doe, B. R. 07636

Copper, manganese, zinc, Butte district: Meyer, Charles. 05351

Lignite, Fort Union Formation, reserves, method: Carmichael, Virgil W. 01911

Lignite, Foster Creek field, reserves, evaluation: Gilmour, E. H. 10228

Limestone, Rattler Gulch area, exploration, reserves: Landreth, John O. 00602

Metals, Castle Mountain mining district: Winters, Allen S. 02560

Natural gas, nitrogen, Williston basin: McCrae, R. O. 03384

Natural gas, Sweetgrass arch area, occurrence: Nordquist, Jack W. 02140

Petroleum and natural gas, southeastern, Bell Creek field: McGregor, A. A. 05996

Petroleum, Bell Creek field: McGregor, Alexander A. 04505

Petroleum, Bell Creek field, discovery: Gary, Samuel. 00168

Petroleum, Bell Creek field, occurrence: Biggs, Charles A. 05908

Petroleum, Bell Creek field, occurrence, production history: Haddenhorst, Fred A. 05909

Petroleum, occurrence, Muddy Sandstone: Wulf, George R. 05905

Petroleum, southeastern, Muddy Sandstone: Guess, Roy H. 05907

Petroleum, Williston basin, carbonate reservoir evaluation: Marchant, L. C. 07276

Engineering geology

Dams, foundations, earthquake response, experimental: Keightley, W. O. 04850

Foundations, Helena reservoirs, fractures: Elliott, Harold C. 04854

Tunnels, Flathead, Salish Range: Galster, Richard W. 04858

Geochemistry

Boulder batholith, Pb, Sr isotopes: Doe, B. R. 07636

Cambrian-Devonian rocks, lead isotopes: Zartman, R. E. 04111

Castle Mountain mining district, metals, geochemical prospecting: Winters, Allen S. 02560

Highwood Mountains, igneous rocks, analcime composition: Wilkinson, J. F. G. 05298

Lewis and Clark Range, geochemical prospecting, lead-zinc: Mudge, Melville R. 04110

Montana—Continued

Geochemistry—Continued

Libby area, vermiculite, hydrobiotite, genesis, experimental: Boettcher, A. L. 07753

Philipsburg, Boulder batholiths, trace metals: Brownlow, Arthur H. 08628

Soils, nitrogen content: Faust, Richard A. 05610

Stillwater complex, Fe-rich chromite, composition: Beeson, Melvin H. 10765

Stillwater complex, minerals, radiogenic argon: Schwartzman, David W. 10764

Geomorphology

Beartooth Mountains, periglacial boulder clusters, piping: Smith, H. T. U. 07392

Caves, high-mountain, gravity sliding origin: Campbell, Newell P. 07784

Geophysical surveys

Crazy Mountain stock complex, gravity: Kelley, William N., Jr. 07910

Crustal structure, lateral variation, seismic, gravity, magnetic: Glover, Peter. 00042

Deer Lodge Valley, gravity: Cremer, E. A., 3d. 04467

Disturbed Belt, northern, magnetic, gravity: Kleinkopf, M. D. 10238

Eastern, gravity: Plouff, Donald. 10365

Intrusions, shape, gravity: Bonini, W. E. 06830

Lewis and Clark Range, southeastern, magnetic, gravity: Mudge, Melville R. 04110

Northwestern, magnetic, gravity: Kleinkopf, M. D. 11108

Western, central, gravity: Smith, Robert Baer. 00865

Glacial geology

Beartooth Mountains, Grasshopper Glacier, mass balance: Alford, Donald. 05609

Tobacco Root Mountains, cirques: Jacobs, Alan M. 08289

Hydrogeology

Bighorn Valley, lower, ground-water resources: Hamilton, L. J. 03680

Deer Lodge Valley, ground-water resources: Konizeski, R. L. 04376

Eastern, Fox Hills-Hell Creek aquifer, constants, stress relations: Taylor, O. James. 02687

Ground-water levels, 1961-65: U.S. Geological Survey. 02411

Ground-water resources: Konizeski, Richard L. 03762

KalisPELL Valley, ground-water resources: Konizeski, R. L. 03621

North-central, Judith River Formation: Osterkamp, W. R. 04759

Powder River valley, Cretaceous and Cenozoic aquifers: Taylor, O. James. 02572

Water levels and artesian pressures, well records, 1953-67: Reed, T. E. 02561

Maps, geochemical

Lewis and Clark Range, southeastern: Mudge, Melville R. 04110

Maps, geologic

Beaverhead Range, central: Scholten, Robert. 07899

Castle Mountain mining district: Winters, Allen S. 02560

Castle Reef quadrangle: Mudge, Melville R. 00336

Hatfield Mountain quadrangle: Skipp, Betty. 00996

KalisPELL Valley area: Konizeski, R. L. 03621

Lewis and Clark Range, southeastern: Mudge, Melville R. 04110

Lubrecht Experimental Forest: Brenner, Robert L. 05619

Montana—Continued*Maps, geologic—Continued*

Roberts Mountain quadrangle: Schmidt, Robert George. 04417

Maps, gravity

Deer Lodge Valley: Cremer, E. A., 3d. 04467
KalisPELL Valley area: Konizeski, R. L. 03621
Lewis and Clark Range, southeastern: Mudge, Melville R. 04110

Maps, ground water

Bighorn Valley, lower: Hamilton, L. J. 03680
Deer Lodge Valley: Konizeski, R. L. 04376
KalisPELL Valley area: Konizeski, R. L. 03621
North-central, Judith River Formation: Osterkamp, W. R. 04759
Powder River valley, Custer-Fallon-Prairie Counties: Taylor, O. James. 02572

Maps, magnetic

Lewis and Clark Range, southeastern: Mudge, Melville R. 04110

Mineralogy

Clay minerals, Morrison and Kootenai Fms.: Suttner, Lee J. 06947
Feldspar, alkali, Rader Creek pluton: Tilling, Robert I. 05084
Feldspar, Rader Creek pluton, perthitization: Tilling, Robert I. 08033
Hinsdalite, Butte area, identification, electron probe: Mead, Cynthia W. 05232

Paleoclimatology

Altitheermal, age: Husted, Wilfred M. 02328

Paleomagnetism

Precambrian, Stillwater complex: Bergh, Hugh W. 08384
Tertiary, Gallatin Range, Yellowstone Valley, volcanic rocks: Chadwick, Robert A. 07682

Paleontology

Algae, biostrome, Mississippian, Sappington Formation, paleoecology: Gutschick, Raymond C. 07950
Algae, Precambrian, Belt Series, molar tooth structures: Pflug, Hans D. 02551
Brachiopoda, Mississippian, Lodgepole Limestone, Madison County: Rodriguez, Joaquin. 08859
Brachiopoda, Mississippian, Lodgepole Limestone, southwestern: Rodriguez, Joaquin. 05769
Gymnosperms, Oligocene, western, cones: Miller, Charles N., Jr. 00384
Gymnosperms, Oligocene, western, pine cones: Miller, C. N. 02306
Mammalia, Cretaceous, Hell Creek Formation, marsupial jaw: Clemens, William A., Jr. 01650
Mammalia, Oligocene, ischyromyid rodents: Black, Craig C. 02848
Mammalia, Paleocene, Silberling and Gidley quarries, picrodents: Szalay, Frederick S. 03870
Pteridophytes, Cretaceous, eastern, new salviniaceans: Hall, John W. 03146
Pteridophytes, Cretaceous, Hell Creek Formation, Dawson County, new: Hall, John W. 04527
Reptilia, Cretaceous, Bearpaw Shale, Malta area: Rich, T. Hewitt. 08317
Reptilia, Willow Creek beds, east of Alberta syncline, dinosaur: Russell, Loris S. 01964
Stromatolites, Pennsylvanian, Alaska Bench Limestone: Gilmour, Ernest H. 00426

Petrology

Beartooth Mountains, amphibolites, regional distribution: Bentley, Robert D. 07821

Montana—Continued*Petrology—Continued*

Boulder batholith, emplacement, time span: Tilling, Robert I. 04441
Butte district, quartz monzonite, hydrothermal alteration: Guilbert, J. M. 05565
Crazy Mountains, Big Timber stock: Tappe, John. 10268
Gallatin Range and Yellowstone Valley, Tertiary volcanics: Chadwick, Robert A. 07682
Gallatin Range, Eocene volcanics: Chadwick, Robert A. 10217
Highwood Mountains, igneous rocks, analcime-rich: Wilkinson, J. F. G. 05298
Little Belt Mountains, Yogo Peak pluton, differentiation: Woodward, Lee A. 10278
Lolo Pass, Idaho batholith, skarn, reaction rims: Nold, John. 10990
Mission-Swan Ranges, southern, Precambrian rocks: O'Connor, Michael Peter. 01351
Missouri River Breaks, diatremes: Hearn, B. Carter, Jr. 00123
Stillwater intrusion, layering, crystal fractionation: Wager, L. R. 00366
Yellowstone Valley, basalt: Bush, John H. 10213
Yogo Peak pluton, plagioclase, alkali feldspar, relations: Woodward, Lee A. 09741

Sedimentary petrology

Bell Creek oil field, Muddy Sandstone, stratigraphic trap: Berg, Robert R. 04506
Belt Supergroup, middle carbonate units: McKelvey, Gregory E. 03856
Belt-Purcell Supergroup, molar-tooth structures, genesis: Smith, A. Gilbert. 03893
Hell Creek Formation: Frye, Charles Isaac. 02034
Kibbey Formation, textures, deposition: Rawson, Richard R. 04390
Lewis and Clark Range, Shields Formation, salt casts: O'Brien, Dennis C. 03535
Precambrian, Piegan Group-Missoula Group, cyclic sedimentation: O'Connor, Michael P. 08831
Sun River area, Cretaceous conglomerates, igneous pebbles: Mudge, Melville R. 05186
West-central, Morrison-Kootenai rocks, environment: Silverman, Arnold. 08000
Western, Pilcher Quartzite, ice-cemented sand blocks: Hall, Frank W. 07951

Stratigraphy

Cambrian-Cretaceous, Castle Reef quadrangle, sections: Mudge, Melville R. 00336
Cretaceous, Hell Creek Formation, new members: Frye, Charles Isaac. 02034
Cretaceous, Judith River Formation, north-central: Osterkamp, W. R. 04759
Cretaceous, Livingston Group, Crazy Mts.: Sims, John David. 01738
Cretaceous, Muddy Sandstone, Rocky Mts.: Wulf, George R. 05905
Cretaceous, southeastern, Bell Creek oil field: McGregor, Alexander A. 04505
Mississippian, carbonate strata, southwestern: Huh, Oscar K. 01223
Mississippian, Kibbey Formation, Ray Member: Rawson, Richard R. 06973
Mississippian-Cretaceous, Hatfield Mtn. quadrangle, section: Skipp, Betty. 00996
Precambrian, Piegan Group-Missoula Group boundary, western: O'Connor, Michael Peter. 01351

Montana—Continued*Stratigraphy—Continued*

- Precambrian, Wallace Formation and equivalents, western: McKelvey, Gregory E. 03856
- Precambrian-Cambrian, Belt Series, gradational boundary, western: Illich, Harold A. 07902
- Precambrian-Cambrian, Missoula area: Dobell, Joseph P. 10223
- Precambrian-Cretaceous, Lewis and Clark Range, southeastern: Mudge, Melville R. 04110
- Roberts Mountain quadrangle, section: Schmidt, Robert George. 04417
- Tertiary, Bozeman Group, correlation, southwestern: Kuenzi, W. David. 11071
- Tertiary, Jefferson River basin: Kuenzi, W. David. 10239
- Triassic-Jurassic: Carlson, C. E. 11230

Structural geology

- Beartooth Mountains, Cloverleaf Lakes area: Bentley, Robert D. 10207
- Beaverhead Range, central, tectonics, mechanisms, evolution: Scholten, Robert. 07899
- Bitterroot Range, northern, evolution: Wehrenberg, John P. 10275
- Black Hills area, tectonics, regional setting: Sales, John K. 05904
- Boulder batholith, emplacement: Klepper, Montis R. 08764
- Boulder batholith region, dynamic events: Robinson, G. D. 06502
- Chief Mountain, double klippe: Barnes, William C. 09970
- Crazy Mountains basin, thin-skinned deformation, Paleocene: Skipp, Betty. 10262
- Disturbed belt: Hruska, Donald C. 10233
- Hatfield Mountain quadrangle, folds, faults: Skipp, Betty. 00996
- Highland Mountains, thrust faults: Smedes, Harry W. 10263
- LASA, variations: Glover, Peter. 10544
- Little Rocky Mountains, fracture analysis: Cotera, Augustus S., Jr. 04396
- Northwestern, Lewis thrust salient, imbricate thrusts: Barnes, William C. 08573
- Sheridan district, Precambrian, flow folding, nappe development: Burger, Henry Robert. 3d. 08632
- Southwestern, thrust faults, Devonian tectonics: Mapel, William J. 05184
- Western, central, tectonics: Smith, Robert Baer. 00865

Mud volcanoes*Texas*

- Southern, Gueydan Formation: Freeman, P. S. 03352

Museums*American Museum Natural History*

- Clarence S. Bement mineral collection: Seaman, David M. 09096

American Museum of Natural History

- History, dinosaurs: Shuttlesworth, Dorothy E. 09183

Nebraska*Economic geology*

- Petroleum, Denver basin, Dakota Sandstone traps: Exum, F. A. 04504
- Uranium, reconnaissance, 1951-56: U.S. Atomic Energy Commission. 08995

Nebraska—Continued*Engineering geology*

- Highways, application, procedures: Eversoll, Duane A. 04149
- Materials, properties, loess, Omaha-Council Bluffs area: Benak, Joseph Vincent. 01337
- Reservoirs, Omaha area, Papillion Creek: Smith, Joseph B. 04001

Geochemistry

- Platte River drainage area, lower, ground and river water: Barnes, Ivan. 01490

Geomorphology

- Hastings area, Beaver Creek watershed, channel, floodplain: Allen, William H., Jr. 07574
- Loess, eolian origin, climate factor: Reed, Eugene C. 02324
- Loess, origin in High Plains, western: Lugin, A. L. 02330
- Sand dunes, volume and trend measurements: Warren, Andrew. 02475
- Sand Hills, dunes, cf. North Africa: Smith, H. T. U. 02325

Hydrogeology

- Adams County, ground-water resources: Keech, C. F. 02597
- Antelope County, water resources: Souders, V. L. 07053
- Ashland area, Lincoln wellfield, ground-water recharge, sand pits: Brugger, Wayne E. 02485
- Fillmore County, ground-water resources: Keech, C. F. 00910
- Ground water atlas: Nebraska Univ. Conserv. and Survey Div. 09840
- Ground-water levels, wells, 1967: Keech, C. F. 02432
- Hastings area, Beaver Creek watershed, floodplain catchment: Allen, William H., Jr. 07574
- Lincoln, Antelope Valley well field, recharge: Marlette, R. R. 08067
- Platte River drainage area, ground and river water, geochemistry: Barnes, Ivan. 01490
- Polk County, ground-water data: Smith, F. A. 01642

Maps, ground water

- Adams County: Keech, C. F. 02597
- Antelope County: Souders, V. L. 07053
- Fillmore County: Keech, C. F. 00910
- General, quality, storage, regions: Nebraska Univ. Conserv. and Survey Div. 09840

Paleontology

- Mammalia, Miocene-Pliocene, Valentine Formation, Norden Bridge, rodents: Klingener, David. 02810
- Mammalia, Oligocene, cricetine rodents, cf. Europe: Alker, Julius. 09034
- Mammalia, Oligocene, hyracodontids: Tanner, Lloyd G. 02474
- Mammalia, Oligocene, ischyromyid rodents: Black, Craig C. 02848
- Mammalia, Pliocene, chalicotheres: Skinner, Morris F. 03872
- Pisces, Mississippian-Permian, bradyodont, cf. Ohio, Pennsylvanian: Hansen, Michael C. 02486
- Trilobita, Pennsylvanian, biometrics, growth, phillipsiid: Pabian, Roger K. 07399
- Trilobita, Pennsylvanian, Haynies Limestone, Weeping Water area: Pabian, Roger K. 02483
- Vertebrata, Tertiary, seasonal growth evidence: Voorhies, M. R. 11049

Nebraska—Continued

Sedimentary petrology

- Lincoln-Seward area, Cedar Bluffs till, iron-formation fragments: Stevenson, T. H. 02472
 Platte River drainage area, lower, fluvial sediments: Barnes, Ivan. 01490

Stratigraphy

- Cretaceous, Dakota Sandstone, "J" sandstone, Denver basin: Exum, F. A. 04504
 Miocene, Marsland Formation: Stout, Thompson M. 02473
 Permian, Council Grove Group, southeastern: Avers, Darrell D. 02468
 Tertiary, interstate correlations, problems: Schultz, C. Bertrand. 02470

Neon

Abundance

- Enstatite melts: Kirsten, T. 00657

Geochemistry

- Carbonaceous chondrites, cosmogenic and trapped: Pepin, Robert O. 08049
 Chondritic meteorites, unequilibrated, analyses: Heymann, D. 00297

Isotopes

- Abundance, natural gas, relations to helium genesis: Stroud, Lowell. 08009

Neutron diffraction analysis

Methods

- Multiple reflection, elimination, four-circle diffractometer: Coppens, P. 00938

Nevada

Absolute age

- Death Valley-Furnace Creek fault zone, igneous, sedimentary rocks: McKee, E. H. 01069
 Lincoln County, Caliente depression, volcanics, K-Ar: Noble, D. C. 10248
 Mono Basin, volcanics: Gilbert, C. M. 06355
 Mount Wheeler mine area, zircon: Lee, Donald E. 05195
 Nye and Esmeralda Counties, volcanic rocks: Kistler, Ronald W. 06796
 Ruby Mountains, plutonic activity: Kistler, Ronald W. 10012
 Silver Peak region, Tertiary volcanics, sediments: Robinson, Paul T. 06578
 Southern, volcanics, fault systems: Ekren, E. B. 06795

Areal geology

- Lake Tahoe area: Burnett, John L. 03673
 Lake Tahoe area, guidebook: Geol. Soc. Sacramento. 03748
 Mount Shader quadrangle: Hamill, Gilmore S. 08586
 Nevada Test Site region, symposium 1966: Eckel, Edwin B. 06820
 White Pine County, Cherry Creek and Egan Ranges: Fritz, William H. 08917
 White Pine-Grant Range area: Moores, E. M. 05263

Earthquakes

- 1954, Dixie Valley-Fairview Peak, energy release, surface strain: Meister, Laurent J. 04370
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 August 16, 1966, Lincoln County: Cook, Kenneth L. 10547
 Central, micro-distribution, mechanism: Stauder, William. 10044
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 Dixie Valley-Fairview Peak area, strain energy release: Burford, Robert O. 08246

Nevada—Continued

Earthquakes—Continued

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 Western, traveltimes, measurements: Green-sfelder, R. 08275

Economic geology

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 Copper, Mountain City mine: Coats, Robert R. 05375
 Copper-gold-silver, Lander County: Sayers, R. W. 09461
 Gems, turquoise: Morrissey, Frank R. 03174
 Gold, Carlin area: Hausen, Donald M. 05484
 Gold, Cortez prospect, occurrence: Wells, John D. 00839
 Gold, silver, Tuscarora area, possibilities: Coats, R. R. 00782
 Gold, Tenabo-Gold Acres area, exploration: Wrucke, Chester T. 00838
 Magnesite-brucite, Gabbs area: Schilling, John H. 05363
 Manganese, Nye County: Hewett, D. F. 04221
 Mercury, Opalite mining district: Fisk, Elwin L. 05361
 Metals, eastern and central: Hewitt, William Paxton. 05482
 Metals, Eureka district: Nolan, T. B. 05486
 Metals, Gold Acres and Tenabo areas, distribution: Wrucke, Chester T. 02584
 Metals, Lander County, southern, possibilities: Stewart, John H. 00911
 Metals, volcanics: Albers, John P. 00840
 Mineral County, regional belts, prospecting zones: Archbold, N. L. 08232
 Petroleum, developments, 1953-67: Schilling, John H. 04181
 Petroleum, Eagle Springs field: Schilling, John H. 04181
 Polymetallic ores, Tem Piute, genesis: Buseck, Peter R. 08581
 Silver, Morey district, mineralogy: Williams, Sidney A. 03754
 Silver-lead-zinc, Pioche district: Gemmill, Paul. 05378

Engineering geology

- Geologic hazards, Lake Tahoe area: Matthews, Robert A. 03674
 Land subsidence, Las Vegas Valley: Domenico, Patrick A. 07764
 Materials, properties, Nevada Test Site, Cenozoic volcanics: Healey, D. L. 10954
 Materials, properties, Nevada Test Site, volcanic rocks: Carroll, Roderick D. 06819
 Materials, properties, Pahute Mesa, volcanic rocks: Snyder, R. P. 07145
 Materials, properties, Yucca Flat, granitic rock: Ege, John R. 06812
 Nuclear explosions, fracture patterns: Barosh, Patrick J. 06813
 Nuclear explosions, Nevada Test Site, groundwater contamination: Essington, Edward H. 06797
 Nuclear explosions, site appraisal: Houser, F. N. 06823
 Nuclear explosions, southern, geologic results, general: Eckel, Edwin B. 06821
 Nuclear explosions, underground test site, fault displacement: Dickey, D. D. 06814
 Rock mechanics, basalt, strength: Lutton, R. J. 05039

Nevada—Continued*Engineering geology—Continued*

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- Rock mechanics, slope design, Ely area, Kimbley pit: Wisecarver, David W. 00050
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- Slope stability, Ely area, Kimbley pit: Merrill, Robert H. 06761
- Slope stability, Ely area, Kimbley pit, model study: Blake, Wilson. 07010
- Soils, compressibility, Las Vegas Valley, land subsidence relations: Mindling, Anthony. 10988
- Underground excavation, Yucca Flat, stability index: Ege, John R. 06812
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- Waste disposal, Beatty area, proposed site: Clebsch, Alfred, Jr. 11089

General

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Geochemistry

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Geomorphology

- Humboldt River, Lake Lahontan, late Quaternary history: Hawley, John W. 11020
- Lake Tahoe, general: Goldman, Charles R. 09387
- Truckee River, Tahoe-age flood velocities: Birkeland, Peter W. 00538
- Yucca Flats area, alluvial fans: Fernald, Arthur T. 06825

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Nevada—Continued*Geophysical surveys—Continued*

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Nevada—Continued

Maps, geologic—Continued

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 Shoshone Range, Ravenswood window: Stewart, John H. 00911
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Maps, gravity

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 Manganese oxides, Nye County: Hewett, D. F. 04221
 Santa Rosa Range, basalt, rhyolite, modal analyses: LeMasurier, Wesley E. 02695
 Silver ores, Morey district: Williams, Sidney A. 03754
 Stonewall Pass area, petrified wood, collecting: Strong, Mary Frances. 08138
 Zeolites, Nevada Test Site, genesis: Hoover, D. L. 06798
 Zircon, granitoid rocks, Mt. Wheeler mine area: Lee, Donald E. 05195

Paleoclimatology

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Paleomagnetism

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 Tertiary, ash-flow tuff, Test Site, remanent: Allingham, John W. 08569
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Paleontology

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Nevada—Continued

Paleontology—Continued

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 Anthozoa, Permian, Arcturus Group, White Pine County: Stevens, Calvin H. 08334
 Brachiopoda, Cephalopoda, Mississippian-Pennsylvanian: Gordon, Mackenzie, Jr. 06810
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 Conodonts, Devonian, central, correlation, western Utah: Clark, David L. 02897
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 Crinoida, Permian, Arrow Canyon Range, Battlefield Wash: Webster, G. D. 10127
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 Graptolithina, Silurian-Devonian, faunal zoning: Berry, W. B. N. 02830
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 Trilobita, Cambrian, Middle, Lander County, paradoxid: Palmer, Allison R. 00490
 Trilobita, Cambrian, Pioche Shale, White Pine County: Fritz, W. H. 01044
 Vertebrata, Pliocene, Esmeralda Fm., west-central: Mawby, John Evans. 07193
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 Antelope Range, volcanics, differentiation: Blake, M. C., Jr. 08576
 Ash-flow tuffs, flowage mechanism, cf. Canary Islands: Noble, Donald C. 05683
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Nevada—Continued

Petrology—Continued

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 Mono Basin, volcanics, eruptive history: Gilbert, C. M. 06355
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 Pahute Mesa, Silent Canyon volcanics, eruptive history: Orkild, Paul P. 06815
 Pliocene, Timber Mountain Tuff, ash-flow sheets: Byers, F. M., Jr. 06816
 Santa Rosa Range, basalt and rhyolite: LeMasurier, Wesley E. 02695
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 Steamboat Springs, hot-spring system, rock alterations: Schoen, Robert. 09161
 Volcanic centers, relation to ore deposits: Albers, John P. 00840
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 White Mountains, Inyo batholith, processes, randomness: Krauskopf, Konrad B. 03057
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Stratigraphy

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 Cambrian-Quaternary, Mount Callaghan quadrangle, sections: Stewart, John H. 02274
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Nevada—Continued

Stratigraphy—Continued

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 Magruder Mountain area: McKee, Edwin H. 05983
 Miocene-Pliocene, Horse Camp formation, Curran area, new: Moores, E. M. 00530
 Mississippian, Diamond Peak Fm.-Chainman Shale, Eureka quadrangle: Brew, David A. 10882
 Mississippian-Pennsylvanian, boundary, southern: Webster, G. D. 09171
 Mississippian-Pennsylvanian, Eleana and Tipipah formations: Gordon, Mackenzie, Jr. 06810
 Nevada Test Site and Nellis Air Force Range: Ekren, E. B. 06822
 Ordovician, Middle, revisions: Ross, Reuben James, Jr. 08083
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 Paleozoic, Toiyabe Range: Washburn, Robert H. 09169
 Pennsylvanian-Permian, Egan Range to Spring Mts., correlation: Barosh, Patrick J. 01677
 Permian, Las Vegas area: Bissell, H. J. 08575
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 Quaternary, Lake Lahontan basin, correlation: Birkeland, P. W. 03976
 Silurian-Devonian, Roberts Mts. Formation-Windmill Limestone: Berry, W. B. N. 02830
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 Tertiary, Silver Peak region, volcano-sedimentary sequence: Robinson, Paul T. 06578
 Tertiary, Virgin Valley beds, correlation, California: Lohman, Kenneth E. 01843
 Tertiary-Quaternary, Trail Ridge quadrangle, section: Christiansen, Robert L. 05446
 Triassic, Humboldt Range, basement relief, effects: Silberling, N. J. 08327
 Triassic, Moenkopi Formation, Las Vegas area: Bissell, H. J. 01317
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Structural geology

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 Carson Sink-Dixie Valley region, Mesozoic orogeny: Speed, Robert C. 08331
 Cortez area, Roberts thrust: Wells, John D. 00839
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 East-central, Miocene-Pliocene gravity sliding: Moores, E. M. 00530
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 Eastern, miogeosyncline, orogenic belt, evolution: Armstrong, Richard Lee. 01076

Nevada—Continued

Structural geology—Continued

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Esmeralda-Nye Counties, Goldfield mining district: Albers, John P. 08231

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Nevada Test Site and Nellis Air Force Range: Ekren, E. B. 06822

Nevada Test Site and Nellis bombing range, fault systems, age: Ekren, E. B. 06795

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Ruby Mountains, Antler orogenic belt, isoclinal folds: Willden, Ronald. 08352

Ruby Mountains, folds, flow direction, triclinic fabric: Howard, Keith A. 05209

Ruby Mountains, tectonics: Kistler, Ronald W. 10012

Schell Creek Range, thrust faults: Dechert, Curt P. 11275

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Snake Range, northern, kersantite sill, amphibolitization control: Nelson, Robert B. 02469

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Tuscarora area, Independence Valley, fault scarps, Holocene: Coats, R. R. 00782

Walker Lane, fault zone: Bonham, Harold F. 08241

White Pine County, Schell Creek Range, northern: Dechert, Curt Peter. 03027

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Yucca Flat area, faults, folds: Hinrichs, E. Neal. 06794

Nevada—Continued

Structural geology—Continued

Yucca Flat, faults and joints, explosion-produced fractures: Barosh, Patrick J. 06813

Volcanology

Beowawe area, geyser activity: Rinehart, John S. 05008

New Brunswick

Areal geology

Captain area: Tupper, W. M. 09118

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New Brunswick—Continued*Maps, geologic—Continued*

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Silurian-Devonian, paleogeography: Boucot, A. J. 07139

Structural geology

Letang Peninsula-Frye Island area, Silurian rocks, deformation: Lee, D. T. C. 05533

Miramichi Bay area, magnetic anomaly interpretation: McGrath, P. H. 04402

New Brunswick—Continued*Structural geology—Continued*

Taconic orogeny, stratigraphic evidence: Pavlides, Louis. 07138

New England*Absolute age*

Igneous and metamorphic rocks: Lyons, J. B. 07250

Intrusions, alkaline, interpretation: Chapman, Carleton A. 00583

Earthquakes

November 18, 1755, possible tsunami: Rothman, Robert L. 04809

Geophysical surveys

Gulf of Maine, seismic reflection: Ballard, J. Alan. 00930

Heat flow, thermal history since Early Devonian: Birch, Francis. 09355

Northwestern, gravity, anomalies: Diment, W. H. 07257

Southern, magnetic data, lineament defined: Bromery, Randolph W. 09754

Glacial geology

Deglaciation, chronology: Schafer, John P. 09930

Hydrogeology

Glacial deposits: Miller, David W. 09804

Petrology

Devonian plutonic rocks: Page, Lincoln R. 07255

Granites, gneisses, mineral compositions, correlation: Liese, Homer C. 05049

Metamorphic rocks, facies: Thompson, James B., Jr. 07251

Sedimentary petrology

Continental margin, bottom sediment, textures: Schlee, John. 09931

Stratigraphy

Cambrian, review: Theokritoff, George. 07179

Cambrian, western, biostratigraphy: Theokritoff, George. 09940

Cambro-Ordovician, paleogeography, continental margin: Rodgers, John. 07133

Comprehensive review: Zen, E-an. 07177

Devonian, Appalachians: Cumming, L. M. 03163

Ordovician, graptolite zones, paleogeography: Berry, William B. N. 07180

Paleozoic, mio- and eugeosyncline, lateral transition: Cady, Wallace M. 07134

Silurian-Devonian, paleogeography: Boucot, A. J. 07139

Structural geology

Acadian orogeny: Cumming, L. M. 03163

Coast, southern, subsidence, Holocene: Fairbridge, Rhodes W. 04836

Comprehensive review: Zen, E-an. 07177

Intrusions, alkaline, intersecting belts: Chapman, Carleton A. 00583

Mantled gneiss domes and nappes: Thompson, James B., Jr. 07242

Paleozoic mio- and eugeosyncline, lateral transition: Cady, Wallace M. 07134

Postglacial tilt, profiles: Koteff, Carl. 11240

Taconic allochthon: Zen, E-an. 07132

Taconic allochthon, stratigraphic-structural contrasts: Zen, E-an. 09957

Taconic klippe, mechanism: Cady, Wallace M. 02452

Taconic orogeny, stratigraphic evidence: Pavlides, Louis. 07138

New Hampshire*Geochemistry*

Conway Granite, metals, concentration variations: Brimhall, Willis H. 07804

Geomorphology

Wolfeboro-Winnepesaukee area: Goldthwait, Richard P. 09075

Geophysical surveys

Western, magnetic: Griscom, Andrew. 07207

Glacial geology

Wolfeboro quadrangle, Pine River esker system: Goldthwait, Richard P. 09783

Wolfeboro-Winnepesaukee area: Goldthwait, Richard P. 09075

Hydrogeology

Merrimack River valley, lower, ground-water resources: Weigle, James M. 00322

Maps, geologic

Connecticut Lakes-Parmachenee area: Green, John Chandler. 04298

Winnepesaukee quadrangle, surficial: Goldthwait, Richard P. 09075

Wolfeboro quadrangle, surficial: Goldthwait, Richard P. 09075

Maps, ground water

Merrimack River valley, lower: Weigle, James M. 00322

Mineralogy

Clinoamphibole, Ordovician volcanics: Jaffe, Howard W. 01088

Strafford area, Littleton Formation, collecting assemblages: Gregory, Gardiner E. 08137

Zircon, composition, Conway granite: Richardson, Keith A. 10738

Petrology

White Mountain Magma Series, cf. Maine coastal plutons: Chapman, Carleton A. 07256

Stratigraphy

Cambrian-Devonian, Boundary Mountains anticlinorium: Green, John C. 07246

Cambrian-Devonian, Connecticut Lakes-Parmachenee area: Green, John Chandler. 04298

Structural geology

Boundary Mountains anticlinorium: Green, John C. 07246

Connecticut Lakes-Parmachenee area: Green, John Chandler. 04298

Oliverian domes, regional relations: Naylor, Richard S. 07244

Road construction fill area, pro-Alpine deformation: Wolfe, C. W. 08191

Weathering

Silicate minerals, chemical, rate: Johnson, Noye M. 01984

New Jersey*Absolute age*

Newark Group: Abdel-Monem, Abdalla A. 02977

Northern, Budd Lake core, C-14: Harmon, Kathryn Parker. 06533

Areal geology

Eastern, guidebook: New York State Geological Assoc. 01401

Franklin Mine area, field trip, road log: Alexandrov, Eugene A. 01406

Highlands, northern, Paleozoic inliers, field trip, road log: Finks, Robert M. 01407

Newark Basin, northern, field trip road log: VanHouten, F. B. 01405

South Amboy-Raritan area, field trip, road log: Owens, James P. 01403

New Jersey -- Continued*Earthquakes*

Ramapo fault area: Molnar, Peter H. 02805

Ramapo fault, seismicity: Page, Robert A. 00963

Economic geology

Iron, Dover district: Collins, Lorence G. 01900

Engineering geology

Dam and reservoir, Spruce Run: McGavock, Cecil B., Jr. 07509

General

Education: Pollock, Archie W. 10823

Geochemistry

Continental shelf, interstitial and bottom waters: McKinney, Thomas F. 08183

Palisade sill, barium, rare earths, abundances: Philpotts, John A. 07841

Geomorphology

Coastal Plain, wind-eroded boulders: Minard, James P. 08203

Musconetcong Valley, landform evolution, natural and cultural: Wacker, Peter O. 06323

Sandy Hook, headland-bay beach development: Yasso, Warren E. 08193

Hydrogeology

Atlantic County, ground-water resources: Clark, Glenn A. 05640

Burlington County, ground-water resources: Rush, F. Eugene. 06076

Coastal plain, ground-water recharge: Wolfe, Peter E. 09740

Essex County, ground-water resources: Nichols, William D. 07923

Ground-water provinces, resources: Widmer, Kemble. 05445

Monmouth County, ground-water resources: Jablonski, Leo A. 08014

Morris County, eastern, and Essex County, western, aquifers: Nichols, William D. 00587

Rahway area, ground-water resources: Anderson, Henry R. 05623

Maps, geologic

Burlington County: Rush, F. Eugene. 06076

Essex County: Nichols, William D. 07923

Monmouth County: Jablonski, Leo A. 08014

Rahway area: Anderson, Henry R. 05623

Maps, ground water

Atlantic County: Clark, Glenn A. 05640

Burlington County: Rush, F. Eugene. 06076

Monmouth County: Jablonski, Leo A. 08014

Rahway area: Anderson, Henry R. 05623

Maps, structure

Burlington County: Rush, F. Eugene. 06076

Morris County, eastern, and Essex County, western: Nichols, William D. 00587

Mineralogy

Calcite, New Brunswick area, shale: Modreski, Peter J. 09089

Feldspar, antiperthitic, Precambrian rocks: Vogel, Thomas A. 07572

Feldspar, Wanaque area, plutonic rocks: Goodspeed, Robert Marshall. 07190

Gaigaite, Franklin, structure: Moore, Paul B. 09850

Kaolinite, Woodstown area, macro-platelets, genesis: Isphording, Wayne C. 05571

Zincian and manganese amphiboles, Franklin orebody: Klein, Cornelis, Jr. 06782

Paleontology

Bryozoa, Cretaceous, Navesink Formation, Marlboro area: Toots, Heinrich. 09942

Flora, Pleistocene, northern, forest history: Harmon, Kathryn Parker. 06533

New Jersey—Continued

Paleontology—Continued

Fossils, problematic, Cretaceous, Red Bank Formation: Evitt, William R. 10983

Petrology

Beemerville area, nepheline syenite: Milton, Charles. 10806

Brookville, syenite, genesis, assimilation in diabase: Barker, Daniel S. 10890

Stanhope area, Byram Cove synform: Chapman, Diana F. 07978

Wanaque area, plutonic rocks, coexisting feldspars: Goodspeed, Robert Marshall. 07190

Sedimentary petrology

Beach Haven-Little Egg Inlet region, sedimentation: Charlesworth, Lloyd James, Jr. 07152

Beach Haven-Little Egg Inlets, sediments, size analysis: Charlesworth, L. J., Jr. 10995

Port Jervis South area, Martinsburg Shale, fabric: Carson, William P. 03915

Trenton area, Quaternary sediments, provenance: Owens, James P. 08207

Triassic argillite and shale, weathered zone: Lodding, William. 07030

Triassic basin, redbeds, provenance: Abdel-Monem, Abdalla A. 02977

Stratigraphy

Cambrian-Devonian, inliers, northern: Finks, Robert M. 01407

Cretaceous, Lower, delta deposits, South Amboy-Raritan area: Owens, James P. 01403

Sussex County, Andover area: Baum, John L. 09749

Triassic, Newark Basin, northern: Savage, E. Lynn. 01404

Triassic, Newark Basin, northern: VanHouten, F. B. 01405

Structural geology

New Jersey Highlands: Smith, Bennett L. 08189

Sussex County, Andover area: Baum, John L. 09749

Weathering

Pensauken Formation, lateritic: Bowman, James F., 2d. 07976

Triassic argillite and shale, clay mineralogy: Lodding, William. 07030

New Mexico

Absolute age

Pajarito Mountain, alkaline intrusive rocks: Kelley, Vincent C. 04296

Questa Mine area, biotite: Shibata, Ken. 06178

Rio Grande gorge, basalts, reliability: Ozima, M. 00272

San Andres Mountains, Gardner Spring site, Quaternary soils: Gile, L. H. 04821

Valles Caldera, rhyolites and associated rocks: Doell, Richard R. 06579

Areal geology

Guadalupe Mountains, road log: Klement, Karl W. 10165

Mockingbird Gap quadrangle: Bachman, George O. 05470

Mogollon Plateau, volcanic province: Elston, Wolfgang E. 05123

Mogollon Range: Rhodes, R. C. 02644

Rio Arriba County: Bingler, Edward C. 07897

Roadside features, picture story: James, H. L. 09137

Southwestern, field trip, road-log: Damon, Paul E. 02655

Southwestern, guidebook: Arizona Geological Society. 02672

New Mexico—Continued

Earthquakes

Microseisms, Rio Grande Valley, train source: Sanford, Allan R. 00475

Seismicity, Socorro area: Sanford, Allan R. 00953

Economic geology

Coal, Raton Basin, occurrence: Pillmore, Charles L. 07843

Copper and other metals, general: Anderson, Charles A. 05380

Copper, Santa Rita area: Nielsen, Richard L. 00471

Copper, southern, genesis: Guilbert, John M. 02667

Evaporites, Carlsbad district, Fifth ore zone: Jones, Charles L. 05984

Metals, Central mining district: Hernon, Robert M. 05382

Mineral resources, Rio Arriba County: Bingler, Edward C. 07897

Molybdenum, Lincoln County: Thompson, Tommy B. 07639

Molybdenum, Questa mine area: Carpenter, Robert H. 05349

Molybdenum, Questa mine, reserve estimation, sampling: Hymas, K. I. 05312

Molybdenum, Red River district: Clark, K. F. 04226

Molybdenum, Sierra Blanca: Giles, David L. 04154

Natural gas, Delaware basin, occurrence: Hills, John M. 03431

Natural gas, Four Corners region: Picard, M. Dane. 03427

Natural gas, Permian basin: Salisbury, Gerald P. 03812

Natural gas, San Juan basin, occurrence: Silver, Caswell. 02153

Petroleum and natural gas, Lusk Strawn field: Thornton, Dewey E. 00069

Petroleum, multipay fields, common source: Coester, B. B. 00100

Petroleum, Permian basin, composition, relation to stratigraphy: Holmquest, Harold J., Jr. 00106

Petroleum, Permian basin, Yeso shelf deposits cf. basin: Rodgers, Elton E. 00098

Petroleum, southeastern, Abo reef trend, source rocks, ages: Sax, N. A. 00099

Uranium, Burro Mountains, occurrence: Gillerman, Elliot. 01915

Uranium, Grants region: Kelley, Vincent C. 05390

Uranium, Laguna district, Jackpile Sandstone, genesis: Nash, J. Thomas. 06991

Uranium, San Juan basin, genesis: Granger, Harry C. 01655

Zinc, lead, Hansonburg district, exploration: McDougall, David J. 09430

Engineering geology

Materials, properties, Los Alamos area, tuff, use as aggregate: Pettitt, Roland A. 05656

Nuclear explosions, materials, properties, GNOME: Gard, Leonard M., Jr. 04059

Vibratory properties, welded tuff, Mesita de Los Alamos: Keller, M. Dean. 07731

Waste disposal, San Juan basin, potential reservoirs: Peterson, James A. 05606

General

Meteorite collection, University Institute of Meteorites: Pokrzywnicki, Jerzy. 02014

New Mexico—Continued

Geochemistry

Carlsbad area, brines, salt precipitation: Smith, Joe P. 01022

Eagle Nest quadrangle, geochemical, biogeochemical prospecting: Misaqi, F. Leo 07627

Halite, thermoluminescence, stress effects: Roach, Carl H. 03951

Hanover, oxygen buffer: Burt, D. M. 04136

Hansonburg district, Mex-Tex deposits, fluid inclusions: Roedder, Edwin. 04223

Philmont Ranch region, geochemical prospecting: Misaqi, F. Leo. 01623

Sierra Blanca area, igneous rocks, spectrochemical analyses: Thompson, Tommy B. 10089

Southwestern, ash flows, biotite, chemical variations: Giles, David L. 07738

Southwestern, Monticello Box, geochemical prospecting: Griffiths, Wallace R. 05425

Geomorphology

Albuquerque area, wind abrasion, shatter-cone-like markings: Elston, Wolfgang E. 07500

Carlsbad Caverns: Bullington, Neal R. 10166

Dead Man Lake, sedimentation rate since Pleistocene: Wright, H. E., Jr. 03089

Mount Taylor, peripheral volcanic stumps, columnar jointed: Hernandez, F. Louis. 09138

Rio Grande, sediment-water discharge, correlation, analysis: Rodriguez-Iturbe, Ignacio. 02988

San Mateo Mountains, rock glaciers: Blagbrough, John W. 05211

Southwestern, drainage patterns, evolution: Cooley, M. E. 02665

West-central, Zuni Salt Lake maar, origin, history: Bradbury, John Platt. 01725

Geophysical surveys

Heat flow: Decker, E. R. 00044

Socorro County, central, gravity: Sanford, Allan R. 01622

Geothermal energy

Exploration: Summers, W. Kelly. 09200

Exploration, hot springs and wells, potential: Summers, W. K. 09139

Hydrogeology

Carlsbad area, ground water, control by reef lithofacies: Motts, Ward S. 01074

Chaves County, Roswell artesian basin, Permian strata: Havenor, Kay C. 07901

Ground-water levels, 1966: Busch, F. E. 03527

McKinley County, southeastern, ground-water resources: Cooper, James B. 01878

Pecos River basin, leaky-aquifer system, utilization: Saleem, Zubair A. 08428

Rio Grande underground water basin, administration: Reynolds, S. E. 05592

Rio Grande, water-sediment discharge, time-series analysis: Rodriguez-Iturbe, Ignacio. 02988

Maps, geochemical

Monticello Box area, metals: Griffiths, Wallace R. 05425

Philmont Scout Ranch area, stream sediments: Misaqi, F. Leo. 01623

Maps, geologic

Brazos Peak quadrangle: Muehlberger, William R. 10938

Carlsbad district, Fifth ore zone: Jones, Charles L. 05984

Cebolla quadrangle: Doney, Hugh H. 08015

El Rito quadrangle: Bingler, E. C. 06715

New Mexico—Continued

Maps, geologic—Continued

Guadalupe Mountains and vicinity, part: Motts, Ward S. 01074

McKinley County, southeastern: Cooper, James B. 01878

Mockingbird Gap quadrangle: Bachman, George O. 05470

Rio Arriba County: Bingler, Edward C. 07897

Valle Grande Peak quadrangle: Bingler, E. C. 06716

Zuni Salt Lake volcanic crater: Cummings, David. 01808

Maps, ground water

Carlsbad area, potentiometric surfaces in Permian rocks: Motts, Ward S. 01074

McKinley County, southeastern: Cooper, James B. 01878

Maps, isopach

San Juan basin: Peterson, James A. 05606

Maps, structure

Brazos Peak quadrangle: Muehlberger, William R. 10938

Maps, tectonic

Brazos Peak quadrangle: Muehlberger, William R. 10938

Rio Arriba County: Bingler, Edward C. 07897

Mineralogy

Dolomite, pseudomorphic after calcite, Carlsbad Caverns: Thrallkill, John. 02083

Ferroselite, McKinley County, Kermac mine: Santos, E. S. 07556

Zinc-copper aluminum silicate, Bingham area: Rosenzweig, Abraham. 11076

Zircon, Hillsboro area, Copper Flat intrusion, crystal growth trends: Wilbanks, John R. 10993

Paleomagnetism

Cenozoic, rhyolites and associated rocks, Valles Caldera: Doell, Richard R. 06579

Tertiary, basalts, Rio Grande gorge: Dalrymple, G. Brent. 00290

Tertiary, basalts, Rio Grande gorge: Ozima, M. 00272

Paleontology

Algae, Pennsylvanian, Middle, southeastern, new sp.: Toomey, Donald Francis. 02960

Cephalopoda, Ordovician, Second Value Formation, Cooks Range: Flower, Rousseau H. 11054

Foraminifera, Cretaceous, Mancos Shale, zonation: Lamb, George M. 01893

Foraminifera, Pennsylvanian, Sandia and Madera limestones, Manzano Mts.: Myers, Donald A. 01182

Foraminifera, Permian, Laborcita Formation, fusulinids: Steiner, Maureen B. 00494

Gymnosperms, Triassic, Chinle Formation, new: Ash, Sidney R. 09349

Insecta, Jurassic, Todilto Formation, northern: Bradbury, John P. 07754

Invertebrata, Mississippian, Lake Valley Formation, Sacramento Mts.: Ruedisili, Lon Chester. 02042

Mammalia, Paleocene, Nacimiento Fm., San Juan basin: Gazin, C. Lewis. 07024

Mollusca, Quaternary, alluvial deposits, Rio Grande valley, Caballo Dam area: Metcalf, Artie L. 11047

Porifera, Permian, Stodermatidae, taxonomy: Reid, R. E. H. 05709

New Mexico—Continued

Petrology

- Cobre Mountains, ash-flow tuffs: Giles, David L. 01729
 Cobre Mountains, Tertiary ash-flow tuffs: Giles, David L. 02645
 Las Tablas quadrangle, Moppin Schist, mineral assemblages, paragenesis: Carpenter, John R. 02565
 Pajarito Mountain, alkaline intrusive rocks: Kelley, Vincent C. 04296
 Santa Rita area, quartz-monzonite: Nielsen, Richard L. 00471
 Santa Rita monzonite stock, mineral zoning: Nielsen, Richard L. 07835
 Southwestern, Tertiary ash flows: Elston, Wolfgang E. 02654

Sedimentary petrology

- Carlsbad area, salt precipitation: Smith, Joe P. 01022
 Carlsbad Caverns, dolomite deposits: Thraikill, John. 02083
 Carlsbad district, Fifth ore zone, evaporites: Jones, Charles L. 05984
 Delaware basin, Castile Anhydrite, variations: Dean, Walter Edward, Jr. 01726
 Delaware basin, Permian deep-sea fans: Jacka, Alonzo D. 08004
 Guadalupe Mountains, Permian reefs, cf. modern Florida: Klement, Karl W. 08902
 Laguna area, sandstone pipes, origin: Megrue, George H. 01902
 Laguna area, sandstone pipes, origin: Moench, R. H. 01901
 Mockingbird Gap quadrangle, Permo-Pennsylvanian sedimentation: Bachman, George O. 05470
 Rio Arriba County, Morrison Formation, lower: Tanner, William F. 06039
 San Andres Mountains, Gardner Spring site, soil genesis: Gile, L. H. 04821
 Santa Fe area, sediment transport, wave bed forms: Langbein, Walter B. 07530
 Southeastern, Pennsylvanian-Wolfcampian rocks, sedimentation: Meyer, Richard Fastabend. 06553
 Southeastern, Permian evaporites: Jones, C. L. 01026
 Southern, desert soils, argillic horizon: Gile, L. H. 05082
 Tusas Mountains, Tertiary sedimentation: Bingler, Edward C. 10208

Stratigraphy

- Cambrian-Recent, Permian basin: Mear, Charles E. 00096
 Cebolla quadrangle: Doney, Hugh H. 08015
 Cretaceous, lower Mancos Shale, San Juan Basin: Lamb, George M. 01893
 Cretaceous-Quaternary, Zuni Salt Lake volcanic crater, section: Cummings, David. 01808
 Devonian, southeastern, Tobosa basin: McGlasson, E. H. 11324
 Devonian system: Baars, D. L. 00181
 Jemez Mountains: Smith, R. L. 11077
 Jurassic, Morrison Formation, Rio Arriba County: Tanner, William F. 01201
 Mississippian, Lake Valley Formation, bioherms, Sacramento Mts.: Ruedisili, Lon Chester. 02042
 Mississippian, north-central, biostratigraphy: Armstrong, A. K. 08227

New Mexico—Continued

Stratigraphy—Continued

- Paleozoic, Pedernal uplift effect: Kottlowski, Frank E. 00059
 Paleozoic, Permian basin field area, paleogeography: Hills, John M. 01012
 Pennsylvanian-Permian, paleogeography, Pedernal uplift: Kottlowski, Frank E. 01173
 Pennsylvanian-Permian, southeastern: Meyer, Richard Fastabend. 06553
 Permian, Cenozoic, El Rito quadrangle, sections: Bingler, E. C. 06715
 Permian, Guadalupean lithofacies, Carlsbad area: Motts, Ward S. 01074
 Permian, Laborcita Formation, Sacramento Mts.: Steiner, Maureen B. 00494
 Permian, Salado Formation, Carlsbad district, sections: Jones, Charles L. 05984
 Permian, salt deposits, southeastern: Adams, John Emery. 01013
 Permian, San Andres and Artesia formations, Roswell basin: Havenor, Kay C. 07901
 Permian, Yeso Formation, shelf deposits cf. basin: Rodgers, Elton E. 00098
 Precambrian, Cenozoic, Brazos Peak quadrangle: Muehlberger, William R. 10938
 Silurian-Quaternary, Lusk Strawn oil and gas field: Thornton, Dewey E. 00069
 Tertiary, Mogollon-Datil volcanic province: Elston, Wolfgang E. 10224
 Tertiary, southwestern, ash flows: Elston, Wolfgang E. 02654
 Tertiary-Quaternary, volcanics, Sangre de Cristo Mts. area: Johnson, Ross B. 11070
 Valle Grande Peak quadrangle, section: Bingler, E. C. 06716

Structural geology

- Brazos Peak quadrangle: Muehlberger, William R. 10938
 Cebolla quadrangle: Doney, Hugh H. 08015
 Jemez Mountains: Smith, R. L. 11077
 Joyita uplift, Wolfcampian orogeny: Kottlowski, Frank E. 07920
 Pedernal uplift, Pennsylvanian-Permian history: Kottlowski, Frank E. 01173
 Permian basin, tectonics: Galley, John E. 00101
 Sangre de Cristo uplift, faults: Baltz, Elmer H. 10204
 Tertiary, Mogollon-Datil volcanic province: Elston, Wolfgang E. 10224
 West-central, Rio Puerco fault belt: Campbell, J. A. 10215

Volcanology

- Mount Taylor, peripheral volcanic stumps, columnar jointed: Hernandez, F. Louis. 09138
 Valles caldera, resurgent cauldron formation: Smith, Robert L. 06497
 West-central badlands, lava flows: James, H. L. 09140

New York

Absolute age

- Balmat area, lead, concordia plots: Russell, R. D. 00372
 Balmat area, lead ores, formation chronology: Reynolds, P. H. 05471
 Flushing Meadows, peat: Baskerville, Charles A. 07506
 Ithaca area, interglacial deposit, carbon-14: Bloom, Arthur L. 09752
 Manhattan Prong area, gneiss, schist: Abdel-Monem, Abdalla A. 02977
 Southeastern, metamorphic and igneous rocks: Clark, George S. 05213

New York—Continued

Areal geology

- Adirondack Mountains, southeastern: Turner, Brian Buddington. 01359
 Cortlandt intrusives area, field trip guide: Ratcliffe, Nicholas M. 01817
 Eastern, guidebook: New York State Geological Assoc. 01401
 Hudson River valley, Albany to New York City: Johnsen, John H. 06365
 Long Island, western, field trip guide: Sirkin, Leslie A. 01838
 Montauk Peninsula, guidebook: Newman, Walter S. 01815
 New York City region, geologic evolution, guidebook: Schubert, Christopher J. 06968
 Newark Basin, northern, field trip, road log: VanHouten, F. B. 01405
 Pelham Bay Park, field trip guide: Seyfert, Carl K. 01816
 Plattsburgh-Rouses Point quadrangles: Fisher, Donald W. 10515
 Putnam-Westchester Counties, parts: Prucha, John James. 11174
 Southeastern, Glenville area, field-trip road log: Hall, Leo M. 06000
 Southeastern, Taconic inliers, field trip, road log: Finks, Robert M. 01407
 White Plains area, field trip, road log: Hall, Leo M. 01402

Earthquakes

- Ramapo fault area: Molnar, Peter H. 02805
 Ramapo fault, seismicity: Page, Robert A. 00963

Economic geology

- Industrial minerals, Peekskill area, emery: Davis, James F. 01880
 Iron, Benson mines, geochemistry: Hagni, Richard D. 01883
 Iron, Benson mines, Saint Lawrence County: Crump, Robert M. 05417
 Iron, titaniferous, Sanford Lake district: Gross, Stanford O. 05422
 Lead, Balmat area, genesis, isotope data: Reynolds, P. H. 05471
 Zinc, Balmat-Edwards district: Lea, Edgar R. 05383

Engineering geology

- Foundation problems, Flushing Meadows, roads: Baskerville, Charles A. 07506
 Harbors, Hudson River, model study: Panuzio, Frank L. 06367
 Waste disposal, Appalachian basin, potential reservoirs: McCann, Thomas P. 05601
 Waste disposal, Hudson River, mud, Na absorption: McCrone, Alistair W. 06366
 Waste disposal, Long Island, deep-well injection: Perlmutter, N. M. 01818

General

- American Museum of Natural History, history of dinosaurs: Shuttlesworth, Dorothy E. 09183
 Education, geological, higher level, decline 1956-1966: Davis, James F. 01935
 Education, geological, secondary schools: Davis, James F. 01934
 Lamont Geological Observatory, geophysical oceanographic studies: Ewing, Maurice. 07995

Geochemistry

- Adirondack Mountains, anorthositic, K-Rb ratios: Reynolds, R. C., Jr. 09925
 Balmat area, lead, isotopic composition: Reynolds, P. H. 05471

New York—Continued

Geochemistry—Continued

- Balmat area, sulfide assemblage, emulsion textures, electron probe: Wiltse, Milton A. 09739
 Continental shelf, interstitial and bottom waters: McKinney, Thomas F. 08183
 Crane Mountain, charnockite, K-Rb ratios: Whitney, P. R. 09951
 Erie-Niagara basin, water quality: Archer, R. J. 09114
 Evaporite rocks, silicate assemblages, equilibria: Bodine, Marc W., Jr. 11124
 Fayetteville Green Lake, chemical limnology: Brunskill, Gregg John. 06566
 Green Lake, Fayetteville area, waters, meromixis: Takahashi, Taro. 02536
 Hudson River, Ca, Cu, Li, Mg, K, Na, Sr concentrations: Fabricand, Burton P. 03551
 Hudson River, sediments, sodium uptake: McCrone, Alistair W. 03558
 Titanium, Benson mines: Hagni, Richard D. 01883
 Troy area, Rensselaer Graywacke, trace elements: Ondrick, Charles William. 05500

Geomorphology

- Buffalo area, Erie Lowland, beach ridges: Calkin, Parker E. 09757
 Buffalo area, glaciolacustrine strand lines, history: Calkin, Parker E. 01138
 Erie-Niagara basin, stream erosion, sediment transport: Archer, R. J. 09115
 Hudson River basin, flow characteristics: Busby, Mark W. 06364
 New York City region, landform evolution: Schubert, Christopher J. 06968
 Plattsburgh area, patterned ground, tree-throw origin: Denny, Charles S. 00738

Geophysical surveys

- Eastern, gravity, anomalies: Diment, W. H. 07257
 Heat flow, thermal history since Early Devonian: Birch, Francis. 09355
 Hudson River, sediments, seismic: Herron, E. M. 02336

Glacial geology

- Hudson Valley, history: Connally, G. Gordon. 07983
 Montauk Peninsula, general, field trip guide: Newman, Walter S. 01815
 Southeastern, chattermarks, Shawangunk conglomerate: Laverdiere, Camille. 07002
 Western, Kent glaciation, correlation: Muller, Ernest H. 08205

Hydrogeology

- Crown Point Fish Hatchery, ground-water resources: Kantrowitz, I. H. 07647
 Erie-Niagara basin, ground-water resources: LaSala, A. M., Jr. 09113
 Long Island, Nassau County, glacial aquifers, water quality: Padar, Francis V. 09550
 Long Island, salt-water intrusion, protective measures: Montanari, Francis W. 09534
 Long Island, water resources, methods: Cohen, Philip. 01795
 Long Island, western, salt-water intrusion: Perlmutter, N. M. 01818
 Nassau County, ground-water levels, sewerage effects: Franke, O. L. 00730
 Nassau County, waste disposal, injection, salt-water barrier: Rose, John L. 04730
 Niagara County, wells, temperature profiles, fracture indicators: Trainer, Frank W. 00731
 Schoharie and Albany Counties, cavernous limestones: Baker, Victor R. 07786

New York—Continued

Hydrogeology—Continued

- Suffolk County, Brookhaven Natl. Laboratory, ground-water resources: Warren, M. A. 11438
Susquehanna River basin, aquifer yields, cost: Holliday, Este F. 02743

Maps, geologic

- Erie-Niagara basin: LaSala, A. M., Jr. 09113
Ohio quadrangle: Nelson, Arthur E. 04003
Pelham Bay Park: Seyfert, Carl K. 01816
Plattsburgh-Rouses Point quadrangles: Fisher, Donald W. 10515
Putnam-Westchester Counties, parts: Prucha, John James. 11174

Maps, ground water

- Erie-Niagara basin: LaSala, A. M., Jr. 09113
Suffolk County, Brookhaven Natl. Laboratory: Warren, M. A. 11438
Suffolk County, Upton area, water-table contours: Warren, M. A. 11438

Mineralogy

- Artinite, Staten Island, serpentine: Reasenber, Julian R. 09093
Serendibite, Warren County, structure: Susse, P. 01596
Sphalerite, central, Lockport Formation, occurrence: Labuz, Adrian. 09090
Talc, tremolite, tirodite, Gouverneur district: Ross, Malcolm. 06568

Paleontology

- Algae, Devonian, Onondaga Limestone, Buffalo: Baschnagel, Raymond A. 02407
Annelida, Devonian, Cardiff Shale, serpulids: Cameron, Barry. 03209
Anthozoa, Devonian, Case Hill Coral Bed, Tully Valley: Grasso, Thomas X. 00498
Brachiopoda, Devonian, Bois Blanc Formation: Boucot, A. J. 04114
Cephalopoda, Devonian, ammonoids, succession, trans-Arctic links: House, M. R. 02876
Conodonts, Devonian, Middle-Upper boundary, correlation, n.spp.: Orr, R. William. 05772
Conodonts, Devonian, Rhinestreet Shale, redescription: Huddle, John W. 00209
Conodonts, Devonian, Tully Formation: Mayr, U. 05505
Devonian, Tully Formation, correlation, Cedar Valley Formation: Cooper, G. Arthur. 02886
Devonian, Upper, southwestern: Tesmer, Irving H. 02889
Diatoms, Pleistocene, Massena area, paleoecology: O'Brien, Neal R. 04401
Fauna, Devonian, Sonyea Formation, Cashaqua Shale Member: Kirchgasser, William Thomas. 01748
Flora, Devonian, Lodi Limestone, Tompkins County: Wilcox, Margaret Schnaitman. 00829
Foraminifera, Ordovician, Trenton Group, Trepostomata: Ross, June R. P. 08082
Mammalia, Pleistocene?, Orange County cave deposit, caribou, artifact: Guilday, John E. 11291
Monoplacophora, Devonian, Skaneateles Formation, Morrisville area: Rollins, H. B. 00623
Protista, acritarchs, Silurian, Maplewood Shale, Rochester: Cramer, Fritz H. 07292
Protista, acritarchs, Silurian, western, new: Deunff, Jean. 06923
Pteridophytes, Devonian, Hamilton Group, Cairo area: Matten, L. C. 02345
Pteridophytes, Devonian, Middle, Cairo area, progymnosperm: Matten, Lawrence C. 02429
Pteridophytes, Devonian, Upper, Greene County, lycopod: Banks, H. P. 05114

New York—Continued

Paleontology—Continued

- Trilobita, Cambrian, Taconic sequence, Columbia County: Bird, John M. 03642
Trilobita, Devonian, Hamilton Formation, spotted specimen: Whitney, Bruce R. 00981
Trilobita, Devonian, Hamilton Shale, Alden area, color: Esker, George C., 3d. 05137
Trilobita, Devonian, Middle, East Bethany area, tropidocoryphine: Cisne, John L. 00484
Trilobita, Ordovician, Chazy Group, Champlain Valley: Shaw, Frederick C. 07019
Worms, Devonian, Cardiff Shale, Morrisville: Cameron, Barry. 09758

Petrology

- Adirondack Mountains, anorthosite series, differentiation: Crosby, P. 05067
Adirondack Mountains, southeastern, igneous rocks: Turner, Brian Buddington. 01359
Adirondack Mountains, Thirteenth Lake massif, anorthosite-charnockite series: Letteney, Cole DeWitt. 01752
Adirondack region, migmatite, anatexis: Dietrich, R. V. 08524
Bronx, amphibolite, layering, metasomatic: Seyfert, Carl K. 08877
Manhattan Prong, metamorphic history: Hall, Leo M. 07130
Ohio quadrangle, metamorphic and igneous rocks: Nelson, Arthur E. 04003
Peekskill area, Cortlandt complex, emery deposits: Davis, James F. 01880
Staten Island, projectile points, sources: Rutsch, Edward S. 08135
Stony Point area, Cortlandt complex, age of intrusion: Ratcliffe, Nicholas M. 01905
Westchester County, Poundridge leptite: Lessing, Peter. 01751

Sedimentary petrology

- Appalachian region, Catskill Formation, facies: Allen, J. R. L. 03441
Black River Group, paleoenvironments: Textoris, Daniel A. 05631
Catskill Front, Devonian sandstone, photogeology: Mutch, Thomas A. 01463
Coeymans Formation, facies: Anderson, Edwin Joseph. 01339
Coeymans Limestone, pelmatozoan fabrics, current intensities: Anderson, Edwin J. 08600
Devonian shale, cone-in-cone concretions, kink bands: Gilman, Richard A. 05680
East-central, Devonian, Catskill deltaic complex, environments: Johnson, Kenneth G. 08751
East-central, Herkimer Formation lithofacies: Zenger, Donald H. 09958
East-central, Tully Limestone, depositional environments: Johnson, Kenneth G. 08209
East-central, Zion Hill, Diamond Rock Quartzites: Harris, William H. 09785
Eastern, Moscow Formation, Portland Point Member: McCave, I. N. 03442
Erie-Niagara basin, stream sediment, variation, transport, deposition: Archer, R. J. 09115
Fayetteville Green Lake, calcite sedimentation, rates: Brunskill, Gregg John. 06566
Long Island Sound, ecology: Rhoads, Donald C. 06048
Niagara Escarpment, Medina Formation: Martini, I. 10686
Niagara Escarpment, Medina Formation, sand facies: Martini, I. 10687
Normanskill Formation, grain orientation, relation to sole marks: Onions, Diane. 01471

New York—Continued

Sedimentary petrology—Continued

- Onondaga Limestone, lithofacies: Lindholm, Roy Charles. 02036
 Pine Hill, High Falls Shale, depositional environment: Fagan, John J. 06612
 Retsof area, Salina salt, primary bedding features: Dellwig, Louis F. 01237
 Soils, degradation zones, eluvial-illuvial interface: Bullock, Peter. 06528
 Sonyea Formation, Cashaqua Shale Member, lithofacies: Kirchgasser, William Thomas. 01748
 Sonyea Group, Devonian, environments: Sutton, Robert G. 08037
 Southeastern, Devonian sedimentation, computer model: Buttner, Peter J. R. 07977
 Southeastern, Genesee Group: Buttner, Peter J. R. 03432
 Southeastern, Marcellus and Skaneateles Formations, lithofacies: Wolff, Manfred P. 09955
 Southeastern, Moscow Formation, Portland Point Member: McCave, Ian Nicholas. 01735
 Southeastern, Upper Devonian, paleogeography: Woodrow, Donald L. 02970
 Troy area, Rensselaer Graywacke, petrographic analysis: Ondrick, Charles William. 05500
 Western, Appalachian geosyncline, Devonian sedimentation: Manspeizer, Warren. 09799
 Whiteface Mountain, soils, morphologies, distribution: Witty, John Edward. 06532

Stratigraphy

- Cambrian, Taconic sequence, Columbia County, correlation: Bird, John M. 03642
 Cambrian-Devonian, inliers, southeastern: Finks, Robert M. 01407
 Cambrian-Ordovician, Cambridge quadrangle: Metz, Robert. 01350
 Devonian, Catskill Formation, Appalachian region: Allen, J. R. L. 03441
 Devonian, Coeymans Formation, paleoenvironments: Anderson, Edwin Joseph. 01339
 Devonian, Genesee Group, southeastern, rhythmic sequences: Buttner, Peter J. R. 03432
 Devonian, Hamilton Group, eastern: McCave, Ian Nicholas. 01735
 Devonian, Late, paleogeography, southeastern: Woodrow, Donald L. 02970
 Devonian, Moscow Formation, Portland Point Member: McCave, I. N. 03442
 Devonian, Skaneateles Formation, Case Hill Coral Bed, Tully Valley: Grasso, Thomas X. 00498
 Devonian, Tully Formation, correlation, Cedar Valley Formation: Cooper, G. Arthur. 02886
 Devonian, Tully Formation, correlation, subdivision: Mayr, U. 05505
 Devonian, Upper, southwestern: Tesmer, Irving H. 02889
 Ordovician, Black River Group, northwestern: Walker, Kenneth Russell. 01206
 Ordovician, Black River Group, northwestern, paleoecology: Walker, Kenneth R. 11018
 Ordovician, Chazy Group, Champlain Valley, correlation: Shaw, Frederick C. 07019
 Ordovician, Normanskill Formation, paleogeography: Fagan, John J. 00015
 Ordovician, northwestern, Trentonian Series, limestone units: Kay, Marshall. 06936
 Pennsylvanian, Hudson Valley, possibility: Zen, E-an. 01922
 Pleistocene, Gardiners Clay, Long Island: Upson, Joseph E. 08198

New York—Continued

Stratigraphy—Continued

- Pleistocene, Montauk Peninsula, field trip guide: Newman, Walter S. 01815
 Quaternary, Long Island Sound, Late-Wisconsin lacustrine, marine episodes: Newman, Walter S. 09808
 Silurian, Fuyk Member of Rondout Formation, Hudson Valley facies: Harper, John D. 01214
 Silurian-Devonian, Becraft Mtn., revision: Johnson, John H. 08182
 Silurian-Devonian, Erie-Niagara basin, lithology, aquifers: LaSala, A. M., Jr. 09113
 Triassic, Newark Basin, northern: Savage, E. Lynn. 01404
 Triassic, Newark Basin, northern: VanHouten, F. B. 01405
 Westchester-Bronx Counties, gneiss terrane: Baskerville, Charles A. 09748
- Structural geology*
 Adirondack Mountains, Jay-Whiteface anorthositic nappe: Crosby, Percy. 09765
 Binnewater area: Wang, Kia K. 09948
 Bronx, Orchard Beach area, metamorphic rocks, deformation structures: Leveson, David J. 08214
 Cambridge quadrangle: Metz, Robert. 01350
 Harrisburg quadrangle: Thompson, R. Bruce, Jr. 08195
 Hoosick Falls area, thrust sheets, Taconic sequence: Potter, Donald B. 08208
 Hudson Highlands, Precambrian gneiss: Helenek, Henry L. 08218
 Manhattan Prong, deformation history, review: Hall, Leo M. 07130
 Myers area, Cayuga mine, salt deformation, Salina Group: Prucha, John James. 06012
 New York City, greater, subsidence, Holocene: Fairbridge, Rhodes W. 04836
 Niagara County, Lockport Dolomite, fractures, indicators: Trainer, Frank W. 00731
 Ohio quadrangle, deformation: Nelson, Arthur E. 04003
 Stony Point area, Cortlandt complex, metasediments, deformation: Ratcliffe, Nicholas M. 01905
 Stony Point area, plutons, post-tectonic intrusion: Ratcliffe, Nicholas M. 09818
 Taconic allochthon, submarine slide blocks, evolution: Potter, Donald B. 09816

Newfoundland

Areal geology

- Wesleyville area: Williams, H. 04352

Economic geology

- Copper, Whalesback mine, evaluation, trend analysis: Agterberg, F. P. 05217
 Copper, Whalesback mine, evaluation, trend analysis: Agterberg, F. P. 05228
 Copper, Whalesback mine, evaluation, trend analysis cf. others: Piloski, M. J. 05315
 Peat, resources: Pollett, Frederick. 06569
 Polymetallic ores, Buchans orebodies, reserve estimation: Swanson, E. A. 05220
 Polymetallic ores, Whalesback mine: Kanehira, K. 07239
 Zinc, western, occurrence, regional geologic control: Cumming, L. M. 07765

Geomorphology

- Avalon Peninsula, patterned ground: Henderson, E. P. 07232

Maps, aeromagnetic

- Badger area: Canada Geological Survey. 00214
 Baie Verte area: Canada Geological Survey. 01300

Newfoundland—Continued

Maps, aeromagnetic—Continued

- Bellburns area: Canada Geological Survey. 01288
- Big Brook area: Canada Geological Survey. 01312
- Blue Mountain area: Canada Geological Survey. 01289
- Brig Bay area: Canada Geological Survey. 01277
- Buchans area: Canada Geological Survey. 00215
- Burnt Hill area: Canada Geological Survey. 00228
- Burnt Pond area: Canada Geological Survey. 00235
- Castors River area: Canada Geological Survey. 01281
- Cat Arm River area: Canada Geological Survey. 01294
- Cold Spring Pond area: Canada Geological Survey. 00238
- Corner Brook area: Canada Geological Survey. 00248
- Dashwoods Pond area: Canada Geological Survey. 00236
- Dead Wolf Pond area: Canada Geological Survey. 00220
- Eddies Cove area: Canada Geological Survey. 01316
- Englee area: Canada Geological Survey. 01286
- Ferolle Point area: Canada Geological Survey. 01276
- Flat Bay area: Canada Geological Survey. 00255
- Fleur de Lys area: Canada Geological Survey. 01295
- Flower's Cove area: Canada Geological Survey. 01315
- Gambo area: Canada Geological Survey. 00224
- Gander area: Canada Geological Survey. 11266
- Gander Lake area: Canada Geological Survey. 00256
- Glovertown area: Canada Geological Survey. 00230
- Grand Falls area: Canada Geological Survey. 00218
- Great Burnt Lake area: Canada Geological Survey. 00229
- Great Gull Lake area: Canada Geological Survey. 00225
- Grey Island Harbour area: Canada Geological Survey. 01287
- Groais Island area: Canada Geological Survey. 01283
- Harbour Deep area: Canada Geological Survey. 01290
- Harry's River area: Canada Geological Survey. 00245
- Horse Islands area: Canada Geological Survey. 01296
- Howley Lake area: Canada Geological Survey. 00241
- Indian Lookout area: Canada Geological Survey. 01293
- Jackson's Arm area: Canada Geological Survey. 01299
- Kepenkeck Lake area: Canada Geological Survey. 00226
- King George IV Lake area: Canada Geological Survey. 00237
- Lake Ambrose area: Canada Geological Survey. 00222
- Little Friars Cove area: Canada Geological Survey. 00254
- Little Grand Lake area: Canada Geological Survey. 00247

Newfoundland—Continued

Maps, aeromagnetic—Continued

- Main Gut area: Canada Geological Survey. 00243
- Main River area: Canada Geological Survey. 01298
- Mainland area: Canada Geological Survey. 00250
- Meta Pond area: Canada Geological Survey. 00233
- Miguels Lake area: Canada Geological Survey. 00221
- Mount Peyton area: Canada Geological Survey. 00216
- Mount Sylvester area: Canada Geological Survey. 00232
- Noel Paul's Brook area: Canada Geological Survey. 00223
- Otange Bay area: Canada Geological Survey. 01291
- Pinware area: Canada Geological Survey. 01302
- Port Blandford area: Canada Geological Survey. 00240
- Port Saunders area: Canada Geological Survey. 01284
- Portland Creek area: Canada Geological Survey. 01292
- Puddle Pond area: Canada Geological Survey. 00242
- Pudops Lake area: Canada Geological Survey. 00231
- Quirpon area: Canada Geological Survey. 01314
- Rainy Lake area: Canada Geological Survey. 00249
- Raleigh area: Canada Geological Survey. 01313
- Red Indian Lake area: Canada Geological Survey. 00257
- Roddickton area: Canada Geological Survey. 01282
- Saint Anthony area: Canada Geological Survey. 01275
- Saint Fintans area: Canada Geological Survey. 00253
- Saint John Island area: Canada Geological Survey. 01280
- Saint Julien's area: Canada Geological Survey. 01279
- Saint Paul's Inlet area: Canada Geological Survey. 01297
- Salmon River area: Canada Geological Survey. 01278
- Serpentine area: Canada Geological Survey. 00251
- Shag Island area: Canada Geological Survey. 00252
- Snowshoe Pond area: Canada Geological Survey. 00227
- Star Lake area: Canada Geological Survey. 00246
- Stephenville area: Canada Geological Survey. 00244
- Stephenville area: Canada Geological Survey. 00258
- Torrent River area: Canada Geological Survey. 01285
- Tug Pond area: Canada Geological Survey. 00239
- Twillick Brook area: Canada Geological Survey. 00234
- West Gander Rivers area: Canada Geological Survey. 00219

Maps, geologic

Wesleyville area: Williams, H. 04352

Newfoundland—Continued*Paleontology*

Cephalopoda, Ordovician, Table Head limestone: Flower, Rousseau H. 01775

Cephalopoda, Ordovician, Table Head limestone, White rock nautiloids: Flower, Rousseau H. 01778

Foraminifera, Mississippian, Codroy Group, St. Georges Bay: Mamet, B. L. 06935

Fossils, problematic, Precambrian, Conception Group: Anderson, M. M. 05047

Gastropoda, Ordovician, new genus: Yochelson, Ellis L. 05863

Trilobita, Cambrian, volcanic belt, New World Island: Kay, Marshall. 04443

Trilobita, Ordovician, Table Head Formation, western: Whittington, H. B. 10769

Sedimentary petrology

North-central, Exploits Group, slump structures, tectonic implications: Helwig, James. 09788

Stratigraphy

Cambrian, Middle, Strait of Belle Isle: Whittington, H. B. 10798

Cambrian-Ordovician, regional disconformity, western: Cumming, L. M. 07765

Ordovician, Canadian and Mohawkian Series: Whittington, H. B. 07137

Ordovician-Silurian, New Bay area: Helwig, James Anthony. 02632

Ordovician-Silurian, Upper Black Island: Overby, Brian S. 09814

Structural geology

Appalachians, cf. British Caledonides, continental drift: Dewey, John. 05890

New Bay area, history: Helwig, James Anthony. 02632

Notre Dame Bay, deformation pattern: Heyl, George R. 08180

Notre Dame Bay district, wrench faulting: Heyl, George R. 10003

Pistolet Bay area, klippen, faults: Tuke, M. F. 01966

Rotation, paleomagnetic evidence: Robertson, W. A. 05468

Southern, Bay d'Espoir Group: Anderson, F. D. 09747

Nicaragua*Petrology*

Northwestern, Miocene ignimbrites, fiamme: McBirney, Alexander R. 00353

Nickel*Abundance*

Soil, sediments, North Carolina: Carpenter, Robert H. 10290

Analysis

Atomic absorption spectroscopy, water, chelation-extraction: Fishman, Marvin J. 04308

Chromatographic, PAQH complexes: Frei, R. W. 03436

Appalachians

Resources, review: Cornwall, H. R. 01377

Canada

Deposits, genesis, exploration, sulfur: Chamberlain, J. A. 11146

Exploration

Geochemical factors, sulfur, key element: Chamberlain, J. A. 11146

General

Industry review, worldwide: Mining Engineering. 06805

Nickel—Continued*Geochemistry*

Igneous rocks, Ni-Co ratios, variations: Fleischer, Michael. 09282

Meteorites, Canyon Diablo and others: Wasson, John T. 00952

Isotopes

Ice, Greenland: Fireman, Edward L. 08498

Manitoba

Halfway Lake area, possibilities: Godard, J. D. 08058

Minnesota

Ely area, Duluth Gabbro ores, mineralogy, beneficiation: Viffian, A. 06351

New Mexico

Burro Mountains, arsenides: Gillerman, Elliot. 01915

North Carolina

Resources, review: Cornwall, H. R. 01377

Ontario

Cobalt district, genesis: Petruk, William. 09450

Cobalt-Gowganda area, occurrence: Petruk, William. 04130

Strathcona mine, occurrence: Cowan, J. C. 00116

Oregon

Riddle area, Nickel Mountain mine, occurrence, genesis: Cumberlidge, John T. 05365

Resources

Laterite deposits, potential estimates, sources: Domaas, Finn B. 09594

Ocean vs. land mining, economics: Brooks, David B. 06102

Saskatchewan

Kipahigan Lake deposit, occurrence: Netolitzky, R. K. 04087

Niobium*Abundance*

Crust, summary: Parker, Raymond L. 04103

Analysis

Colorimetric, uranium, BPHA applications: Vita, O. A. 03437

Appalachians

Resources, review: Parker, Raymond L. 01382

Geochemistry

Summary: Parker, Raymond L. 04103

Greenland

Ilimaussaq alkaline complex, occurrence: Hansen, John. 09393

North Carolina

Spruce Pine district, resources: Parker, Raymond L. 01382

Nitrates*Appalachians*

Resources, review: Wedow, Helmuth, Jr. 01328

Geochemistry

Analysis, volumetric: Reichen, Laura E. 04002

Nitrogen*Abundance*

Chondritic meteorites: Moore, Carleton B. 00031

Geochemistry

Lakes, cycle, Wisconsin, Lake Mendota: Brezonik, Patrick Lee. 04451

Meteorites, genesis of compounds: Hayatsu, Ryoichi. 00294

Sediments, experimental mohole: Stevenson, F. J. 08006

Solubility, aqueous NaCl: O'Sullivan, Thomas D. 07856

Nitrogen—Continued*Isotopes*

Abundance, natural gas, relations to helium genesis: Stroud, Lowell. 08009

Nodules*Composition*

Todorokite in manganese nodules, British Columbia fjord: Grill, E. V. 03158

Flint

North America, Atlantic coast, European source: Emery, K. O. 01928

Iron-manganese

Geochemistry, mineralogy, Atlantic Ocean, Nares Abyssal Plain: Smith, R. E. 03061
Mossbauer spectra, composition: Gager, H. M. 05105

Manganese

Atlantic Ocean, San Pablo Seamount: Aumento, F. 04726
British Columbia fjord, todorokite: Grill, E. V. 03158
Composition, mercury content, deep-sea: Harriss, Robert C. 02012
Composition, Pd, Ir, Au abundance: Harriss, Robert C. 04893
Composition, variations, Pacific Ocean: Lorber, Harvey R. 00049
Composition, X-ray fluorescence analyzer, multi-element portable: Rhodes, J. R. 07701
Genesis, marine environment: Penn, Sheldon H. 00048
Genesis of iron-poor: Cheney, E. S. 06615
Lake Michigan: Rossmann, Ronald. 04875
Mineral economics, deep-sea resources, potential: Brooks, David B. 05109
Pacific Ocean, northern, distribution: Ewing, M. 08484

Phosphate

South Dakota, Black Hills, Niobrara Formation: Tourtelot, Harry A. 05864
Texas, Hopkins County, composition, petrology: Milton, Charles. 00798

Siderite

Genesis, Washington, southwestern, Wilkes Formation, coprolite-like: Danner, Wilbert R. 03614

Sulfide

Gold content: Linn, T. A., Jr. 09424

North America*Absolute age*

C-14, UCLA list: Berger, Rainer. 01121
C-14, University of Michigan list: Crane, H. R. 01120
Northeastern, Silurian, Devonian volcanics: Fullagar, Paul D. 06054
Pacific Northwest, archeological sites, C-14: Sanger, David. 05154
Precambrian, chelogenic cycles, cf. Europe: Sutton, John. 02571
Quaternary deposits, K-Ar, methods, dates: Dalrymple, G. B. 03993

Areal geology

Atlantic continental margin, Tertiary-Quaternary history: Emery, K. O. 08947
Continental margin, structural development: Belousov, V. V. 03638
Great Plains, relation to prehistoric man and mammals: Reider, Richard G. 00259
History, popular account: Ogburn, Charlton, Jr. 02239
Textbook, geological evolution: Clark, Thomas H. 05732

North America—Continued*Earthquakes*

Seismicity, regionalization: Santo, Tetsuo. 03721

Strain release data: Milne, W. G. 08304

Economic geology

Barite, eastern, regional control, zoning: Hanor, Jeffrey S. 08720
Diamonds, occurrence, exploration, genesis: Gold, David P. 01863
Metallotects: Guild, P. W. 00841
Natural gas, composition, geologic controls: Dobbin, Carroll E. 03514
Natural gas, provinces: Knight, G. L. 03399
Natural gas, resources, production, economics, summary: Beebe, B. W. 03392
Natural gas, symposium: Beebe, B. Warren. 03248
Natural gas, symposium papers: Beebe, B. Warren. 02093
Petroleum and natural gas, lower Paleozoic, occurrence, summary: Kuznetsov, A. S. 11409
Petroleum, giant fields: Moody, J. D. 00418
Petroleum, Great Plains province, occurrence, evaporitic rocks: Fuller, J. G. C. M. 01224
Sulfur, occurrence, production, uses: Myers, John C. 09438
Tin, metallogenic belts, distribution, geochemical aspects: Schulling, R. D. 07651

General

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Geochemistry

Batholiths, alkali metals, alkaline earths, fractionation: Allen, Gary C. 08509
Coal-bearing strata, trace elements, cf. Europe: Nicholls, G. D. 05872
Continental shelf, Hudson Channel to Nova Scotia, sediments, organic constituents: Hulsemann, Jobst. 09792
Standard rocks, analyses, international comparison: Pendias, Henryk. 06746
Standard samples, G-1, S-1, G-2, GSP-1, AGV-1, NBS-70, Rb, Sr analyses: Duchesne, J. C. 01127

Geomorphology

Arid, semiarid regions, terrain features: Howe, George M. 07633
Continental terrace, genesis, types: Wang, Chao-Siang. 07913
Deserts, research, appraisal: Lustig, Lawrence K. 08103

Geophysical observations

Heat flow, glacial and depth of borehole effects: Crain, Ian K. 01530

Geophysical surveys

Basin and Range, continental structure, integrated data: Archambeau, C. B. 11106
Continental margin, Nova Scotia to Florida, seismic: Uchupi, Elazar. 08197
Crust, magnetic, magnetotelluric, conductivity in lower: Hyndman, R. D. 02984

North America—Continued

Geophysical surveys—Continued

- Upper mantle structure, P-wave inversion: Iyer, H. M. 10377
 Western, crust-mantle profile, seismic: Wickens, A. J. 05455

Glacial geology

- Cordillera, neoglaciation, chronology: Porter, Stephen C. 08090
 Pleistocene glacial-interglacial stages, ice-free Arctic Ocean: Donn, William L. 04166
 Quaternary, meteorological-isostatic model: Tanner, William F. 04169
 Western, glaciers, activity, dating, lichen: Viereck, Leslie A. 02289

Hydrogeology

- Ground-water budget, methods of study: Farvolden, R. N. 07977

Maps, geoid

- Revision of 1960 map: Fischer, Irene. 07077

Maps, geologic

- Eastern, J. E. Guettard, 1756: Osborne, F. Fitz. 07146

Mineralogy

- Amber, localities, infrared spectra, catalog: Langenheim, Jean H. 04786

Paleoclimatology

- Cenozoic, cooling trend, increasing altitudes: Hamilton, Warren. 04170
 Cenozoic, flora, sequential changes: Barghoorn, E. S. 04691
 Quaternary, glacial and postglacial, eastern, alpine vegetation: Dansereau, Pierre. 00565
 Quaternary, Great Plains, inorganic-organic association: Reider, Richard G. 00259

Paleomagnetism

- Cretaceous, pole positions: Helsley, Charles E. 02495
 Devonian, paleolatitudes: Creer, K. M. 05258
 Polar wandering curves, cf. Europe, continental drift: Hospers, J. 07064
 Precambrian, field intensity: Kobayashi, Kazuo. 06333

Paleontology

- Angiosperms, Eocene, southeastern, palms: Dilcher, D. L. 09375
 Anthozoa, Devonian, Lower and Middle, eastern, rugose: Oliver, William A., Jr. 02884
 Aves, Pliocene, rails: Feduccia, J. Alan. 03091
 Brachiopoda, Devonian, Appalachian Province: Boucot, A. J. 02968
 Brachiopoda, Devonian, faunal provinces: Boucot, A. J. 02915
 Brachiopoda, Ordovician, affinities with Estonian faunas: Roomusoks, A. 05072
 Brachiopoda, Silurian-Devonian, Chonetacea, taxonomy: Boucot, A. J. 00491
 Bryozoa, Ordovician, Anolotichiidae, n. fam., from Ceramoporidae: Utgaard, John. 05770
 Bryozoa, Ordovician, Ceramoporidae, redefined genera: Utgaard, John. 06028
 Cephalopoda, Devonian, ammonoids, zonation, correlation, Europe: House, M. R. 02876
 Cephalopoda, Ordovician, Lower, southwestern, endoceroid zone: Flower, Rousseau H. 03791
 Conodonts, Triassic, platform types, evolution, cf. Europe: Mosher, L. Cameron. 05672
 Conodonts, Triassic, western, correlation, Europe: Mosher, L. Cameron. 05671
 Crinoidea, Ordovician, Middle and Upper, Porocrinidae: Kesling, Robert V. 00807
 Diatoms, Cretaceous-Holocene, *Aulacodiscus*, review: Burke, Joseph F. 10987

North America—Continued

Paleontology—Continued

- Echinoidea, Triassic, cidaroid: Kier, Porter M. 05675
 Flora, Holocene, Pacific Northwest, affinities, migrations: Detling, LeRoy E. 03737
 Foraminifera, Cambrian, Cenozoic, continental margins, extinctions, climate: Rothwell, W. T., Jr. 01191
 Foraminifera, Cretaceous, western, geographic distribution: Douglas, Robert G. 07768
 Foraminifera, Tertiary, planktonic, taxonomy: Berggren, W. A. 03011
 Gastropoda, Miocene-Pleistocene, southern, baccinids, nomenclature: Emerson, William K. 02808
 Graptolithina, Devonian, Cordilleran geosyncline, cf. Europe: Berry, William B. N. 02875
 Graptolithina, Ordovician, Lower, correlation with British: Berry, William B. N. 03199
 Graptolithina, Ordovician, Lower, correlation with British: Skevington, David. 03198
 Gymnosperms, cycad cones, evolution: Delevoryas, T. 02548
 Gymnosperms, Pennsylvanian, alethopterids, species, distribution: Wagner, R. H. 09482
 Insecta, Tertiary, *Ulmeriella*: Emerson, Alfred E. 03871
 Mammalia, aquatic insectivores: Hutchison, J. Howard. 08287
 Mammalia, Cretaceous-Eocene, marsupials, evolution: Clemens, William A. 01091
 Mammalia, Cretaceous-Tertiary, multituberculates, generic diversity: Fox, Richard C. 04842
 Mammalia, Oligocene, hedgehog: Gawne, Constance Elaine. 02990
 Mammalia, Oligocene-Holocene, horses, evolution: Sondaar, P. Y. 07006
 Mammalia, Pleistocene, eastern, mastodon extinction, climate: Dreimanis, A. 10976
 Mammalia, Pleistocene, lemmings, zoogeography: Guilday, John E. 08061
 Mammalia, Pliocene-Pleistocene, megalonychid sloths: Hirschfeld, Sue E. 08054
 Mammalia, Quaternary, short-faced bears: Firby, Jean B. 08271
 Mammalia, Tertiary, chalicotheres, distribution: Skinner, Morris F. 03872
 Mammalia, Tertiary, primates, new finds, review: Simons, Elwyn L. 06506
 Man, fossil, Quaternary: Hibben, Frank C. 06186
 Man, fossil, Quaternary, Great Plains: Reider, Richard G. 00259
 Man, fossil, Quaternary, scarce early finds: Jennings, Jesse D. 09000
 Paleobotany, Cretaceous-Tertiary, amber, infrared spectra: Langenheim, Jean H. 04786
 Paleogeology, Precambrian-Holocene, evolution: Termier, Henri. 07867
 Palynomorphs, Paleozoic, *Spencerisporites*: Felix, C. J. 02348
 Pelecypoda, Cretaceous, Western Interior, ecology, evolution: Kauffman, Erle G. 07908
 Pelecypoda, Paleozoic, lower, eastern, ambonychiid type material: Pojeta, John, Jr. 05704
 Pisces, Cretaceous-Holocene, western interior, clupeomorph: Cavender, Ted. 10944
 Porifera, Paleozoic, lower, bibliography: Rigby, J. Keith. 07652

North America—Continued

Paleontology—Continued

- Protista, calcispheres, Devonian, paleoecologic, stratigraphic value: Stanton, Robert J., Jr. 08004
 Pteridophytes, gymnosperms, Paleozoic, carbohydrate evolution: Swain, F. M. 06304
 Pteridophytes, Pennsylvanian, lycopods, morphology: Frankenberg, Julian Myron. 04450
 Trilobita, Ordovician, eastern, *Cryptolithus*: Whittington, H. B. 03206
 Vertebrata, Devonian, Old Red Sandstone and equivalents: Allen, J. R. L. 03187
 Vertebrata, midcontinent, stratigraphic distribution, Quaternary: Schultz, C. Bertrand. 02329
 Vertebrata, Pennsylvanian, coal-bearing strata, cf. Europe: Westoll, T. S. 05871
 Worm burrows, Paleozoic, stratigraphic range: Conkin, James E. 04329

Petrology

- Layered intrusions, various types, crystal fractionation: Wager, L. R. 00366

Sedimentary petrology

- Cordilleran geosyncline, Ordovician sandstone, provenance: Ketner, Keith B. 00740
 Eastern, continental margin, sediments, provenance, dispersion: Ross, David A. 08861
 Eastern, Ordovician reefs, evolution: Pitcher, Max Grow. 02608
 Juan de Fuca Strait, Pleistocene sedimentation: Anderson, Franz E. 08601
 Soils, deserts, research, appraisal: Dregne, Harold E. 08102
 Soils, plant communities: Eyre, S. R. 04129

Stratigraphy

- Cenozoic, correlation with Eurasia: Gabunia, L. 05062
 Cenozoic, western, nannoplankton, correlation with Europe: Lipps, Jere H. 02018
 Jurassic-Cretaceous, transition beds, western: Jeletzky, J. A. 07904
 Mississippian, Wasatch Line, west of, shelf-like conditions: Schleh, E. E. 10259
 Ordovician, Lower, correlation with British: Berry, William B. N. 03199
 Ordovician, Lower, correlation with British: Skevington, David. 03198
 Paleocene-Eocene, biostratigraphy, cf. Europe: Mohler, H. P. 10326
 Paleozoic-Mesozoic sedimentation, symposium, northeastern: Klein, George deVries. 03453
 Pleistocene, Cary-Port Huron Interstade, eastern, correlatives: Dreimanis, Aleksis. 09768
 Precambrian, chelogenic cycles, cf. Europe: Sutton, John. 02571
 Quaternary, correlation, methods: Morrison, R. B. 03989
 Quaternary, correlation methods, symposium: Morrison, Roger B. 03988
 Quaternary, glacial sequence, correlation with southern hemispheres: Suggate, R. P. 03992
 Silurian-Devonian boundary, location: Berdan, J. M. 02829
 Triassic, marine strata, correlation, ammonoid zonation: Silberling, N. J. 04891

Structural geology

- Appalachians, Saint Lawrence region, continental drift: Dineley, D. L. 07016
 Continental drift, Mesozoic: Kay, Marshall. 05088
 Continental drift, over East Pacific Rise: Palmer, Harold. 04996

North America—Continued

Structural geology—Continued

- Continental drift, Triassic, Atlantic Ocean opening, rates: Seyfert, Carl. 08450
 Cordillera, regional tectonics: Sales, John K. 05904
 Diapirs, symposium: Braunstein, Jules. 09358
 Glacial crustal bending: McGinnis, Lyle D. 01906
 Northwestern, crust, oceanward spreading: Bostrom, R. C. 01523
 Pacific margin, major faulting, transverse and peripheral: Burk, Creighton A. 04028
 Tectonics, general theory: Wilson, J. Tuzo. 05087
 Western, continental margin, thrusting hypotheses: vonHuene, Roland. 10379
 Western, East Pacific Rise, extension, mantle convection: Cook, Kenneth L. 07793

North Carolina

Absolute age

- Long Beach area, peat, carbon-14: Whitehead, Donald R. 10356
 Ore Knob, gneiss, Rb-Sr and K-Ar ages compared: Fullagar, Paul D. 07732

Areal geology

- Great Smoky Mountains National Park: King, Philip B. 00263
 Oxford area: Cook, John T. 06040
 Sauratown Mountains, field trip: Butler, J. Robert. 01149
 Troy quadrangle, southwest quarter: Upchurch, C. Neil. 06043

Economic geology

- Chromite, western: Thayer, T. P. 01376
 Cobalt, nickel, resources: Cornwall, H. R. 01377
 Construction materials, Orange County: Allen, Eldon P. 07663
 Copper, southern, exploration, geochemical: Tan, Li-Ping. 08908
 Feldspar, resources: Lesure, F. G. 01327
 Gold, genesis, Slate Belt: Worthington, J. E. 06863
 Lead, southwestern, occurrence: Davis, James H. 08520
 Mica, resources: Lesure, F. G. 01369
 Niobium, tantalum, resources: Parker, Raymond L. 01382
 Pegmatite, Blue Ridge area: Lesure, Frank G. 00261
 Phosphate, Beaufort County, Lee Creek open-pit mine: Caldwell, A. Blake. 09591
 Phosphate, continental shelf: Luternauer, John L. 08544
 Thorium, rare earths, resources: Adams, John W. 01364

Geochemistry

- Beaufort area, estuary sediments and water, zinc exchange: Duke, Thomas W. 04496
 Coastal plain, soils, magnesium, exchange capacity: Rice, H. B. 02266
 Coastal plain, soils, strontium retention: Taylor, Alan W. 07565
 Democrat area, soils, sediments, nickel concentration: Carpenter, Robert H. 10290
 Fort Caswell area, soils, organic matter, canopy drip source: Malcolm, R. L. 05962
 Great Smoky Mountains, Thunderhead Sandstone, metamorphism, chemical variations: Allen, Gary C. 08597
 Kings Mountain-Charlotte area, ground water, metal concentrations: Price, Van. 08549

North Carolina—Continued

Geochemistry—Continued

Kings Mountain-Charlotte area, ground-water analyses, rock types distinguished: Price, Van. 00924

Mecklenburg ultramafic complex, mafic silicates, petrochemistry: Hermes, O. Don. 10766

Rowan County, Salisbury pluton, chemical trends: Lemmon, Robert E. 06003

Western, ultramafic minerals, K, Rb, Sr isotopes: Stueber, Alan M. 09709

Geomorphology

Barrier islands, evolution: Fisher, John J. 08688

Cape Fear, continental shelf, submerged shoreline features: Riggs, Stanley R. 10339

Cape Hatteras, continental margin, bathymetry: Rona, Peter A. 09926

Capes Hatteras to Fear, shoreline changes: El-Ashry, Mohamed T. 07369

Continental shelf, quantitative analysis: Fisher, John J. 07619

Outer Banks, beach profiles, variation: Van-Beek, Johannes L. 11137

Outer Banks, relict beach ridges, evolution: Fisher, John Joseph. 02033

Geophysical surveys

Brevard zone, gravity, interpretation: Cooley, Tillman. 06004

Continental margin, seismic: Rona, Peter Arnold. 02040

Continental margin, slope, canyons, seismic: Rona, Peter A. 08056

Hot Springs-Asheville-Hendersonville area, radar: Williams, Lyman O. 10357

Hydrogeology

Belhaven area, ground-water resources: Lloyd, Orville B., Jr. 09491

Chowan County, ground-water resources: Lloyd, O. B., Jr. 04383

Chowan County, ground-water resources: Lloyd, Orville B., Jr. 08899

Pitt County, ground-water resources: Sumson, Carlton T. 03682

Maps, geologic

Blue Ridge area: Lesure, Frank G. 00261

Great Smoky Mountains National Park: King, Philip B. 00263

Orange County: Allen, Eldon P. 07663

Pilot Mountain area: Butler, J. Robert. 01149

Sauratown Mountains anticlinorium area: Butler, J. Robert. 01149

Maps, ground water

Chowan County: Lloyd, O. B., Jr. 04383

Chowan County: Lloyd, Orville B., Jr. 08899

Pitt County: Sumson, Carlton T. 03682

Maps, mineral resources

Blue Ridge area, mica districts: Lesure, Frank G. 00261

Heavy minerals: Overstreet, William C. 00323

Maps, structure

Piedmont, eastern: Parker, John M., 3d. 04101

Mineralogy

Axinite, Mitchell County, occurrence: Brannock, K. C. 08136

Beaufort County, phosphorite deposit: Rooney, Thomas Peter. 01757

Eucryptite, bikitaite, King's Mtn.: Leavens, Peter B. 06770

Kobellite, Raleigh area: Harris, D. C. 11295

Oligoclase, Mitchell County, pegmatite: Colville, A. A. 11234

North Carolina—Continued

Mineralogy—Continued

Tourmaline, pyrophyllite deposits, acicular, filiform morphology: Furbish, William J. 09092

Paleoecology

Miocene, Foraminifera, Yorktown Fm., Pitt County: Schnitker, Detmar. 08556

Oligocene, oyster community, Belgrade area: Lawrence, David R. 07929

Oligocene, oyster community, Belgrade area: Lawrence, David R. 08540

Paleontology

Foraminifera, Miocene, paleoecology: Gibson, Thomas G. 03850

Foraminifera, Miocene, paleoecology: Leutze, Willard P. 03849

Ostracoda, Miocene-Pliocene, Waccamaw Formation: Swain, Frederick M. 00262

Palynology, Quaternary, Lake Singletary, sediments, spores: Wolf, Frederick A. 00726

Pelecypoda, Oligocene, cf. Holocene, oysters, taphonomy: Lawrence, David R. 03866

Pisces, Cretaceous, Black Creek Formation, Phoebus Landing: Miller, Halsey W. 06760

Reptilia, Triassic, Pekin Formation, Chatham County: Baird, Donald. 10888

Petrology

Albemarle area, igneous rocks, low-rank metamorphism: Ragland, Paul C. 10335

Blue Ridge province, Precambrian-Paleozoic magma series: Rankin, D. W. 08849

Chapel Hill quadrangle, Carolina Slate Series and intrusions: Mann, V. I. 10908

Deep River basin, diabase dikes: Justus, Philip S. 08537

Deep River Triassic basin, diabase dikes, texture, evolution: Justus, Philip S. 08756

Jackson County, Webster-Addie ultramafic ring: Madison, James A. 10322

Mecklenburg gabbro-metagabbro complex: Hermes, O. Don. 01732

Orange County, basalt, pillow structure: Wilson, William F. 04102

Orange County, granodiorite stock, xenolith alteration: Beyer, Paul J. N. 06041

Orange County, rock types: Allen, Eldon P. 07663

Piedmont, diabase, Triassic dikes: Ragland, Paul C. 07069

Piedmont, Mecklenburg complex, gabbro-metagabbro: Hermes, O. Don. 05296

Piedmont, plutons: Butler, J. Robert. 08513

Western, metamorphic isograds: Carpenter, Robert H. 10289

Sedimentary petrology

Coast line, sediment budget: Pierce, J. W. 08548

Coastal area, modern sediments, environments: Ingram, Roy L. 05437

Coastal plain, Cape Fear Formation, graded rhythmic bedding: Heron, S. Duncan, Jr. 11300

Coastal plain, organic, organic soils, genesis: Dolman, J. D. 02268

Coastal plain, soil catenas: Nettleton, W. D. 04191

Coastal plain, soil catenas: Nettleton, W. D. 04218

Continental shelf, Pleistocene reef: Menzies, R. J. 11083

Dan River, Davie County basins, Triassic clastics: Thayer, Paul Arthur. 02044

North Carolina—Continued*Sedimentary petrology—Continued*

Durham Basin, Triassic rocks, paleocurrents: Leith, C. J. 10319

Great Smoky Mountains, soils, vegetation, bedrock influences: Wolfe, James Alvis. 03013

Onslow Bay, sediments: Cleary, William J. 01150

Outer Banks beach, sedimentation: Sonu, C. J. 10346

Outer Banks, subaerial sediments, physical properties, dynamic responses: Sonu, Choule J. 08437

Raleigh area, Cecil soils, clay skins: Khalifa, E. M. 05964

Stratigraphy

Cretaceous, Cape Fear Arch, transgressive deposits, ravinement: Swift, Donald J. P. 03894

Precambrian, Blue Ridge: Rankin, D. W. 10337

Structural geology

Blue Ridge: McKniff, Joseph. 10324

Brevard zone, gravity anomalies: Cooley, Tillman. 06004

Brevard zone, origin: Burchfiel, B. C. 00667

Brevard zone, origin: Dunn, David E. 00641

Crust, thickness: Nation, J. B. 10543

Piedmont, eastern, anticlinorium: Parker, John M., 3d. 04101

Pilot Mountain, slip cleavage, development: Dunn, David E. 07705

Weathering

Benson area, paleosols, genesis: Cady, J. G. 07419

Coastal plain, soil catenas, fragipan formation, geomorphic surfaces: Nettleton, W. D. 04218

Coastal plain, soil catenas, fragipan genesis: Nettleton, W. D. 04191

Slate Belt, mica, soil parent material, relations: Goss, Don Woodson. 07181

North Dakota*Areal geology*

Cass County: Klausning, Robert L. 01641

North Forks to Canadian Line, Lake Agassiz bed, field trip: Bluemle, Mary E. 10770

Economic geology

Lignite, Fort Union Formation, reserves, method: Carmichael, Virgil W. 01911

Limestone, eastern, exploration, cement-rock possibilities: Anderson, Sidney B. 07051

Natural gas, occurrence: Anderson, Sidney B. 03426

Petroleum, Williston basin, Newcastle Formation, possibilities: Reishus, Mark. 04724

Petroleum, Williston basin, Sanish pool: Murray, G. H., Jr. 00064

Engineering geology

Ground-water recharge, Minot area: Pettyjohn, Wayne A. 02680

Highway underpass, foundation soils, stabilization, Fargo area: Bell, Gordon L. 07510

Geomorphology

Badlands, genesis, piping process: Bell, Gordon L. 04852

Little Missouri River, floodplain history, use of trees: Everitt, Ben L. 02445

Geophysical surveys

Canal sites, resistivity: Anzman, J. R. 06866

Hydrogeology

Artesian basin, recharge, geochemistry: Swenson, Frank A. 00552

North Dakota—Continued*Hydrogeology—Continued*

Cass County, ground-water resources, aquifers: Klausning, Robert L. 07043

Coteau du Missouri, potholes, ground-water: Eisenlohr, William S. 02820

Dakota artesian basin, water source, movement: Swenson, Frank A. 05879

Eastern, Dakota Sandstone, properties, water composition: Kelly, T. E. 02699

Eddy and Foster Counties, ground-water resources: Trapp, Henry, Jr. 01050

Grand Forks County, ground-water resources: Kelly, T. E. 00066

Ground-water levels, 1966, observation wells: Randich, P. G. 00827

Minot area, aquifer, recharge system: Pettyjohn, Wayne A. 02680

Renville and Ward Counties, ground-water basic data: Pettyjohn, Wayne A. 01051

Wells County, ground-water basic data: Buturla, Frank, Jr. 01052

Maps, geologic

Cass County: Klausning, Robert L. 01641

Grand Forks County, cement-rock prospects: Anderson, Sidney B. 07051

Maps, ground water

Cass County: Klausning, Robert L. 01641

Cass County, availability: Klausning, Robert L. 07043

Eddy County: Trapp, Henry, Jr. 01050

Foster County: Trapp, Henry, Jr. 01050

Maps, isopach

Williston basin, Mowry, Newcastle, and Skull Creek formations: Reishus, Mark. 04724

Maps, structure

Williston basin, Mowry, Newcastle, and Skull Creek formations: Reishus, Mark. 04724

Paleontology

Insecta, Paleocene, upper, Dickinson area: Fen-nah, R. G. 00325

Pelecypoda, Cretaceous, Fox Hills Formation, tellinid, color pattern: Feldmann, Rodney M. 00500

Sedimentary petrology

Hell Creek Formation: Frye, Charles Isaac. 02034

Kibbey Formation, textures, deposition: Rawson, Richard R. 04390

Western, Tongue River and Sentinel Butte Formations, fluvial features: Royse, Chester F., Jr. 01192

Western, Tongue River, Sentinel Butte Formations: Royse, Chester Franklin, Jr. 02041

Stratigraphy

Cretaceous, Hell Creek Formation, new members: Frye, Charles Isaac. 02034

Cretaceous, Newcastle Formation, Williston basin: Reishus, Mark. 04724

Mississippian, Kibbey Formation, Ray Member, Williston basin: Rawson, Richard R. 06973

Ordovician-Silurian, Pembina and Grand Forks Counties: Anderson, Sidney B. 07051

Paleocene, Tongue River and Sentinel Butte Formations, western: Royse, Chester F., Jr. 01192

Paleocene, Tongue River, Sentinel Butte Formations, western: Royse, Chester Franklin, Jr. 02041

Triassic-Jurassic: Carlson, C. E. 11230

Northwest Territories*Absolute age*

- C-14, University of Wisconsin list: Bender, Margaret M. 01122
 Great Slave Lake area, lead: Robertson, D. K. 05431
 Yellowknife area, Archean volcanics, island arc development: Folinsbee, R. E. 09381
 Yellowknife area, greenstones, granitic rocks: Green, D. C. 07481

Areal geology

- Hopewell and Nasatapoka Islands off New Quebec: Stevenson, I. M. 09117
 Mackenzie, Christie Bay area, Great Slave Lake: Stockwell, C. H. 05653
 Mackenzie, Nahanni area: Green, L. H. 02585
 Mackenzie, Reliance area: Stockwell, C. H. 05654
 Mackenzie, Tumi Lake area: McGlynn, J. C. 07868

Earthquakes

- 1965, swarm, Mould Bay area: Smith, W. E. T. 05460

Economic geology

- Copper, Copper Mine River area, occurrence: Watts, Murray. 01134
 Copper, Coppermine River area, Precambrian possibilities: Watts, Murray. 09561
 Copper, Coppermine River region, exploration: Mining in Canada. 07883
 Evaporites, Sverdrup Basin: Sproule, J. C. 01023
 Gold, Giant Yellowknife mine, reserve estimation, grade control: Dadson, A. S. 05322
 Lead-zinc, Pine Point area, exploration history: Seigel, H. O. 03050
 Lead-zinc, Pine Point orebodies, genesis: Beales, F. W. 07752
 Mineral resources, Arctic islands, exploration problems: Sproule, J. C. 07881
 Petroleum, Arctic islands, potential: Hunt, A. D. 07081
 Petroleum, Arctic, western, possibilities: Gallup, W. B. 00109
 Petroleum, natural gas, Arctic areas: Mining in Canada. 07882
 Tungsten, Flat River headwaters: Blusson, S. L. 08055
 Zinc, lead, Pine Point: Evans, T. L. 04222
 Zinc, lead, Pine Point: Roedder, Edwin. 04231

General

- Current research, Devon Island: Barr, W. 01516

Geochemistry

- Great Slave Lake area, lead, sulfur isotopes: Robertson, D. K. 05431
 Mackenzie, north-central, elements in rocks, patterns: Mursky, Gregory. 03596
 Muskox intrusion, sulfur isotope ratios: Sasaki, Akira. 08080
 Pine Point area, lead-zinc deposits, sulfur isotopes: Folinsbee, R. E. 07724

Geomorphology

- Axel Heiberg Island, eolian features, wind direction mapping: Rudberg, Sten. 07375
 Baffin Island, shore features: Andrews, J. T. 01133
 Cornwallis Island, Resolute area, raised shorelines, cf. modern: Hannell, F. G. 01517
 Mackenzie Delta, ice in permafrost profile: Williams, P. J. 07237
 Mackenzie River delta, pingos, genesis: Mackay, J. Ross. 02504

Northwest Territories—Continued*Geomorphology—Continued*

- Prince Patrick Island, patterned ground: Pissart, A. 07391
 Prince Patrick Island, slope evolution: Pissart, A. 10919

Geophysical surveys

- Great Slave Lake area, aeromagnetic, interpretation: Naidu, Prabakar S. 11116
 Pine Point, Pyramid orebodies, case history: Seigel, H. O. 03050

Glacial geology

- Meighen Ice Cap, ice core, fabric analysis: Koerner, R. M. 04874

Maps, aeromagnetic (See also Maps, magnetic)

- Franklin, Hardinge Bay, Polar Continental Shelf: Canada Geological Survey. 00706
 Franklin, Intrepid Inlet, Polar Continental Shelf: Canada Geological Survey. 00705
 Franklin, Satellite Bay, Polar Continental Shelf: Canada Geological Survey. 00707
 Franklin, Sheet 99 C, Polar Continental Shelf: Canada Geological Survey. 00709
 Franklin, Sheet 109 C, Polar Continental Shelf: Canada Geological Survey. 00711
 Franklin, Sheet 99 D, Polar Continental Shelf: Canada Geological Survey. 00708
 Franklin, Sheet 109 D, Polar Continental Shelf: Canada Geological Survey. 00710
 Franklin, Sheet 99 E, Polar Continental Shelf: Canada Geological Survey. 00712
 Franklin, Sheet 109 E, Polar Continental Shelf: Canada Geological Survey. 00714
 Franklin, Sheet 89 F, Polar Continental Shelf: Canada Geological Survey. 00704
 Franklin, Sheet 99 F, Polar Continental Shelf: Canada Geological Survey. 00713
 Franklin, Sheet 109 F, Polar Continental Shelf: Canada Geological Survey. 00715
 Franklin, Sheet 109 G, Polar Continental Shelf: Canada Geological Survey. 00719
 Franklin, Sheet 99 H, Polar Continental Shelf: Canada Geological Survey. 00716
 Franklin, Sheet 109 H, Polar Continental Shelf: Canada Geological Survey. 00718
 Franklin, Sheets 99 G and 1000 A, Polar Continental Shelf: Canada Geological Survey. 00717
 Mackenzie, Artillery Lake area: Canada Geological Survey. 00767
 Mackenzie, Baillie River area: Canada Geological Survey. 00770
 Mackenzie, Beechey Lake area: Canada Geological Survey. 00684
 Mackenzie, Beechey Lake area: Canada Geological Survey. 00769
 Mackenzie, Biologist Lake area: Canada Geological Survey. 00672
 Mackenzie, Casey Lake area: Canada Geological Survey. 00681
 Mackenzie, Conrod Lake area: Canada Geological Survey. 00679
 Mackenzie, Duggan Lake area: Canada Geological Survey. 00695
 Mackenzie, Duggan Lake area: Canada Geological Survey. 00771
 Mackenzie, Healey Lake area: Canada Geological Survey. 00768
 Mackenzie, Malley Rapids area: Canada Geological Survey. 00680
 Mackenzie, Mary Frances Lake area: Canada Geological Survey. 00668
 Mackenzie, Sheet 76 A/7: Canada Geological Survey. 00671

Northwest Territories—Continued

Maps, aeromagnetic—Continued

- Mackenzie, Sheet 76 A/13: Canada Geological Survey. 00676
 Mackenzie, Sheet 76 A/14: Canada Geological Survey. 00677
 Mackenzie, Sheet 76 A/15: Canada Geological Survey. 00678
 Mackenzie, Sheet 76 B/14: Canada Geological Survey. 00673
 Mackenzie, Sheet 76 B/15: Canada Geological Survey. 00674
 Mackenzie, Sheet 76 B/16: Canada Geological Survey. 00675
 Mackenzie, Sheet 76 G/6: Canada Geological Survey. 00683
 Mackenzie, Sheet 76 G/8: Canada Geological Survey. 00685
 Mackenzie, Sheet 76 G/11: Canada Geological Survey. 00690
 Mackenzie, Sheet 76 G/10: Canada Geological Survey. 00691
 Mackenzie, Sheet 76 G/9: Canada Geological Survey. 00692
 Mackenzie, Sheet 76 G/14: Canada Geological Survey. 00697
 Mackenzie, Sheet 76 G/15: Canada Geological Survey. 00698
 Mackenzie, Sheet 76 G/16: Canada Geological Survey. 00699
 Mackenzie, Sheet 76 H/1: Canada Geological Survey. 00682
 Mackenzie, Sheet 76 H/5: Canada Geological Survey. 00686
 Mackenzie, Sheet 76 H/6: Canada Geological Survey. 00687
 Mackenzie, Sheet 76 H/7: Canada Geological Survey. 00688
 Mackenzie, Sheet 76 H/8: Canada Geological Survey. 00689
 Mackenzie, Sheet 76 H/12: Canada Geological Survey. 00693
 Mackenzie, Sheet 76 H/11: Canada Geological Survey. 00694
 Mackenzie, Sheet 76 H/9: Canada Geological Survey. 00696
 Mackenzie, Sheet 76 H/13: Canada Geological Survey. 00700
 Mackenzie, Sheet 76 H/14: Canada Geological Survey. 00701
 Mackenzie, Sheet 76 H/15: Canada Geological Survey. 00702
 Mackenzie, Sheet 76 H/16: Canada Geological Survey. 00703
 Mackenzie, Sheet 75 0/10: Canada Geological Survey. 00669
 Mackenzie, Sheet 75 0/9: Canada Geological Survey. 00670

Maps, geologic

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 Baffin Island, Navy Board Inlet area: Blackadar, R. G. 01526
 Baffin Island, Phillips Creek area: Blackadar, R. G. 01527
 Cornwallis Island area, preliminary: Thorsteinsson, R. 06570
 Franklin, Agu Bay-Easter Cape area: Blackadar, R. G. 02463
 Franklin, Arctic Bay-Cape Clarence area: Blackadar, R. G. 02461
 Franklin, Berlinguet Inlet-Bourassa Bay area: Blackadar, R. G. 02460

Northwest Territories—Continued

Maps, geologic—Continued

- Franklin, Erichsen Lake area: Blackadar, R. G. 02441
 Franklin, Moffet Inlet-Fitzgerald Bay area: Blackadar, R. G. 02462
 Mackenzie, Christie Bay area, Great Slave Lake: Stockwell, C. H. 05653
 Mackenzie, Goulburn Group: Tremblay, L. P. 07898
 Mackenzie, Nahanni area: Green, L. H. 02585
 Mackenzie, Reliance area: Stockwell, C. H. 05654
 Mackenzie, Sparrow Lake-Thompson Lake area: Kretz, R. 04382
 Mackenzie, Staple Lake area: Kretz, R. 04382
 Mackenzie, Tumi Lake area: McGlynn, J. C. 07868
- Maps, geomorphologic*
 Baffin Island, northern, glaciers: Henocho, W. E. 07673
 Baffin Island, southern, glaciers: Henocho, W. E. 07674
 Queen Elizabeth Islands, northern, glaciers: Henocho, W. E. 07671
 Queen Elizabeth Islands, southern, glaciers: Henocho, W. E. 07672
- Maps, isopach*
 Ellesmere Island, east-central, Ordovician formations: Kerr, J. William. 06311
 Mackenzie District, northwestern, Devonian: Norris, A. W. 03180
- Maps, magnetic (See also Maps, aeromagnetic)*
 Frani, Sheet 37 D/15, airborne: Canada Geological Survey. 03276
 Franklin, Barnes Ice Cap area, airborne: Canada Geological Survey. 03277
 Franklin, Bieler Lake East area, airborne: Canada Geological Survey. 03318
 Franklin, Bieler Lake West area, airborne: Canada Geological Survey. 03278
 Franklin, Conn Lake area, airborne: Canada Geological Survey. 03279
 Franklin, Ege Bay area, airborne: Canada Geological Survey. 03253
 Franklin, Flyaway Lake area, airborne: Canada Geological Survey. 03322
 Franklin, Gee Lake West, airborne: Canada Geological Survey. 03320
 Franklin, Generator Lake area, airborne: Canada Geological Survey. 03325
 Franklin, Ipivtik Lake area, airborne: Canada Geological Survey. 03262
 Franklin, Lake Gillian North area, airborne: Canada Geological Survey. 03260
 Franklin, Lewis Glacier area, airborne: Canada Geological Survey. 03267
 Franklin, Nivalis Lake area, airborne: Canada Geological Survey. 03266
 Franklin, Omega Bay area, airborne: Canada Geological Survey. 03263
 Franklin, Piling Lake area, airborne: Canada Geological Survey. 03272
 Franklin, Rimrock Lake area, airborne: Canada Geological Survey. 03256
 Franklin, Sam Ford River area, airborne: Canada Geological Survey. 03326
 Franklin, Sheet 27 C/5, airborne: Canada Geological Survey. 03324
 Franklin, Sheet 37 D/13, airborne: Canada Geological Survey. 03259
 Franklin, Sheet 37 D/5, airborne: Canada Geological Survey. 03261

Northwest Territories—Continued

Maps, magnetic—Continued

- Franklin, Sheet 37 D/14, airborne: Canada Geological Survey. 03269
- Franklin, Sheet 37 D/6, airborne: Canada Geological Survey. 03271
- Franklin, Sheet 37 D/2, airborne: Canada Geological Survey. 03273
- Franklin, Sheet 37 D/7, airborne: Canada Geological Survey. 03274
- Franklin, Sheet 37 D/10, airborne: Canada Geological Survey. 03275
- Franklin, Sheet 37 D/9, airborne: Canada Geological Survey. 03321
- Franklin, Sheet 37 D/1, airborne: Canada Geological Survey. 03323
- Franklin, Sheet 37 E/13, airborne: Canada Geological Survey. 03255
- Franklin, Sheet 37 E/5, airborne: Canada Geological Survey. 03257
- Franklin, Sheet 37 E/4, airborne: Canada Geological Survey. 03258
- Franklin, Sheet 37 E/14, airborne: Canada Geological Survey. 03265
- Franklin, Sheet 37 E/3, airborne: Canada Geological Survey. 03268
- Franklin, Sheet 37 E/15, airborne: Canada Geological Survey. 03280
- Franklin, Sheet 37 E/9, airborne: Canada Geological Survey. 03317
- Franklin, Sheet 37 E/1, airborne: Canada Geological Survey. 03319
- Franklin, Sheet 27 F/4, airborne: Canada Geological Survey. 03327
- Franklin, Sheet 37 H/4, airborne: Canada Geological Survey. 03254
- Franklin, Sheet 37 H/3, airborne: Canada Geological Survey. 03264
- Franklin, Sheet D/11, airborne: Canada Geological Survey. 03270
- Franklin, Sheets 109 A:SE and NE, D:SE, airborne: Canada Geological Survey. 07122
- Franklin, Sheets 109 A:SW and NW, D:SW, airborne: Canada Geological Survey. 07124
- Franklin, Sheets 109 B:SE and NE, C:SE, airborne: Canada Geological Survey. 07126
- Franklin, Sheets 109 B:SW and NW, C:SW, airborne: Canada Geological Survey. 07128
- Franklin, Sheets 108 E:NE, H:SE, H:NE, airborne: Canada Geological Survey. 07121
- Franklin, Sheets 108 E:NW, H:SW and NW, airborne: Canada Geological Survey. 07123
- Franklin, Sheets 108 F:NE, G:SE and NE, airborne: Canada Geological Survey. 07125
- Franklin, Sheets 108 F:NW, G:SW and NW, airborne: Canada Geological Survey. 07127
- Franklin, Sheets 98 G:SW and NW, 99 B:SW and NW, airborne: Canada Geological Survey. 07120
- Franklin, Tikerarsuk Point area, airborne: Canada Geological Survey. 03252
- Mackenzie, Sheet 76 I:3 and 4, airborne: Canada Geological Survey. 06193
- Mackenzie, Sheet 76 I:1 and 2, airborne: Canada Geological Survey. 06194
- Mackenzie, Sheet 76 I:5 and 6, airborne: Canada Geological Survey. 06199
- Mackenzie, Sheet 76 I:7 and 8, airborne: Canada Geological Survey. 06200
- Mackenzie, Sheet 76 I:11 and 12, airborne: Canada Geological Survey. 06205
- Mackenzie, Sheet 76 I:9 and 10, airborne: Canada Geological Survey. 06206

Northwest Territories—Continued

Maps, magnetic—Continued

- Mackenzie, Sheet 76 I:13 and 14, airborne: Canada Geological Survey. 06211
- Mackenzie, Sheet 76 I:15 and 16, airborne: Canada Geological Survey. 06212
- Mackenzie, Sheet 76 J:3 and 4, airborne: Canada Geological Survey. 06191
- Mackenzie, Sheet 76 J:1 and 2, airborne: Canada Geological Survey. 06192
- Mackenzie, Sheet 76 J:5 and 6, airborne: Canada Geological Survey. 06197
- Mackenzie, Sheet 76 J:7 and 8, airborne: Canada Geological Survey. 06198
- Mackenzie, Sheet 76 J:11 and 12, airborne: Canada Geological Survey. 06203
- Mackenzie, Sheet 76 J:9 and 10, airborne: Canada Geological Survey. 06204
- Mackenzie, Sheet 76 J:13 and 14, airborne: Canada Geological Survey. 06209
- Mackenzie, Sheet 76 J:15 and 16, airborne: Canada Geological Survey. 06210
- Mackenzie, Sheet 76 K:1 and 2, airborne: Canada Geological Survey. 06190
- Mackenzie, Sheet 76 K:5 and 6, airborne: Canada Geological Survey. 06195
- Mackenzie, Sheet 76 K:7 and 8, airborne: Canada Geological Survey. 06196
- Mackenzie, Sheet 76 K:11 and 12, airborne: Canada Geological Survey. 06201
- Mackenzie, Sheet 76 K:9 and 10, airborne: Canada Geological Survey. 06202
- Mackenzie, Sheet 76 K:13 and 14, airborne: Canada Geological Survey. 06207
- Mackenzie, Sheet 76 K:15 and 16, airborne: Canada Geological Survey. 06208
- Mackenzie, Sheet 76 K:3 and 4, airborne: Canada Geological Survey. 06765
- Mackenzie, Sheet 76 N:3 and 4, airborne: Canada Geological Survey. 06213
- Mackenzie, Sheet 76 N:1 and 2, airborne: Canada Geological Survey. 06214
- Mackenzie, Sheet 76 N:5 and 6, airborne: Canada Geological Survey. 06219
- Mackenzie, Sheet 76 N:7 and 8, airborne: Canada Geological Survey. 06220
- Mackenzie, Sheet 76 N:11 and 12, airborne: Canada Geological Survey. 06253
- Mackenzie, Sheet 76 N:9 and 10, airborne: Canada Geological Survey. 06254
- Mackenzie, Sheet 76 N:13 and 14, airborne: Canada Geological Survey. 06259
- Mackenzie, Sheet 76 N:15 and 16, airborne: Canada Geological Survey. 06260
- Mackenzie, Sheet 76 O:3 and 4, airborne: Canada Geological Survey. 06215
- Mackenzie, Sheet 76 O:1 and 2, airborne: Canada Geological Survey. 06216
- Mackenzie, Sheet 76 O:5 and 6, airborne: Canada Geological Survey. 06249
- Mackenzie, Sheet 76 O:7 and 8, airborne: Canada Geological Survey. 06250
- Mackenzie, Sheet 76 O:11 and 12, airborne: Canada Geological Survey. 06255
- Mackenzie, Sheet 76 O:9 and 10, airborne: Canada Geological Survey. 06256
- Mackenzie, Sheet 76 O:13 and 14, airborne: Canada Geological Survey. 06261
- Mackenzie, Sheet 76 O:15 and 16, airborne: Canada Geological Survey. 06262
- Mackenzie, Sheet 76 P:3 and 4, airborne: Canada Geological Survey. 06217

Northwest Territories—Continued

Maps, magnetic—Continued

- Mackenzie, Sheet 76 P:1 and 2, airborne: Canada Geological Survey. 06218
 Mackenzie, Sheet 76 P:5 and 6, airborne: Canada Geological Survey. 06251
 Mackenzie, Sheet 76 P:7 and 8, airborne: Canada Geological Survey. 06252
 Mackenzie, Sheet 76 P:11 and 12, airborne: Canada Geological Survey. 06257
 Mackenzie, Sheet 76 P:9 and 10, airborne: Canada Geological Survey. 06258
 Mackenzie, Sheet 76 P:13 and 14, airborne: Canada Geological Survey. 06263
 Mackenzie, Sheet 76 P:15 and 16, airborne: Canada Geological Survey. 06264
 Sheets 105 O:9, O:16, airborne: Canada Geological Survey. 07106

Maps, mineral resources

- Yellowknife-Beaulieu area, beryllium, geologic distribution: Mulligan, Robert. 06082

Maps, structure

- Mackenzie, Sparrow Lake-Thompson Lake area: Kretz, R. 04382
 Mackenzie, Staple Lake area: Kretz, R. 04382

Mineralogy

- Feldspar, Kaminak Lake area, K-variety, nephelite intergrowth: Davidson, A. 03585
 Sphalerite, Pine Point, color banding: Roedder, Edwin. 07567

Paleoclimatology

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Paleontology

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 Brachiopoda, Devonian, Middle, Mackenzie River basin, ambocoeliid: Caldwell, W. G. E. 02894
 Brachiopoda, Permian, Arctic Islands, new linopoductid: Waterhouse, J. B. 05688
 Fauna, Devonian, McKenzie District, northwestern: Norris, A. W. 05744
 Mammalia, Pleistocene, Wisconsin age, Banks Island: Maher, William J. 05658
 Microflora, Cretaceous or Tertiary, Idlorak Formation, Somerset Island: Dineley, D. L. 02724
 Ostracoda, Devonian, Carcajou Ridge, cf. Europe: McGill, Peter. 02870
 Ostracoda, Devonian, Ellesmere Island, new kloedenellids: Weyant, Marcel. 07293
 Ostracoda, Devonian, Hay River Formation, Great Slave Lake area: Braun, Willi Karl. 02895
 Palynomorphs, Devonian, Buffalo River Shales, Great Slave Lake area: Audretsch, A. P. 02881
 Pisces, Devonian, Idlorak Formation, Cretaceous-Tertiary, Somerset Island: Dineley, D. L. 02724
 Pisces, Devonian, Lower, Somerset Island, osteostracans: Dineley, D. L. 06690
 Pisces, Devonian, Peel Sound Formation, Prince of Wales Island area: Broad, D. S. 03134
 Pisces, Silurian-Devonian, Ellesmere Island, acanthodians: Spjeldnaes, Nils. 02874
 Trilobita, Cambrian, Mackenzie, South Nahanni River area: Norford, B. S. 03718
 Trilobita, worms, Cambrian, Lower, Ellesmere Island: Cowie, J. W. 03888

Petrology

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Northwest Territories—Continued

Petrology—Continued

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 Muskox intrusion, quartz paramorphism: Pouliot, Gaston. 06930
 Yellowknife-Beaulieu area, pegmatites, country rocks: Kretz, R. 04382

Sedimentary petrology

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 Cornwallis Island, Resolute area, surface materials: Hannell, F. G. 01517
 Ellef Ringnes Island, Isachsen area, soil development: Everett, K. R. 10814
 Great Slave Group, gypsum, halite crystal casts: Hoffman, Paul. 08735
 Prince Gustaf Adolf Sea area, bottom sediments: Marlowe, J. I. 02054
 Prince Patrick Island, Arctic soils, genetic distribution: Tedrow, J. C. F. 09007
 Prince Patrick Island, Mould Bay area, soil development: Everett, K. R. 10814
 Queen Elizabeth Islands, western, sediments, ecology: Pelletier, B. R. 01422
 Somerset Island, Idlorak Formation: Dineley, D. L. 02724
 Somerset Island, sandstone, crossbedding, deformed: Rust, B. R. 01475
 Somerset Island, Stanwell-Fletcher Lake, sedimentation: Rust, B. R. 08064
 Somerset Island, Stanwell-Fletcher lake, sediments: Coakley, J. P. 06602
 Stanwell-Fletcher Lake, bottom sediments: Coakley, J. P. 05522

Stratigraphy

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 Cambrian-Ordovician, Mackenzie, Flat River tungsten area: Blusson, S. L. 08055
 Devonian, Axel Heiberg and Ellesmere Islands, Franklinian eugeosyncline: Trettin, H. P. 03176
 Devonian, Beavertail Formation, Norman Wells area: Crickmay, C. H. 01699
 Devonian, Hay River Formation, Great Slave Lake area, correlation: Braun, Willi Karl. 02895
 Devonian, Mackenzie District, northwestern: Norris, A. W. 03180
 Devonian, McKenzie District, northwestern: Norris, A. W. 05744
 Devonian, Middle, Mackenzie River basin, correlation, brachiopods: Caldwell, W. G. E. 02894
 Devonian, Peel Sound Formation, Prince of Wales Island area: Broad, D. S. 03134
 Devonian, Queen Elizabeth Islands: Kerr, J. William. 03188
 Devonian, southern: Richmond, William Oliver. 00862
 Mesozoic-Cenozoic, Prince Gustaf Adolf Sea area, lithofacies: Marlowe, J. I. 02054
 Ordovician, Ellesmere Island, east-central: Kerr, J. William. 06311
 Ordovician-Tertiary, Cornwallis Island area: Thorsteinsson, R. 06570
 Paleozoic, evaporites, Sverdrup Basin: Sproule, J. C. 01023
 Precambrian, Goulburn Group, Mackenzie: Tremblay, L. P. 07898
 Precambrian, Great Slave Supergroup, Mackenzie, revision: Hoffman, P. F. 06306

Northwest Territories—Continued*Stratigraphy—Continued*

- Precambrian, Hurwitz Group, Keewatin, Tavani and Kaminak Lake areas: Bell, R. T. 04071
- Precambrian-Ordovician, Baffin Island, Navy Board Inlet: Blackadar, R. G. 01526
- Precambrian-Silurian, Baffin Island, Milne Inlet area: Blackadar, R. G. 01607
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Structural geology

- Axel Heiberg and Ellesmere Islands, Franklinian eugeosyncline: Trettin, H. P. 03176
- Baffin Island, postglacial rebound: Andrews, J. T. 01133
- Cornwallis Island area, tectonics, unconformities: Thorsteinsson, R. 06570
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- Postglacial uplift, variability, cause: Andrews, J. T. 03892
- Queen Elizabeth Islands, Franklinian miogeosyncline: Kerr, J. William. 03188
- Sverdrup basin, diapirs: Gould, Don B. 11410

Weathering

- Cornwallis Island, Resolute area, surface materials: Hannell, F. G. 01517
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Nova Scotia*Absolute age*

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Areal geology

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General

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Geomorphology

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Nova Scotia—Continued*Geomorphology—Continued*

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Geophysical surveys

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Maps, geologic

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- Whycocomough area: Kelley, Danford G. 08155

Maps, ground water

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Maps, magnetic

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- Cape Breton Island, Glace Bay, ship- and airborne: Canada Geological Survey. 02765
- Cape Breton Island, Louisbourg area, ship- and airborne: Canada Geological Survey. 03793
- Shelburne area, airborne: Canada Geological Survey. 02770
- Sydney area, airborne: Canada Geological Survey. 02773
- Truro area, airborne: Canada Geological Survey. 02772
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Marine geology

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Mineralogy

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Paleomagnetism

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Paleontology

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Sedimentary petrology

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Nova Scotia—Continued

Sedimentary petrology—Continued

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- Debert Indian site, periglacial sand, eolian: Swift, Donald J. P. 11357
- East Parrsboro Harbour, pebble transport by algae: Swanson, F. J. 06623
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- Minas Basin, Parrsboro area, sediments, grain-size cf. clam distribution: Clebnik, Sherman M. 06628
- Minas Basin, Pinnacle-Long Island Flats, bedform migration: McLean, J. Ross. 06618
- Minas Basin, Pinnacle-Long Island Flats, sediments, structures: Bedi, V. K. 06627
- Minas Basin, zone sediments, structures: Badal, Julian C. 06625
- North West Arm, glacial sediments, reworking, distribution: Stanley, Daniel J. 06593
- Parrsboro Harbour, Crane Point fan-crescent bar complex: Waitt, Mary Beth. 06624
- Parrsboro Harbour, mud deposition, gravel bar migration: Pearson, Gene. 06621
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Stratigraphy

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- Paleozoic-Mesozoic, Annapolis-Cornwallis Valley: Trescott, Peter C. 09018
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Structural geology

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Nuclear explosions

Applications

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- Excavation, research: Kurtz, Maurice K., Jr. 09578

Nuclear explosions—Continued

Applications—Continued

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- Industrial, engineering criteria, applications: Knutson, Carroll F. 07916
- Marginal ore deposits, in-situ leaching operations: Hansen, Spenst M. 09596
- Petroleum, gas, mineral production: Wainerdi, Richard E. 09274
- Thunderbird, Wyoming, coal gassification: Wold, John S. 05901

Boxcar

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Crustal studies

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Deformation

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- Halite, stress effect on thermoluminescence: Roach, Carl H. 03951
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- Nevada, Yucca Flat, fault displacement: Dickey, D. D. 06814
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Detection

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Fish Bowl

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Gasbuggy

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Gnome

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Jangle U

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Products

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Nuclear explosions—Continued*Seismic effects—Continued*

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Layered media, wave propagation solution: Costantino, C. J. 07738

P traveltimes, regional variations: Herrin, Eugene. 03110

PcP traveltimes, depth to core: Taggart, James. 03108

Pre-stressed media, radiation patterns: Toksoz, M. Nafi. 10049

P-waves, source characteristics: Trembly, Lynn Dale. 02049

S waves, traveltimes: Nuttli, Otto W. 11095

Shock spectra, computation: Galbraith, Frank W. 04584

Soils, vertical stress depth attenuation: Hendron, Alfred J., Jr. 08880

Sterling event, S-waves: Perret, William R. 06305

Sterling, Salmon, spectral analysis, Mississippi: Borchardt, Roger. 02708

Teapot Ess

Crater structure: Shoemaker, Eugene M. 07476

Nuclear magnetic resonance*Methods*

Application to mineralogy: Hafner, Stefan S. 09012

General, introductory course: Proctor, Warren G. 09008

Quadrupole effects: Brinkmann, Detlef. 09011

Ocean basins*Areal distribution*

Compared to continents, 5° band, 0°-75° lat: Krause, Dale C. 08449

Evolution

Hypothesis, core ages, frequency distribution: Galvin, Cyril J., Jr. 08448

Structural geology

Quasiraticonic, Cenozoic collapse: Fairbridge, Rhodes W. 08224

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Engineering geology, coastal: Mecarini, Gino. 09576

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Ohio—Continued

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Carbon gas field: Workman, L. E. 02138
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Goose River oil field: Jenik, A. J. 00063
Hogleg-Rimbeigh gas field: Webb, J. B. 03400
Medicine Hat-Hatton gas field: Hancock, W. P. 02139
Pembina Cardium oil field: Mills, B. A. 02134
Provost gas field: Suey, Harry. 02137
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Arizona

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Arkansas

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Gragg, Booneville, and Chismville gas fields: Bartlett, Charles S., Jr. 03410
Jerusalem gas field: Hartman, F. H. 03388
Magnolia oil field, Smackover unit: Weaver, Lewis K. 09074

British Columbia

- Fort Saint John gas field: Clark, L. M. 02133
Inga oil field: Peterson, D. J. 01158

Oil and gas fields—Continued

California

- Arbuckle gas field: Vaughan, Richard H. 02129
 Bouquet Canyon oil field: Zuberli, J. L. 04423
 Brea-Olinda field: Gaede, Verne F. 04418
 Brentwood field: Ditzler, Clark C. 02102
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 Elk Hills oil field: Lantz, Robert J. 02869
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 Ojai oil field, Sisar Creek area: Mitchell, William Spencer. 04420
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 Wilmington field: Hamilton, S. V. 02106
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Colorado

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 Brandon oil field, Kiowa County: Stoddard, John. 07265
 Greenwood gas field: Wingerter, H. R. 04464

Illinois

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 Albion oil fields: Skolfield, John L. 07834
 Boulder oil field: Stevenson, D. L. 07836
 Dale Consolidated oil field: Webb, Wilton H. 07838
 Dupo oil field: Schwalb, Howard. 07839
 Eldorado Consolidated oil field: Hawn, Margaret H. 07840
 Fishhook gas field: Meents, Wayne F. 07841
 Gard's Point oil field: Sparks, Jackson B. 07842
 Gila oil field: McKay, Edward D. 07844
 Iola Consolidated oil field: Luttrell, Homer. 07847
 Johnston City East oil field: Bell, Frank. 07849
 New Baden East oil field: Bristol, Hubert M. 07852
 New Harmony oil field: Skolfield, John L. 07853
 Oak Point oil field: Loveless, Ernest, Jr. 07854
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 Saint James oil field: Buehner, J. H. 07952
 Wapella East oil field: Harris, Lloyd A. 07957
 Waterloo oil field: Schwalb, Howard. 07958

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Oil and gas fields—Continued

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 Montgomery oil pool: Loveless, Ernest. 07851
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 Owensville East oil pool: Eberle, Robert F. 07948
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 Union Chapel oil pool: Reynolds, Doug. 07956

Kansas

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 Greenwood gas field: Wingerter, H. R. 04464
 Hardtner gas field: Young, Robert T. 03414
 Hugoton Panhandle gas field: Mason, John W. 03422
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 Otis-Albert gas field: Miller, Robert R. 03387
 Spivey-Grabs field: Frenslay, Robert W. 03415

Kentucky

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 Big Sandy gas field: Ray, Edward O. 03205
 Boxville oil pool: Avila, John. 07837
 Greensburg oil pool: Kincheloe, Jesse. 07843
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 Jingo oil field: Neudecker, Thomas E. 07848
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Louisiana

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 Thornwell gas field: Hardin, Frank R. 02122
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 Belle River Mills gas field: Lundy, C. L. 07929
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 Deep River field: Lundy, C. L. 07931
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 Enterprise field: Wirth, J. A. 07933
 Headquarters field: Sutton, D. G. 07934
 Northville field: Checkley, W. G. 09362
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Oil and gas fields—Continued

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Texas

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 Willow Springs gas field: Loetterle, G. J. 02161
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 Vadis field: Milner, William. 05577

Wyoming

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Oil and gas fields—Continued*Wyoming—Continued*

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 Kitty oil field: Swirczynski, Richard P. 05910
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 Natural gas, Greenwood field: Wingerter, H. R. 04464
 Natural gas, Hugoton-Panhandle field: Mason, John W. 03422
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 Natural gas, Laverne area: Pate, J. Durwood. 03420
 Natural gas, North Gotebo area: Takken, Suzanne. 03419
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 Petroleum and natural gas, Wheatland area: Ah-meduddin, Mir. 05584
 Petroleum, Burbank field, development: Largent, B. C. 00421

Oklahoma—Continued

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 Petroleum, eastern, Bartlesville sand: Weirich, T. E. 09069
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Maps, oil and gas

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 Osage County: Wagner, Oscar E., Jr. 03746

Maps, structure

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 Wheatland area, selected Paleozoic limestones: Ahmeduddin, Mir. 05584

Mineralogy

- Clay minerals, Kiowa County, diabase dikes, weathered: Nichols, Clayton R. 02501
 Clay minerals, Reddish Prairies, Nardin soils, genesis, translocation: Culver, James R. 05963
 Opaline phytoliths, soils, vegetation-type indicator: Yeck, Ronald D. 00160
 Selenite crystals, Great Salt Plains, growth, factors affecting: Davis, Johnnie L. 04340

Oklahoma—Continued

Paleomagnetism

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Igneous rocks: Spall, Henry R. 10085

Paleontology

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 Anthozoa, Pennsylvanian, favositid, n.gen.: Cocke, J. M. 06800
 Brachiopoda, Devonian, Lower, fauna: Amsden, Thomas W. 00424
 Brachiopoda, Silurian, Clarita Formation: Amsden, Thomas W. 03222
 Brachiopoda, Silurian, Henryhouse Marlstone, subsurface: Amsden, Thomas W. 10060
 Brachiopoda, Silurian-Devonian, value changes: Amsden, Thomas W. 07746
 Bryozoa, Ordovician, Simpson Group, Arbuckle Mts., cryptostomes: Farmer, George Thomas, Jr. 05516
 Bryozoa, Ordovician, Simpson Group, subsurface exploration, use: Boardman, Richard S. 11388
 Cephalopoda, Pennsylvanian, Bloyd Formation: McCaleb, James A. 03723
 Conodonts, Mississippian, Warsaw Formation, northeastern: Goebel, Edwin D. 06373
 Conodonts, Ordovician, Arbuckle Group, Arbuckle Mts.: Mound, Michael C. 05018
 Crinoidea, Pennsylvanian, Savanna Formation, Muskogee area: Strimple, Harrell L. 00042
 Crinoidea, Pennsylvanian, Wann Formation, Bartlesville area: Strimple, Harrell L. 04341
 Diatoms, Pliocene, Ogallala Formation, Beaver County: Wilson, L. R. 05270
 Diatoms, Quaternary, Fisher Canyon deposit, Caddo County, new sp.: Bond, T. A. 05020
 Insecta, Permian, Wellington Formation, Noble County, mayfly nymph: Kukalova, Jarmila. 11182
 Mollusca, Pennsylvanian, Wann Formation, paleoecology: McCoy, Scott, Jr. 00419
 Ostracoda, Devonian, Haragan Formation, correlation: Lundin, Robert F. 06322
 Palynomorphs, Cretaceous, Albian, Marshall County: Hedlund, R. W. 03740
 Palynomorphs, Pennsylvanian, coal seams: Wilson, L. R. 00413
 Palynomorphs, Pennsylvanian, coal swamps, correlation: Wilson, L. R. 00161
 Palynomorphs, Pennsylvanian, Secor Coal: Clarke, Robert T. 10068
 Palynomorphs, Permian, El Reno Group, southwestern: Morgan, Bill Eugene. 11331
 Palynomorphs, Permian, Wellington Fm.: Bond, T. A. 07368
 Pisces, Permian, Wellington Formation, north-central: Carlson, Keith J. 05679
 Porifera, Pennsylvanian, Pawnee Limestone, northeastern: Toomey, Donald Francis. 09717
 Porifera, Pliocene-Pleistocene, fresh-water: Branson, Carl C. 05141
 Protista, Devonian, Haragan Formation, acritarchs, new: Loeblich, Alfred R., Jr. 06347
 Reptilia, Eosuchia, Permian, Lower, Fort Sill: Carroll, Robert L. 03739
 Reptilia, Permian, Upper, Caseidae: Olson, Everett C. 00809
 Trilobita, Devonian, Turkey Creek limestone, cf. Europe: Ormiston, Allen R. 05705

Oklahoma—Continued*Paleontology—Continued*

Vertebrata, Permian, Early, summary: Olson, Everett C. 11171

Petrology

Northeastern, basement rocks: Denison, Rodger E. 10069

Sedimentary petrology

Ada area, Woodford Chert, concretions, dahlitic spherulites: Shead, A. C. 05139

Anadarko Basin, Pennsylvanian, Lower, sedimentation: Swanson, Donald C. 08038

Arkoma Basin, Spiro Sand, porosity: Pittman, Edward D. 03550

Beaver County, salt, fabric: Muehlberger, William R. 11332

North-central, Foraker Formation, carbonates: Mogharabi, Ataolah. 00158

Northeastern, Morrowan oolitic limestone, diagenesis: Henbest, Lloyd G. 01148

Northern, Senora Formation, Excello Shale Member: Cassidy, Martin M. 00307

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Northwestern, Pennsylvanian sandstones, environments, geometry: Khaiwka, Moayad Hamid. 04539

Ouachita front, Jackfork sandstones, provenance and dispersal: Morris, Robert C. 00417

Ouachita Mountains, Stanley Group, sandstone provenance: Hill, John Gilmore. 01346

Ouachita Mountains, Stanley Group, sedimentary structures: Johnson, Kent E. 03549

Reddish Prairies, soils, grayish claypans: Culver, James R. 05963

Soils, genesis, opaline phytoliths: Yeck, Ronald D. 00160

Southern, Kindblade Limestone, carbonate mounds: Ham, William E. 07954

Tulsa area, Arkansas River deposits, ripples, sand waves: Tillman, Roderick W. 01202

Western, Cloud Chief Formation, sedimentation: Nalewaik, Gerald Guy. 02039

Stratigraphy

Cambrian-Ordovician, Arbuckle overlap, paleogeography: Chenoweth, Philip A. 03766

Carter County, Healdton oil field: Latham, Jack W. 00062

Cretaceous, Antlers Sand, "Walnut" clay, Albin, Marshall County: Hedlund, R. W. 03740

Devonian, Turkey Creek limestone inlier, Marshall County: Amsden, Thomas W. 00044

Mississippian, Stanley Group, Ouachita Mts.: Hill, John Gilmore. 01346

Mississippian, Stanley Group, Ouachita Mts.: Johnson, Kent E. 03549

Mississippian-Pennsylvanian, Anadarko basin, western, correlations: Swanson, Donald C. 00415

Mississippian-Pennsylvanian, Marietta basin, deeper portion: Bradfield, H. H. 00412

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Pennsylvanian, Atoka Formation, Coal County, biostratigraphy: Strimple, Harrell L. 02498

Pennsylvanian, Atoka rocks, nomenclature, problems: Quinn, James H. 02497

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Oklahoma—Continued*Stratigraphy—Continued*

Pennsylvanian, Bluejacket Formation, northeastern: Saitta B., Sandro. 09068

Pennsylvanian, Bluejacket Sandstone, Bartlesville Sand: Visher, Glenn S. 09067

Pennsylvanian, Cherokee-Marmaton Groups, Nemaha Ridge: Cole, Joseph Glenn. 04533

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Pennsylvanian, coal beds, palynology: Wilson, L. R. 00161

Pennsylvanian, coal seams, biofacies: Wilson, L. R. 00413

Pennsylvanian, Dornick Hills Group, Bostwick Member, age: Wilson, L. R. 02500

Pennsylvanian, Iron Post and Secor Coal, correlation, method: Gibson, L. B. 02187

Pennsylvanian, Krebs and Cabaniss Groups, Cherokee correlation: Branson, Carl C. 10872

Pennsylvanian, Marietta basin, Gordonville trough: Bradfield, H. H. 00105

Pennsylvanian, Red Fork Sandstone, Anadarko Basin: Withrow, Philip C. 03780

Pennsylvanian, Senora Formation, Excello Shale Member: Cassidy, Martin M. 05762

Pennsylvanian, Senora Formation, Excello Shale Member, northern: Cassidy, Martin M. 00307

Pennsylvanian, Union Valley Formation, Franks graben area: Withrow, Jon R. 00137

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Permian, Blaine Formation, southwestern: Johnson, Kenneth Sutherland. 02634

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Silurian-Devonian, Hunton Group, West Campbell field: Harvey, Ralph L. 09844

Silurian-Devonian, relationship: Amsden, Thomas W. 02883

Structural geology

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Kiowa and Washita Counties, Gotebo thrust: Takken, Suzanne. 03419

McAlester basin, growth faulting: Koinm, David N. 10075

Oklahoma City oil and gas field: Gatewood, Lloyd E. 00422

Ouachita Mountains, Lynn Mtn. syncline: Briggs, Garrett. 02493

Red Oak-Norris gas field, faults, folds: Six, David A. 04303

Southern, basal Cretaceous surfaces: Speer, John H. 10086

Southern, Springer Group, deformation patterns: Shelton, John W. 10084

Wheatland area, Paleozoic, subsurface: Ahmeduddin, Mir. 05584

Weathering

Kiowa County, diabase dikes, clay minerals: Nichols, Clayton R. 02501

Muskogee area, Boggy Formation, soils: Stiegler, Jim. 05271

Tonkawa-Blackwell area, Wellington Formation: Culver, James R. 05140

Ontario*Absolute age*

Bancroft and Faraday township, mica, fission track: Miller, D. K. 03200

Brent crater: Shafiquillah, M. 06360

Ontario—Continued

Absolute age—Continued

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 Cutler area, orogenic events: Cannon, William F. 09759
 Gauthier township, kimberlite dike: Lee, Hulbert A. 02059
 Grenville province, Rb-Sr, mineral and whole-rock: Krogh, T. E. 01585
 Grenville province, Rb-Sr whole-rock: Krogh, T. E. 04185
 Kakebeka Falls area, Gunflint Formation, Rb-Sr: Kovach, J. 10109
 Kirkland Lake gold district, Rb-Sr: Reesman, Richard H. 10735
 Lake Huron, north shore area, Precambrian rocks, Rb-Sr: Knight, C. J. 10704
 Lake Huron, north shore, volcanics, Rb-Sr: Knight, Colin Joseph. 01749
 Lake Timagami area, migmatite, pre-Grenville development: Grant, James A. 11127
 Ottawa area, Quaternary, marine algal bed, C-14: Mott, R. J. 01962
 Precambrian rocks, hornblende, K-Ar: Hanson, G. M. 00581
 Sudbury basin, sediments and tuff, interpretation: Fairbairn, H. W. 07479
 Superior Province, Round Lake batholith, Otto stock: Purdy, J. W. 07478
 Wasaga Beach, glacial lake Nipissing, marl, charcoal, C-14: Farrand, W. R. 10975

Areal geology

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 Awkward Lake area: Thurston, P. C. 00443
 Badour Lake area: Thurston, P. C. 00437
 Beemer Township: Bright, E. G. 00625
 Bernhardt Township: Rupert, R. J. 00191
 Big Trout Lake area: Hudec, P. P. 09515
 Black River area: Milne, V. G. 05440
 Black Sturgeon Lake area: Coates, M. E. 01671
 Blackstock Township: Pyke, D. R. 00190
 Bolton area: Karrow, P. F. 02403
 Cashel Township, Hastings County: Lumbers, S. B. 03193
 Cobalt area, field trip: Thomson, Robert. 10159
 Crawford township, Cochrane District: Leahy, E. J. 04214
 Creelman Township: Meyn, H. D. 00579
 Crescent Lake area: Pye, E. G. 00972
 Denison-Waters area: Card, K. D. 01007
 Devon township, Thunder Bay District: Geul, J. J. C. 01672
 Dorothea township, Thunder Bay District: Mackasey, W. O. 02415
 Eby Township: Lovell, H. L. 00631
 Elk Lake area: MacKean, B. E. 04315
 English Township, Sudbury District: Bright, E. G. 00627
 Fallon Township: Pyke, D. R. 04571
 Fasken Township: Pyke, D. R. 04572
 Frazer Bay area: Card, K. D. 05467
 Garden Lake: Milne, V. G. 09521
 Goosander Lake area: Thurston, P. C. 00438
 Granitehill Lake area: Giguere, J. F. 02416
 Halcrow-Ridout Lakes area: Donovan, J. F. 01008
 Halliday township, Sudbury District: Bright, E. G. 01669
 Hastings County, Madoc and Huntingdon Townships: Hewitt, D. F. 05662
 Irwin township, Thunder Bay District: Mackasey, W. O. 02426

Ontario—Continued

Areal geology—Continued

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 Kenogaming township, Sudbury District: Milne, V. G. 00441
 Kershaw Lake area: Thurston, P. C. 00382
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 Lake Township: Laakso, R. K. 00582
 Langmuir Township: Pyke, D. R. 00189
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 Midlothian township, Timiskaming District: Bright, E. G. 01670
 Milner township, Timiskaming District: McIlwaine, W. H. 01666
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 Morrisette Township: Rupert, R. J. 00192
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 Pashkokogan Lake-eastern Lake St. Joseph area: Goodwin, A. M. 09520
 Porcupine district, Coniaurum mine area: Carter, O. F. 01819
 Porcupine district, Dome mine area: Holmes, T. C. 01767
 Porcupine district, Hollinger mine area: Jones, W. A. 01779
 Porcupine district, Kayorum property: Jones, W. A. 01780
 Porcupine district, McIntyre mine area: Griffis, A. T. 01768
 Porcupine district, Moneta mine area: Buffam, B. S. W. 01789
 Porcupine district, Preston East Dome mine area: Lane, H. C. 01874
 Rabelais Lake area: Thurston, P. C. 00439
 Roberts Township: Meyn, H. D. 00578
 Saganagos Lake area: Harris, F. R. 02251
 Sandra township, Thunder Bay District: Mackasey, W. O. 02402
 Scarborough area, Pleistocene deposits: Karrow, P. F. 09516
 Sewell township, Sudbury District: Milne, V. G. 00440
 South Lorrain Township, northern: McIlwaine, W. H. 00630
 Stevens-Kagiano Lake area: Coates, M. E. 02399
 Sudbury District, Renabie mine area: Ferguson, S. A. 04213
 Township Q, Algoma District: Wood, J. 01665
 Township U, Kenora District: Wood, J. 01592
 Trout Lakes area, Rathouse Bay map-area: Ayres, L. D. 00188
 Tustin township, Kenora District: Pryslak, A. P. 01664
 Wark township, Cochrane District: George, P. T. 02404

Ontario—Continued

Areal geology—Continued

Whitesides township, Cochrane District: Leahy, E. J. 04215

Zavitz Township: Bright, E. G. 00626

Economic geology

Construction materials, Hamilton map-area, stone and shale: Hewitt, D. F. 07326

Copper, nickel, Strathcona mine, occurrence: Cowan, J. C. 00116

Copper, North Coldstream mines, estimated reserves cf. production: Heim, R. C. 05328

Copper, zinc, Manitouwadge area, genesis, diabase dike effect: Graham, R. A. F. 01969

Copper, zinc, Robb Township, Kam-Kotia mine: Somerville, R. 10158

Copper-gold, McIntyre mine, reserve estimation, grade control: Parfitt, P. O. 05319

Diamonds, Gauthier township, possibilities: Lee, Hulbert A. 02059

Gold, copper, Porcupine area, McIntyre mine: Carter, O. F. 10155

Gold, Heyson township, Red Lake mining area, occurrence: Ferguson, S. A. 01048

Gold, Hollinger mine, reserve estimation, grade control: Butler, F. C. 05320

Gold, Kirkland Lake area, Macassa mines: Ward, W. G. 11067

Gold, Kirkland Lake-Larder Lake mining area, occurrence: Lovell, Howard. 10147

Gold, Porcupine area, Hollinger mine: Michie, Harry. 10154

Gold, Porcupine district, Pamour mine, reserve estimation: Paransevicius, J. 05321

Gold, Porcupine district, Paymaster mine: Longley, C. S. 01790

Gold, Porcupine district, Preston East Dome mine: Lane, H. C. 01874

Gold, silver, copper, Porcupine district, McIntyre mine: Griffin, A. T. 01768

Gold, silver, Kirkland Lake area, Upper Canada mine: Bragg, J. G. 10149

Gold, silver, McGarry Township, Kerr Addison mines: Abel, M. K. 10151

Gold, silver, Porcupine district, Coniaurum mine: Carter, O. F. 01819

Gold, silver, Porcupine district, Dome mine: Holmes, T. C. 01767

Gold, silver, Porcupine district, Hollinger mine: Jones, W. A. 01779

Gold, silver, Porcupine district, Moneta mine: Buffam, B. S. W. 01789

Gold, silver, Tisdale township: Ferguson, Stewart A. 01820

Gold, Timmins area, Aunor mines: Abel, M. K. 10157

Gold, Timmins district, Dome mine: Holmes, T. C. 10153

Gold, Whitney Township, Pamour Porcupine mines: Parans, John. 10156

Iron, Boston Township, Adams mine: Drury, John J. 10148

Iron, deposits, classification, descriptions: Shklanka, Roman. 11114

Iron, metallogenic patterns, Superior Province: Kalliokoski, J. 05434

Iron, Michipicoten district, genesis: Seguin, Maurice. 06926

Metals and talc, Lake Township: Laakso, R. K. 00582

Metals, Kashabowie area, exploration: Hodgkinson, J. M. 00586

Metals, Mongowin pluton contact: Card, K. D. 07866

Ontario—Continued

Economic geology—Continued

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Mineral resources, mining history, production: Brown, L. Carson. 09619

Mineral resources, Nipigon-Schreiber area: Pye, E. G. 00431

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Nickel-copper, Sudbury, Strathcona mine, genesis: Naldrett, A. J. 05036

Petroleum and natural gas, exploration, recent finds: Beards, Ronald J. 05161

Petroleum, natural gas, southwestern, Cambrian formations: Pounder, Jack A. 09629

Petroleum, Sarnia area, history, development: Elford, Jean. 09623

Polymetallic ores, Cobalt area: Petruk, W. 10163

Polymetallic ores, Gauthier Township, Upper Beaver mine: Bragg, J. G. 10150

Polymetallic ores, Geco mine, occurrence, reserves and grade estimation: Brooks, L. S. 05316

Polymetallic ores, Sudbury, Falconbridge orebodies, reserves estimation: Potapoff, P. 05221

Polymetallic ores, Timmins district: George, Peter T. 10152

Sand, Frazer Bay area, orthoquartzite: Card, K. D. 05467

Silver, Cobalt area, Glen Lake mines: Ninacs, George J. 10161

Silver, Cobalt area, Nipissing 407 mine: Thorniley, B. H. 10162

Silver, Cobalt area, Silverfields mine: Moore, H. A. 10160

Silver, Cobalt district: Petruk, William. 09450

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Silver, Elk Lake area, property descriptions: MacKean, B. E. 04315

Silver-cobalt-calcite, vein deposits, summary: Sergiades, A. O. 06336

Uranium, Bancroft area, exploration: Dyck, Willy. 01081

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Uranium, Elliot Lake area, Townships 149 and 150: Robertson, J. A. 01769

Uranium-thorium, northern: Robertson, James A. 07916

Engineering geology

Clays, Kars Bridge, settlement under approach fill: Eden, W. J. 06070

Ontario—Continued*Engineering geology—Continued*

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- Clays, Ottawa area, Leda clay, embankment settlement: Burn, K. N. 06050
- Land subsidence, Cornwall to Quebec border, Leda clays: Stermac, A. G. 04258
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- Soil surveys, photogrammetric studies, aerial photos: Mathur, B. Sen. 09659
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- Gunflint Iron-Formation, amino acids: Schopf, J. William. 09132
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Ontario—Continued*Geochemistry—Continued*

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Geomorphology

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Hydrogeology

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Ontario—Continued

Hydrogeology—Continued

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Southwestern, ground-water conditions, 1960-63: Ontario Water Resources Commission. 05641

Maps, aeromagnetic (See also Maps, magnetic)

Big North Lake area: Canada Geological Survey. 00742

Carbonate-alkalic complexes: Satterly, J. 00347

Chard River area: Canada Geological Survey. 00761

Cochrane District, Sheet 42 K/11: Canada Geological Survey. 00758

Cochrane District, Sheet 42 K/14: Canada Geological Survey. 00759

Cochrane District, Sheet 42 K/12: Canada Geological Survey. 01303

Cochrane District, Sheet 42 K/13: Canada Geological Survey. 01304

Cochrane District, Sheet 42 N/4: Canada Geological Survey. 01305

Crandall Falls area: Canada Geological Survey. 00746

Kapiskau Lake area: Canada Geological Survey. 00764

Kenora District, Sheet 54 A/3: Canada Geological Survey. 00754

Kenora District, Sheet 54 A/6: Canada Geological Survey. 00755

Kenora District, Sheet 43 C/11: Canada Geological Survey. 00766

Kenora District, Sheet 43 C/5: Canada Geological Survey. 01310

Kenora District, Sheet 43 C/12: Canada Geological Survey. 01311

Kenora District, Sheet 53 H/11: Canada Geological Survey. 00744

Kenora District, Sheet 53 I/6: Canada Geological Survey. 00747

Kenora District, Sheet 53 I/11: Canada Geological Survey. 00748

Kenora District, Sheet 53 I/14: Canada Geological Survey. 00749

Kenora District, Sheet 42 N/14: Canada Geological Survey. 00763

Kenora District, Sheet 42 N/13: Canada Geological Survey. 01308

Kenora District, Sheet 53 P/6: Canada Geological Survey. 00751

Kenora District, Sheet 53 P/11: Canada Geological Survey. 00752

Kenora District, Sheet 53 P/14: Canada Geological Survey. 00753

Long Dog Lake area: Canada Geological Survey. 00743

Many Branches Lake area: Canada Geological Survey. 00750

Missisa Lake area: Canada Geological Survey. 00765

Muswabik River area: Canada Geological Survey. 00762

Ogoki area: Canada Geological Survey. 01307

Otter River area: Canada Geological Survey. 00745

Quantz Lake area: Canada Geological Survey. 00760

Streatfeild Lake area: Canada Geological Survey. 01309

Wabimeig Lake area: Canada Geological Survey. 02004

Ontario—Continued

Maps, geologic

Abram Lake area, eastern: Johnston, F. J. 01662

Agonzon Lake sheet: Milne, V. G. 05440

Algoma District, Townships 149 and 150: Robertson, J. A. 01769

Awkard Lake sheet: Thurston, P. C. 00443

Badour Lake sheet: Thurston, P. C. 00437

Barehead Lake sheet: Milne, V. G. 05440

Beemer Township: Bright, E. G. 00625

Bernhardt Township: Rupert, R. J. 00191

Big Trout Lake area: Hudec, P. P. 09515

Black River area: Milne, V. G. 05440

Black Sturgeon Lake area: Coates, M. E. 01671

Blackstock Township: Pyke, D. R. 00190

Bolton area, surficial: Karrow, P. F. 02403

Cashel Township, Hastings County: Lumbers, S. B. 03193

Chown and Lawson Townships: MacKean, B. E. 04315

Crawford township, Cochrane District: Leahy, E. J. 04214

Creelman Township: Meyn, H. D. 00579

Denison-Waters area: Card, K. D. 01007

Devon township, Thunder Bay District: Geul, J. J. C. 01672

Dorothea township, Thunder Bay District: Mackasey, W. O. 02415

Dotted Lake sheet: Milne, V. G. 05440

Eby Township: Lovell, H. L. 00631

English Township, Sudbury District: Bright, E. G. 00627

Etobicoke Township, surficial: Watt, A. K. 01791

Fallon Township: Pyke, D. R. 04571

Fasken Township: Pyke, D. R. 04572

Frazer Bay sheet: Card, K. D. 05467

Garden Lake area: Milne, V. G. 09521

Goosander Lake sheet: Thurston, P. C. 00438

Gowan Lake sheet: Milne, V. G. 05440

Granitehill Lake area: Giguere, J. F. 02416

Guelph area, surficial: Karrow, P. F. 02964

Halcrow-Denyes and Tooms-Greenlaw townships: Donovan, J. F. 01008

Halliday township, Sudbury District: Bright, E. G. 01669

Hamilton map-area, Pleistocene: Hewitt, D. F. 07326

Hamilton sheet, surficial: Vos, M. A. 05764

Hastings County, Madoc and Huntingdon Townships: Hewitt, D. F. 05662

Heyson township, northern, Kenora District: Ferguson, S. A. 01048

Hornepayne sheet, Algoma and Cochrane Districts: Giblin, P. E. 01667

Irwin township, Thunder Bay District: Mackasey, W. O. 02426

Kagiano Lake sheet: Coates, M. E. 02399

Kashabowie and Greenwater Lake sheets: Hodgkinson, J. M. 00586

Kenogaming township, Sudbury District: Milne, V. G. 00441

Kershaw Lake sheet: Thurston, P. C. 00382

Kirkland Lake-Larder Lake area: Lovell, Howard. 10147

Lac des Iles and Max Lake areas, Thunder Bay District: Pye, E. G. 01043

Lake Township: Laakso, R. K. 00582

Langmuir Township: Pyke, D. R. 00189

Leigh Lakes sheet: Thurston, P. C. 00381

Louise and northern Dieppe Townships, Sudbury District: Card, K. D. 05466

Ontario—Continued*Maps, geologic—Continued*

- MacNicol township, Kenora District: Pryslak, A. P. 01663
 McGregor Bay sheet: Card, K. D. 05465
 Mickle and James Townships: MacKean, B. E. 04315
 Midlothian township, Timiskaming District: Bright, E. G. 01670
 Milner township, Timiskaming District: McIlwaine, W. H. 01666
 Moose River belt: Skinner, R. 00960
 Morrisette Township: Rupert, R. J. 00192
 Moss Lake area, northern: Harris, F. R. 00624
 Nipigon-Schreiber area: Pye, E. G. 00431
 Ottawa area: Baird, David M. 04804
 Pardee township and Stuart location, Thunder Bay District: Geul, J. J. C. 01673
 Pashkokogan Lake-eastern Lake St. Joseph area: Goodwin, A. M. 09520
 Porcupine area, generalized: Ferguson, Stewart A. 01820
 Rabelais Lake sheet: Thurston, P. C. 00439
 Rathouse Bay sheet, Trout Lakes area: Ayres, L. D. 00188
 Roadhouse and Willet Townships: MacKean, B. E. 04315
 Roberts Township: Meyn, H. D. 00578
 Saganagons Lake area: Harris, F. R. 02251
 Sandra township, Thunder Bay District: Mackasey, W. O. 02402
 Sewell township, Sudbury District: Milne, V. G. 00440
 South Lorrain Township, northern: McIlwaine, W. H. 00630
 Stevens sheet: Coates, M. E. 02399
 Sudbury area, sewage tunnel: Card, K. D. 09518
 Sudbury District, Renabie mine area, surficial: Ferguson, S. A. 04213
 Sudbury mining area: Card, K. D. 00186
 Timmins area: George, Peter T. 10152
 Tisdale township: Ferguson, Stewart A. 01820
 Township Q, Algoma District: Wood, J. 01665
 Township U, Kenora District: Wood, J. 01592
 Trout Lakes area, South Trout Lake sheet: Ayres, L. D. 00187
 Tustin township, Kenora District: Pryslak, A. P. 01664
 Wark township, Cochrane District: George, P. T. 02404
 White Lake sheet: Milne, V. G. 05440
 Whitesides township, Cochrane District: Leahy, E. J. 04215
 Zavitz Township: Bright, E. G. 00626
- Maps, geologic index*
 Eastern: Canada Geological Survey. 02957
- Maps, isopach*
 Hamilton map-area, Pleistocene drift: Hewitt, D. F. 07326
 Michigan basin, Devonian formations: Sanford, B. V. 03177
- Maps, magnetic (See also Maps, aeromagnetic)*
 Asheweig River area, airborne: Canada Geological Survey. 04975
 Burning River area, airborne: Canada Geological Survey. 04932
 Dickey River area, airborne: Canada Geological Survey. 04977
 Fat River area, airborne: Canada Geological Survey. 04916
 Fawn River area, airborne: Canada Geological Survey. 04976

Ontario—Continued*Maps, magnetic—Continued*

- Fort Severn area, airborne: Canada Geological Survey. 04936
 Frog River area, airborne: Canada Geological Survey. 04897
 Ghost Lake area, airborne: Canada Geological Survey. 04914
 Ghost River area, airborne: Canada Geological Survey. 04557
 Gooseberry Brook area, airborne: Canada Geological Survey. 04959
 Hornepayne area, airborne: Canada Geological Survey. 04554
 Kapuskasing area, airborne: Canada Geological Survey. 04553
 Kasabonika Lake area, airborne: Canada Geological Survey. 04896
 Kenogami River area, airborne: Canada Geological Survey. 04556
 Kenora District, Sheet 54 A:2, airborne: Canada Geological Survey. 04906
 Kenora District, Sheet 54 A:7, airborne: Canada Geological Survey. 04907
 Kenora District, Sheet 54 A:10, airborne: Canada Geological Survey. 04908
 Kenora District, Sheet 54 A:1, airborne: Canada Geological Survey. 04922
 Kenora District, Sheet 54 A:8, airborne: Canada Geological Survey. 04923
 Kenora District, Sheet 54 A:9, airborne: Canada Geological Survey. 04924
 Kenora District, Sheet 44 D:5, airborne: Canada Geological Survey. 04938
 Kenora District, Sheet 43 E:5, airborne: Canada Geological Survey. 04926
 Kenora District, Sheet 43 E:6, airborne: Canada Geological Survey. 04940
 Kenora District, Sheet 43 F:4, airborne: Canada Geological Survey. 04950
 Kenora District, Sheet 43 F:5, airborne: Canada Geological Survey. 04951
 Kenora District, Sheet 43 F:12, airborne: Canada Geological Survey. 04952
 Kenora District, Sheet 43 F:13, airborne: Canada Geological Survey. 04953
 Kenora District, Sheet 53 H:7, airborne: Canada Geological Survey. 04895
 Kenora District, Sheet 53 H:8, airborne: Canada Geological Survey. 04911
 Kenora District, Sheet 53 H:16, airborne: Canada Geological Survey. 04913
 Kenora District, Sheet 53 I:2, airborne: Canada Geological Survey. 04898
 Kenora District, Sheet 53 I:7, airborne: Canada Geological Survey. 04899
 Kenora District, Sheet 53 I:10, airborne: Canada Geological Survey. 04900
 Kenora District, Sheet 50 I:15, airborne: Canada Geological Survey. 04901
 Kenora District, Sheet 53 I:8, airborne: Canada Geological Survey. 04915
 Kenora District, Sheet 53 I:16, airborne: Canada Geological Survey. 04917
 Kenora District, Sheet 43 K:5, airborne: Canada Geological Survey. 04955
 Kenora District, Sheet 43 K:13, airborne: Canada Geological Survey. 04957
 Kenora District, Sheet 43 L:5, airborne: Canada Geological Survey. 04930
 Kenora District, Sheet 43 L:12, airborne: Canada Geological Survey. 04931

Ontario—Continued

Maps, magnetic—Continued

- Kenora District, Sheet 43 L:3, airborne: Canada Geological Survey. 04943
- Kenora District, Sheet 43 L:6, airborne: Canada Geological Survey. 04944
- Kenora District, Sheet 43 L:11, airborne: Canada Geological Survey. 04945
- Kenora District, Sheet 43 M:4, airborne: Canada Geological Survey. 04933
- Kenora District, Sheet 43 M:5, airborne: Canada Geological Survey. 04934
- Kenora District, Sheet 43 M:12, airborne: Canada Geological Survey. 04935
- Kenora District, Sheet 43 M:6, airborne: Canada Geological Survey. 04948
- Kenora District, Sheet 43 M:14, airborne: Canada Geological Survey. 04949
- Kenora District, Sheet 43 M:11, airborne: Canada Geological Survey. 05256
- Kenora District, Sheet 43 N:4, airborne: Canada Geological Survey. 04958
- Kenora District, Sheet 43 N:12, airborne: Canada Geological Survey. 04960
- Kenora District, Sheet 53 P:2, airborne: Canada Geological Survey. 04902
- Kenora District, Sheet 53 P:7, airborne: Canada Geological Survey. 04903
- Kenora District, Sheet 53 P:10, airborne: Canada Geological Survey. 04904
- Kenora District, Sheet 53 P:15, airborne: Canada Geological Survey. 04905
- Kenora District, Sheet 53 P:1, airborne: Canada Geological Survey. 04918
- Kenora District, Sheet 53 P:8, airborne: Canada Geological Survey. 04919
- Kenora District, Sheet 53 P:9, airborne: Canada Geological Survey. 04920
- Kenora District, Sheet 53 P:16, airborne: Canada Geological Survey. 04921
- Kenora District, Sheets 43 C:13 and 14, airborne: Canada Geological Survey. 07327
- Kenora mining district, Sheet 54 A/11: Canada Geological Survey. 00756
- Kenora, Sheet 43 E:2, airborne: Canada Geological Survey. 06406
- Kenora, Sheet 43 E:7, airborne: Canada Geological Survey. 06407
- Kenora, Sheet 43 E:10, airborne: Canada Geological Survey. 06408
- Kenora, Sheet 43 E:15, airborne: Canada Geological Survey. 06409
- Kenora, Sheet 43 E:1, airborne: Canada Geological Survey. 06418
- Kenora, Sheet 43 E:8, airborne: Canada Geological Survey. 06419
- Kenora, Sheet 43 E:9, airborne: Canada Geological Survey. 06420
- Kenora, Sheet 43 E:16, airborne: Canada Geological Survey. 06421
- Kenora, Sheet 43 F:3, airborne: Canada Geological Survey. 06430
- Kenora, Sheet 43 F:6, airborne: Canada Geological Survey. 06431
- Kenora, Sheet 43 F:11, airborne: Canada Geological Survey. 06432
- Kenora, Sheet 43 F:14, airborne: Canada Geological Survey. 06433
- Kenora, Sheet 43 K:11, airborne: Canada Geological Survey. 06436
- Kenora, Sheet 43 K:14, airborne: Canada Geological Survey. 06437

Ontario—Continued

Maps, magnetic—Continued

- Kenora, Sheet 43 L:2, airborne: Canada Geological Survey. 06410
- Kenora, Sheet 43 L:7, airborne: Canada Geological Survey. 06411
- Kenora, Sheet 43 L:10, airborne: Canada Geological Survey. 06412
- Kenora, Sheet 43 L:1, airborne: Canada Geological Survey. 06422
- Kenora, Sheet 43 L:8, airborne: Canada Geological Survey. 06423
- Kenora, Sheet 43 L:9, airborne: Canada Geological Survey. 06424
- Kenora, Sheet 43 L:16, airborne: Canada Geological Survey. 06425
- Kenora, Sheet 43 M:2, airborne: Canada Geological Survey. 06414
- Kenora, Sheet 43 M:7, airborne: Canada Geological Survey. 06415
- Kenora, Sheet 43 M:10, airborne: Canada Geological Survey. 06416
- Kenora, Sheet 43 M:15, airborne: Canada Geological Survey. 06417
- Kenora, Sheet 43 M:1, airborne: Canada Geological Survey. 06426
- Kenora, Sheet 43 M:8, airborne: Canada Geological Survey. 06427
- Kenora, Sheet 43 M:16, airborne: Canada Geological Survey. 06429
- Kenora, Sheet 43 N:3, airborne: Canada Geological Survey. 06438
- Lastedar Lake area, airborne: Canada Geological Survey. 04939
- Maminiska River area, airborne: Canada Geological Survey. 04956
- Meggisi Creek area, airborne: Canada Geological Survey. 04942
- Muzhikoba Creek area, airborne: Canada Geological Survey. 04929
- Ogoki area, airborne: Canada Geological Survey. 04558
- Partridge Island area, airborne: Canada Geological Survey. 04937
- Pikwakibud Creek area, airborne: Canada Geological Survey. 04946
- Pine Lake area, airborne: Canada Geological Survey. 06434
- Reeb Lake area, airborne: Canada Geological Survey. 04894
- Shagamu Lake area, airborne: Canada Geological Survey. 04947
- Shamattawa Lake area, airborne: Canada Geological Survey. 04954
- Shibogama Lake area, airborne: Canada Geological Survey. 04912
- Smoky Falls area, airborne: Canada Geological Survey. 04555
- Sourdough Rapids area, airborne: Canada Geological Survey. 04928
- Spruce Lake area, airborne: Canada Geological Survey. 06435
- Straight Lake area, airborne: Canada Geological Survey. 04927
- Tabasokwia Lake area, airborne: Canada Geological Survey. 04925
- Tashka Rapids area, airborne: Canada Geological Survey. 04941
- Wapikopa River area, airborne: Canada Geological Survey. 04910
- West, Pen Island area, airborne: Canada Geological Survey. 05257

Ontario—Continued

Maps, magnetic—Continued

- Winino Creek area, airborne: Canada Geological Survey. 06413
 Winisk area, airborne: Canada Geological Survey. 06439
 Wood Creek area, airborne: Canada Geological Survey. 06428

Maps, structure

- Bolton sheet: White, Owen L. 00442
 Etobicoke Township, bedrock contours: Watt, A. K. 01791
 Port Stanley sheet: Dreimanis, A. 02406
 Saint Thomas sheet: Dreimanis, A. 02405

Mineralogy

- Apatite, Wilberforce area, infrared spectra: Bhatnagar, V. M. 01797
 Cobalt area, Ni-Co-Ag ores: Kulkarni, P. H. 04732
 Garnet, Grenville gneisses: Blackburn, W. H. 06781
 Garnet, Sudbury area, deformation, mylonitic rocks: Dalziel, I. W. D. 02451
 Iron-titanium oxide mineral, Hearst area, new: VanLoan, Paul R. 03604
 Kingston-Montreal area, collecting sites, guidebook: Sabina, Ann P. 02677
 Lead sulfantimonides, Madoc district, paragenesis: Jambor, J. L. 03755
 Platinum-bearing minerals, nickel ores: Rucklidge, John. 03602
 Pyrope, Munro esker, kimberlite discovery: Lee, Hulbert A. 00975
 Quartz, Brent Crater, subfabrics: Gold, D. P. 07459
 Sodalite, Bancroft area, Princess quarry, vein origin: James, R. S. 03590
 Sudbury area, pelitic schists, metamorphic indicators: Kwak, T. 03591
 Sudbury nickel irruptive, north range, electron microprobe studies: Naldrett, A. J. 03597
 Sulfides, Ontario, Great Lakes Nickel intrusion: Mainwaring, P. R. 07790
 Zircon, Lake Huron, North Shore granites: Robertson, James A. 07324

Paleontology

- Algae, Precambrian, Gunflint Iron-Formation, Schreiber area: Licari, G. R. 09133
 Bacteria, Quaternary, Little Round Lake sediments, carotenoids: Brown, Seward R. 02535
 Cephalopoda, Silurian, Attawapiskat Limestone, northern: Hansman, Robert H. 02186
 Conodonts, Devonian, Michigan basin: Orr, Robert William. 01737
 Conodonts, Ordovician, Trenton Group, Lakefield area: Winder, C. Gordon. 05011
 Devonian, southern, microfossils: Winder, C. G. 02887
 Fossils, problematic, Precambrian, Cobalt Group, Elliot Lake area: Hofmann, H. J. 09789
 Gastropoda, Devonian, Anderdon Limestone, southwestern, new: Linsley, Robert M. 03053
 Graptolithina, Ordovician, Craigleith Member, Georgian Bay: Whittington, H. B. 00495
 Invertebrata, Silurian, Manitoulin Island, assemblages: Bolton, Thomas E. 05275
 Mammalia, Pleistocene, Woodbridge area, mammoth: Churcher, C. S. 09026
 Mammalia, Quaternary, Dickson Quarry, cave fauna: Churcher, C. S. 01493

Ontario—Continued

Petrology

- Bancroft area, pegmatites, metamorphic rocks: Cunningham-Dunlop, Peter K. 02607
 Bancroft area, Princess quarry, vein origin: James, R. S. 03590
 Bancroft-Madoc area, Ottawa River remnant: Lumbers, Sydney Blake. 01348
 Batchawana Bay, Tribag mine, wall-rock alteration, paragenesis: Armbrust, George Aime. 03023
 Cobalt area, Nipissing diabase sill, differentiation: Hriskevich, M. E. 03829
 Cutler area, metamorphism: Cannon, William F. 09759
 Cutler batholith area, metamorphic, igneous rocks: Cannon, William Francis. 07186
 Espanola area, Mongowin pluton: Card, K. D. 07866
 Espanola-Sudbury area, Precambrian rocks, Huronian Series: Young, Grant M. 05273
 Fort William area, Great Lakes Nickel intrusion: MacRae, N. D. 07789
 Gananoque area, cordierite gneiss, phase relations: Reinhardt, E. W. 01974
 Gananoque area, Grenville gneisses: Blackburn, W. H. 06781
 Gauthier township, Dobie area, kimberlite dike: Lee, Hulbert A. 02059
 Georgian Bay, granite, genesis in shear zones: McConnell, R. B. 00006
 Grenville and Lewisian granites, comparison: Chesworth, Ward. 09054
 Haliburton Highlands, Grenville rocks, metamorphism: Chesworth, Ward. 03613
 Haliburton-Madoc area, metamorphic rocks: vandeKamp, P. C. 07235
 Lac des Iles ultramafic intrusion: Guarnera, Bernard J. 09291
 Lake Huron, North Shore, granites, classification by zircons: Robertson, James A. 07324
 Lake of the Woods region, Flora Lake stock, genesis, hypotheses: Heimlich, R. A. 03002
 Lake of the Woods region, Flora Lake stock, genesis, hypotheses: Johnston, W. G. Q. 03001
 Noranda volcanic belt, Blake River Group, Duparquet and Aiguebelle sections: Baragar, W. R. A. 02723
 Peterborough County, Blue Mtn. nepheline syenite: Payne, John G. 01959
 Peterborough County, zoned replacement body: Edgar, A. D. 06451
 Porcupine district, Dundonald sill and lenses: Naldrett, A. J. 02176
 Southeastern, metamorphic rocks, equilibrium volumes: Blackburn, William H. 10729
 Stevens-Kagian Lake area: Coates, M. E. 02399
 Sudbury area, pelitic schists, metamorphism, indicators: Kwak, T. 03591
 Sudbury nickel irruptive: Stevenson, John S. 05079
 Sudbury nickel irruptive, north range, electron microprobe studies: Naldrett, A. J. 03597
 Sudbury structure, granitic basement, shock-induced features: French, Bevan M. 07507
 Whetstone Lake area, metamorphism: Carmichael, Dugald Macaulay. 03025

Sedimentary petrology

- Espanola-Willisville area, Huronian sandstones, paleocurrents: Casshyap, Satyendra M. 03618

Ontario—Continued*Sedimentary petrology—Continued*

- Espanola-Willisville area, Huronian strata: Casshyap, S. M. 05531
- Gowganda Formation, tillites, provenance: Young, Grant M. 09743
- Holleford meteorite crater, arenites: Saint John, Brian E. 02730
- Huronian rocks, sedimentary structures: Young, Grant M. 00361
- Lake Michigan shore, Huronian conglomerates, glacial origin: Young, G. M. 07804
- Munro esker, glaciofocus study, kimberlite discovery: Lee, Hulbert A. 00975
- Niagara Escarpment, Medina Formation: Martini, I. 10686
- Niagara Escarpment, Medina Formation, sand facies: Martini, I. 10687
- Payne reef, facies analysis: Hill, J. V. 00149
- Pinery Park, Lake Huron, sediments, ripple marks: Risk, M. J. 09855
- Ravenswood area, iron-carbonate concretions in Devonian shale: Zuidema, Henry P. 00018
- Soils, modal profile, statistical analysis: Protz, R. 07420
- Whitefish Falls area, Gowganda Formation: Lindsey, David Allen. 03032

Stratigraphy

- Devonian, Michigan basin: Sanford, B. V. 03177
- Ordovician, Lowville Limestone, Rockland quarry, not Watertown: Sinclair, G. Winston. 02182
- Ordovician, Trenton Group, Lakefield area, correlation: Winder, C. Gordon. 05011
- Ordovician, Wilderness limestones, Ottawa Valley: Barnes, Christopher R. 02181
- Ordovician, Wilderness limestones, Ottawa Valley, facies in stages: Kay, Marshall. 02180
- Ordovician-Silurian, Hamilton map-area: Hewitt, D. F. 07326
- Ordovician-Silurian, Manitoulin Island: Liberty, B. A. 05274
- Pleistocene, Guelph area: Karrow, P. F. 02964
- Precambrian, Elliot Lake area, Townships 149 and 150: Robertson, J. A. 01769
- Precambrian, Huronian formations, Espanola-Willisville area: Casshyap, S. M. 05531
- Precambrian, Huronian groups and formations, nomenclature: Robertson, J. A. 07799
- Precambrian, Huronian Series, Espanola-Sudbury area: Young, Grant M. 05273
- Precambrian, Huronian Series, Espanola-Willisville area: Casshyap, Satyendra M. 03618
- Precambrian, Ottawa River remnant, Bancroft-Madoc area: Lumbers, Sydney Blake. 01348
- Precambrian, Stevens-Kagian Lake area: Coates, M. E. 02399
- Precambrian, Tisdale township: Ferguson, Stewart A. 01820
- Precambrian-Cambrian, paleolacustrine arenites, Holleford crater: Saint John, Brian E. 02730
- Silurian, biostratigraphy: Bolton, Thomas E. 05275
- Silurian, Niagaran Series, Manitoulin Island, facies: Shelden, Frank D. 05276

Structural geology

- Algoma District, Townships 149 and 150: Robertson, J. A. 01769
- Brent crater, origin, age: Shafiqullah, M. 06360
- Cutler area, orogenesis: Cannon, William F. 09759
- Cutler area, plutonic evolution: Cannon, William Francis. 07186

Ontario—Continued*Structural geology—Continued*

- Grenville Front, tectonics, significance of deformed garnet: Dalziel, I. W. D. 02451
- Heyson township, Precambrian metavolcanics, folds, intrusions: Ferguson, S. A. 01048
- Huronian rocks, metamorphism: Church, William R. 07819
- Manitoulin Island, glacial rebound: Lewis, C. F. M. 05304
- Moose River belt, aeromagnetic data interpretation: MacLaren, A. S. 00961
- Penokean and Hudsonian orogenies, Grenville Front age: Church, William R. 07819
- Superior Province, Quetico metasedimentary belt: Kalliokoski, J. 05434
- Tisdale township: Ferguson, Stewart A. 01820
- West Lake St. Joseph area, Keewatin greenstone belt: Clifford, P. M. 07979

Weathering

- Manitoulin Island, soil development: Hoffman, Douglas W. 05242

Optical mineralogy*Dispersion*

- Plagioclase, curves: Morse, S. A. 02207

Optic angle

- Determination on spindle stage: Noble, Donald C. 02235
- Determination on spindle stage: Wilcox, Ray E. 02223
- Zeolites, chemical potential of water measurement: Eberlein, G. Donald. 05027

Pleochroism

- Causes in silicates: Faye, G. H. 06769
- Erythrite, origin: Faye, G. H. 03760

Refractive index

- Basalt glass beads, Washington, flows distinguished: McKee, Edwin H. 02711
- Calculation, orthorhombic crystals: Field, William G. 08684
- Chaulnes method: Miller, Arthur. 00564
- Diamond, variation with hydrostatic pressure: Schmidt, E. D. D. 06751

Ordovician*Alabama*

- Limestone County, stratigraphy: Daniel, Thomas W., Jr. 07645

Alaska

- Seward Peninsula, Cephalopoda, Canadian beds: Flower, Rousseau H. 09890
- Seward Peninsula, Cephalopoda, Chazy beds: Flower, Rousseau H. 09891

Appalachians

- Bays Formation, stratigraphy: Hergenroder, John D. 10306
- Brachiopoda, Reedsville-Martinsburg Formations, paleoecology: Bretsky, S. S. 08622
- Central, Reedsville Formation, bryozoan ecology: Bretsky, Peter W. 01320
- Northern, stratigraphy, graptolite zones: Berry, William B. N. 07180
- Reedsville-Martinsburg Formations, bivalve assemblages, paleoecology: Bretsky, P. W. 08621

Arkansas

- Batesville district, conodonts, biostratigraphy: Craig, William Warren. 04534
- Marion County, Trilobita, Powell Formation: Taylor, John D. 11180

Brachiopoda

- North American-European faunal relations: Roomusoks, A. 05072

Ordovician—Continued

British Columbia

Peace to Muskwa Rivers, stratigraphy: Davies, E. J. L. 04065

Bryozoa

Cryptostomata, zooecial boundary patterns, Middle: Karklins, Olgerts L. 11389

Canada

Northwestern, Selwyn Mountains, Flat River tungsten area: Blusson, S. L. 08055

Colorado

Canon City area, Harding Sandstone, conodonts, chordate(?): Miller, Halsey W. 07670

Inclusions in diatremes: Chronic, John. 00019

Connecticut

Long Hill and Bridgeport quadrangles, stratigraphy: Crowley, William Patrick. 04302

North-central, correlation, Massachusetts: Hatch, Norman L., Jr. 07131

Crinoidea

Camerate, growth patterns: Brower, James C. 08627

Porocrinidae, n.gen., n.spp., Middle and Upper: Kesling, Robert V. 00807

Echinodermata

Carpoid, morphology: Parsley, Ronald L. 08837

Gastropoda

Teiichispira, n.gen., U.S. and Malaysia: Yochelson, Ellis L. 05863

Idaho

Central, Kinnikinic Quartzite, Middle: Hobbs, S. W. 02246

Southeastern, Laketown Dolomite: Budge, David R. 08580

Illinois

Northwestern, Bryozoa, Champlainian limestones: Bork, Kennard B. 05771

Northwestern, Bryozoa, Champlainian limestones: Bork, Kennard B. 09357

Indiana

Cincinnati region, Upper, conodonts, faunas, species: Kohut, Joseph J. 06030

Southeastern, Lexington Limestone and Kope Formation: Brown, George D. 00929

Southeastern, Saluda Formation: Hatfield, Craig Bond. 03724

Iowa

Northeastern, Platteville Formation, sedimentation: Rassam, Ghassan Noel. 02624

Porifera, Maquoketa Formation: Rigby, J. Keith. 10255

Kentucky

Cincinnati region, Upper, conodonts, faunas, species: Kohut, Joseph J. 06030

Fayette County, Lexington Limestone: Mull, D. S. 06586

Fayette County, stratigraphy: Jillson, Willard Rouse. 03123

Maysville to Stanford, Upper, lithofacies: Weir, Gordon W. 05189

Newport area, Kope and Fairview Formations, paleocurrents: Rife, David L. 00013

North-central, Saluda Formation: Hatfield, Craig Bond. 03724

Northern, correlation: Ford, J. P. 03783

Western, Lexington Limestone and Kope Formation: Brown, George D. 00929

Maine

Cupsuptic quadrangle, fossiliferous rocks, Taconic orogeny: Harwood, David S. 09786

Ordovician—Continued

Maine—Continued

Merrimack synclinorium, stratigraphy: Osberg, P. H. 07245

Northeastern, Carys Mills Formation: Pavlides, Louis. 04107

Stratigraphy, paleogeography, Magog belt: Neuman, Robert B. 07136

Manitoba

Hudson Bay, Kaskattama well, faunal assemblages, correlation: Nelson, Samuel J. 07320

Massachusetts

Ammonoosuc Volcanics, absolute age: Brookins, Douglas G. 02444

Southwestern, correlation, Connecticut: Hatch, Norman L., Jr. 07131

Mexico

Oaxaca, Cephalopoda, Tinu Formation: Flower, Rousseau H. 03791

Oaxaca, Mollusca, Tinu Formation, Tremadocian: Yochelson, Ellis L. 03233

Oaxaca, Trilobita, new, Tinu Formation: Robison, Richard A. 03232

Michigan

Northern, Middle, biostratigraphy, nomenclature: Guldenzopf, E. Charles. 07191

Minnesota

Mollusca, Middle, *Polylopi*: Yochelson, Ellis L. 01146

Porifera, Maquoketa Formation: Rigby, J. Keith. 10255

Southeastern, Platteville Formation, sedimentation: Rassam, Ghassan Noel. 02624

Mississippi Valley

Upper, Prairie du Chien Group, Canadian-Ozarkian unconformity: Davis, Richard A., Jr. 01236

Nevada

Middle, stratigraphy, revisions: Ross, Reuben James, Jr. 08083

Toquima Range, Porifera, Pogonip Group: Rigby, J. Keith. 08318

New Brunswick

Captain area, Tetagouche Group: Tupper, W. M. 09118

Stratigraphy, paleogeography, Magog belt: Neuman, Robert B. 07136

New Brunswick-Maine

Passamaquoddy Bay area: Ruitenberg, A. A. 07696

New England

Stratigraphy, graptolite zones, paleogeography: Berry, William B. N. 07180

Taconic area, orogeny: Zen, E-an. 07132

New Mexico

Cooks Range, Cephalopoda, Second Value Formation: Flower, Rousseau H. 11054

New York

Black River Group, paleoenvironments: Textoris, Daniel A. 05631

Cambridge quadrangle, stratigraphy: Metz, Robert. 01350

Champlain Valley, Trilobita, Chazy Group, correlation: Shaw, Frederick C. 07019

Foraminifera, Trepostomata, Trenton Group: Ross, June R. P. 08082

Normanskill Formation, paleogeography: Fagan, John J. 00015

Northwestern, Black River Group: Walker, Kenneth Russell. 01206

Northwestern, Black River Group, paleoecology: Walker, Kenneth R. 11018

Ordovician—Continued

New York—Continued

Northwestern, Trentonian Series, limestone units: Kay, Marshall. 06936

Newfoundland

Canadian and Mohawkian Series, correlation: Whittington, H. B. 07137

New Bay area, stratigraphy: Helwig, James Anthony. 02632

North-central, Exploits Group, slump structures: Helwig, James. 09788

Upper Black Island: Oversby, Brian S. 09814

Western, Trilobita, Table Head Formation: Whittington, H. B. 10769

North America

Bryozoa, Anolotichiidae, n. fam., from Ceramoporidae, revision: Utgaard, John. 05770

Bryozoa, Ceramoporidae, emend., redefined genera: Utgaard, John. 06028

Cephalopoda, actinoceroids, Whiterock Stage: Flower, Rousseau H. 01775

Cephalopoda, nautiloids, Whiterock Stage: Flower, Rousseau H. 01778

Cordilleran geosyncline, sedimentation: Ketner, Keith B. 00740

Correlation, Lower, with British: Skevington, David. 03198

Correlation, southwestern, Lower, Cephalopoda: Flower, Rousseau H. 03791

Correlation with British: Berry, William B. N. 03199

Eastern, Chazy reefs, evolution: Pitcher, Max Grow. 02608

Eastern, Trilobita, *Cryptolithus*: Whittington, H. B. 03206

North Dakota

Grand Forks and Pembina Counties, stratigraphy: Anderson, Sidney B. 07051

Northwest Territories

Baffin Island, Navy Board Inlet, stratigraphy: Blackadar, R. G. 01526

Cornwallis Island area, stratigraphy: Thorsteinsson, R. 06570

Ellesmere Island, stratigraphy, correlation: Kerr, J. William. 06311

Nova Scotia

Arisaig-Antigonish area, Silurian boundary, volcanics, absolute age: Fullagar, Paul D. 01972

Ohio

Cincinnati area, Kope and Fairview Formations: Bassarab, Dennis R. 02007

Cincinnati region, Bryozoa, ceramopods: Utgaard, John. 06028

Cincinnati region, Cincinnati Series: Sigma Gamma Epsilon. 06668

Cincinnati region, Upper, conodonts, faunas, species: Kohut, Joseph J. 06030

Hamilton County, Cincinnati Group: Ford, J. P. 08525

Hamilton County, Cincinnati strata: Osborne, Robert H. 05722

Southwestern, correlation: Ford, J. P. 03783

Oklahoma

Arbuckle Mountains, Arbuckle Group, conodonts: Mound, Michael C. 05018

Arbuckle Mountains, Bryozoa, Simpson Group: Farmer, George Thomas, Jr. 05516

Carter County, Arbuckle Group: Latham, Jack W. 00062

Criner Hills, Annelida, scolecodont assemblage: Taugourdeau, Ph. 07702

Ordovician—Continued

Oklahoma—Continued

Marietta basin, Oil Creek sandstone: Henry, Gary E. 05575

Southern, Kindblade Limestone, reefs: Ham, William E. 07954

Ontario

Georgian Bay, Graptolithina, Craigleith Member: Whittington, H. B. 00495

Hamilton map-area, stratigraphy: Hewitt, D. F. 07326

Lakefield area, Trenton Group, conodonts, correlation: Winder, C. Gordon. 05011

Manitoulin Island, stratigraphy: Liberty, B. A. 05274

Ottawa Valley, Rockland quarry, Lowville Limestone, not Watertown: Sinclair, G. Winston. 02182

Ottawa Valley, Wilderness limestones: Barnes, Christopher R. 02181

Ottawa Valley, Wilderness limestones: Kay, Marshall. 02180

Paleoecology

Marine provinces, regional faunas: Fell, Baraclough H. 10862

Pennsylvania

Central, marine-continental transition, sedimentation: Thompson, Allan M. 09941

Dauphin County, Martinsburg Formation: Carswell, Louis D. 11415

Franklin County, southeastern, stratigraphy: Root, Samuel I. 06744

Hamburg area, Martinsburg Formation: Rukavina, Norman A. 08060

Lancaster quadrangle, carbonate rocks, stratigraphy: Meisler, Harold. 01644

Quebec

Eastern, Chazy reefs, evolution: Pitcher, Max Grow. 02608

Gaspe, north shore, Graptolithina, zoning: Riva, John. 06937

Perce region, trilobita: Lesperance, Pierre J. 05060

Perce region, Trilobita, White Head Formation, fauna: Lesperance, Pierre J. 03790

Saint Raymond area, Cephalopoda, Black River Group: Flower, Rousseau H. 11055

Southwestern, "shale with blocks", Middle: Saint-Julien, Pierre. 06934

Sutton area, stratigraphy, tectonics: Clark, T. H. 07135

South Dakota

Black Hills, Deadwood Formation: Kulik, Joseph W. 10110

Tennessee

Mollusca, Middle, *Polylophia*: Yochelson, Ellis L. 01146

Texas

El Paso Area, El Paso Group, reefs: Ham, William E. 07954

Franklin Mountains, El Paso Group: LeMone, David V. 10173

Franklin Mountains, El Paso Group, sedimentation: Lucia, F. J. 10172

Franklin Mountains, highlands, associated facies: LeMone, David V. 11015

Marathon region, Graptolithina, Fort Pena Formation: Bulman, O. M. B. 02258

Marathon region, Maravillas Formation: McBride, Earle F. 10077

Marietta basin, Oil Creek sandstone: Henry, Gary E. 05575

Ordovician—Continued*Texas—Continued*

Trans-Pecos area, Marathon Formation: Young, Leonard M. 10095

Trans-Pecos, Marathon Formation, sedimentation: Young, Leonard Maurice. 06561

United States

Eastern, Chazyan reefs, evolution: Pitcher, Max Grow. 02608

Eastern, Taconic allochthon, shelly beds, provenance: Bird, J. M. 07987

Mid-continent, southern, paleogeography, sedimentation: Chenoweth, Philip A. 03766

Utah

Correlation, Garden City Formation with Beekmantown Group: Ross, Reuben James, Jr. 02901

Millard County, Brachiopoda, Pogonip Group: Jensen, Ronald G. 10235

Millard County, Pogonip Group, new reference section: Hintze, L. F. 08732

North-central, Brachiopoda, Garden City Formation: Ross, Reuben James, Jr. 02901

Northeastern, Laketown Dolomite: Budge, David R. 08580

Vermont

Champlain Valley, Trilobita, Chazy Group, correlation: Shaw, Frederick C. 07019

Virginia

Buckingham County, Trilobita, Arvonite Slate: Tillman, C. G. 10349

Harrisonburg area, Edinburg Limestone, slump structures: Lowry, W. D. 11082

Lee County, L. S. Bales well, log: Harris, Leonard D. 09630

Lexington area, conodonts, Whistle Creek Limestone: Curran, H. Allen. 08518

Rockbridge County, central, Middle limestones: Carson, Robert J., 3d. 05059

Southwestern, conodonts, Martinsburg Formation: Rust, Claude Charles. 06558

Wisconsin

Southern, Platteville Formation, sedimentation: Rassam, Ghassan Noel. 02624

Wyoming

Big Horn Mountains, conodonts, Lower: Koucky, Frank L. 11035

Bighorn Mountains, Brachiopoda, Bighorn Formation: Macomber, Richard Wiltz. 04540

Black Hills, Deadwood Formation: Kulik, Joseph W. 10110

Inclusions in diatremes: Chronic, John. 00019

Oregon*Areal geology*

Cascade Range, guidebook, andesite conference: Dole, Hollis M. 07744

Clatsop County, Saddle Mountain field trip: Nafziger, Ralph H. 09588

Harney Lake and Malheur Lake areas, wildlife refuges: Walker, George W. 00025

Newberry caldera, field trip: Higgins, Michael W. 07741

Oregon Islands National Wildlife Refuge: Weissenborn, A. E. 00020

Poker Jim Ridge and Fort Warner areas, Hart Mtn. refuge: Walker, George W. 00026

Portland area, Lake Oswego field trip: Nafziger, Ralph H. 09586

Santiam and McKenzie Pass areas, field trip: Taylor, Edward M. 07745

Snake River Canyon, Granite Creek to Pittsburg Landing: Vallier, Tracy L. 09271

Oregon—Continued*Areal geology—Continued*

Three Arch Rocks National Wildlife Refuge: Weissenborn, A. E. 00021

Earthquakes

January 27, 1968, Portland area, cf. 1962 shock: Heinrichs, Donald F. 09191

January-September, 1968, offshore areas: Couch, Richard W. 09267

May 13, 1968, Portland area, energy: Couch, Richard. 09269

May-June, 1968, Warner Valley: Couch, Richard. 09268

Economic geology

Gold, continental shelf off southern, possibilities: Clifton, H. Edward. 01720

Gold, silver, review: Brooks, Howard C. 07628

Heavy minerals, continental margin, southern, placer possibilities: Kulm, L. D. 10962

Magnetite, other metals, Horse Sign Butte area: Baldwin, Ewart M. 09193

Mineral resources, production, 1967: Mason, R. S. 09261

Nickel, Riddle area, Nickel Mtn. mine: Cumberland, John T. 05365

Petroleum, natural gas, exploration, 1967: Newton, V. C., Jr. 09262

Engineering geology

Columbia estuary, estuarine improvement: Bessey, Roy F. 02588

General

Eminent geologists, public relations, pioneer: Thomas Condon: Allen, John Eliot. 09590

Geochemistry

Abert and Summer Lakes, solute balance, chloride enrichment: VanDenburgh, A. S. 08027

Abert Lake, saline water: Truesdell, A. H. 10789

Cascade Range, lavas, compositional variations: McBirney, Alexander R. 07734

Cascade Range pyroclastics, activation analysis, source identification: Theisen, Arthur A. 03047

Coaledo Formation, rare-earth concentrations, mineral phases: Collins, Kenneth Alan. 02029

Continental shelf, sediments: White, Stanton Moore. 03034

Crater Lake, radioactive fallout isotopes: Volchok, H. L. 10712

Malheur County, Dinner Creek welded tuff, variations: Haddock, Gerald Hugh. 03030

Mount Jefferson area, volcanics, silica analyses: Greene, Robert C. 01870

Newberry Volcano, obsidian, chemical variations: Laidley, R. A. 08772

Southwestern, Crater, East, and Davis Lakes, dissolved solids: Phillips, Kenneth N. 05503

Volcanic terrane, closed basin, alkaline brine, silica: Jones, B. J. 08753

Western, sedimentary rocks, Sr ratios: Hedge, Carl E. 08589

Geomorphology

Coast Range foothills, Woods Creek Canyon area, erosion, transport: Balster, Clifford A. 01691

Columbia River, glacial floods, Willamette Valley impoundments: Howell, Paul. 09587

Continental margin, effects of East Pacific Rise: Byrne, John V. 07779

Crater Lake basin, genesis: Williams, Howel. 07746

Oregon—Continued

Geomorphology—Continued

Eastern, Officer's Cave: Parker, Garald G. 09154

Willamette Valley, relation to soil types and distribution: Parsons, R. B. 04192

Geophysical surveys

Cascade Mountains, gravity: Aiken, C. 11251

Coast Range, crustal refraction profile: Trembly, Lynn. 08341

Continental margin, southern shelf, magnetic: Kulm, L. D. 10962

Crater Lake area, gravity, aeromagnetic: Blank, H. Richard, Jr. 07747

Northwestern coast, magnetic and gravity profiles cf. geologic data: Emilia, David A. 10961

Regional, gravity: Berg, Joseph W., Jr. 08236

Regional, gravity: Thiruvathukal, John Varkey. 03035

Hydrogeology

Ground-water levels, 1961-65: U.S. Geological Survey. 02411

Santiam River basin, lower, ground-water resources, data: Helm, D. C. 04321

Southwestern, Crater, East, and Davis Lakes, water loss by seepage: Phillips, Kenneth N. 05503

Maps, geologic

Dufur quadrangle: Waters, A. C. 04415

Eagle Rock quadrangle: Waters, A. C. 01500

Horse Sign Butte-lower Illinois River area: Baldwin, Ewart M. 09193

Lookout Mountain quadrangle: Swinney, C. M. 02381

Madras quadrangle: Waters, A. C. 04764

Mount Hood: Wise, William S. 07742

Ochoco Reservoir quadrangle: Waters, A. C. 02382

Post quadrangle: Waters, A. C. 01796

Snake River Canyon, Granite Creek to Pittsburg Landing, reconnaissance: Vallier, Tracy L. 09271

Maps, geologic index

General, 1898-1967: Corcoran, R. E. 08916

Marine geology

Sediments, continental margin, heavy mineral concentrations: Kulm, L. D. 10962

Mineralogy

Cavansite, Malheur, Columbia Counties, volcanics: Staples, Lloyd W. 09698

Continental shelf, sediments: White, Stanton Moore. 03034

Oregon Coast Range, Tye Formation, modal analyses: Lovell, J. P. B. 00011

Paleomagnetism

Miocene, Poker Jim Ridge, basalt: Goldstein, M. A. 08377

Miocene, reversal, nondipole behavior: Watkins, Norman D. 10409

Neogene lava flows, intensity, stability: Irving, E. 02727

Pliocene, Mount Hood area, Still Creek intrusion, reversal: Ito, H. 08376

Tertiary, Columbia River basalt: Reitman, Jan D. 08375

Paleontology

Angiosperms, Oligocene, Stayton area: Klucking, Edward Paul. 03031

Anthozoa, Eocene, Cowlitz Formation, new species, cf. Europe: Blake, D. Bryan. 00556

Brachiopoda, Permian, Cornucopia quadrangle, new linoproducid: Waterhouse, J. B. 05688

Oregon—Continued

Paleontology—Continued

Cephalopoda, Jurassic, Lower, ammonites: Im-lay, Ralph W. 00933

Foraminifera, Eocene, Tye Formation, southwestern: Bird, Kenneth John. 02026

Foraminifera, Permian, central, fusulinid fauna: Bostwick, David A. 07808

Mammalia, Miocene, southeastern basins: Shotwell, J. Arnold. 07300

Mammalia, Oligocene-Miocene, John Day Formation, gophers: Rensberger, John Marshall. 04549

Mammalia, Tertiary, Talpidae, taxonomy, morphology: Hutchison, J. Howard. 06922

Pelecypoda, Coos Bay, rock-boring clam, growth rate: Evans, John W. 04763

Pisces, Eocene, Yamhill Formation, Forest Grove area: Applegate, Shelton P. 09190

Pisces, Pliocene, concretions, new: Dalziel, Bonnie. 08259

Pisces, Tertiary, Clarno Formation, Ochoco Mts., fresh water: Cavender, Ted M. 10970

Petrology

Burnt River Canyon area, Burnt River Schist: Ashley, Roger P. 09963

Canyon Mountain complex, rock succession, alpine mafic: Thayer, T. P. 04814

Cascade Range, emery, mineral composition, petrogenesis: White, Jack C. 09270

Cascade Range, lava flow, basalt to andesite gradation: Taylor, Edward M. 08030

Cascade Range, Quaternary lavas, genesis, composition: Smith, A. L. 05294

Cascade Range, volcanics: Smith, A. L. 10778

Coast Range, Siletz River Volcanics, alkaline, tholeiitic: Snively, Parke D., Jr. 02446

Crater Lake, plutonic ejecta: Taylor, Edward M. 09714

Eastern, John Day Formation, lower member, alteration, pyrogenic minerals: Fisher, Richard V. 02575

Klamath Mountains, metamorphic rocks, fabric: Kays, M. A. 00534

Lake, Harney Counties, ash-flow tuff, laminar flowage: Walker, George W. 00772

Malheur County, Dinner Creek welded tuff: Haddock, Gerald Hugh. 03030

Meteorites, authentic discoveries, identification: Lange, Erwin F. 09192

Mitchell area, John Day Formation, tuff, facies changes: Robinson, Paul T. 09159

Mount Hood, debris-flow fan, evolution: Wise, William S. 10837

Mount Jefferson area, volcanics: Greene, Robert C. 01870

Mount Mazama, climatic eruption ejecta, compositional variation: McBirney, Alexander R. 07743

Needle Point pluton, experimental studies, melting: Piwinski, A. J. 00462

Newberry Volcano, obsidian flows, chemical variations, X-ray fluorescence study: Laidley, Richard A. 04273

Rhyolite, flow layering, geometry: Benson, G. T. 01038

Spray area, Columbia River Basalt, Picture Gorge type, differentiation: Aoki, Ken-ichiro. 00666

Sedimentary petrology

Coastal drainages, sediments, heavy minerals: Kulm, L. D. 09265

Crater Lake, sampling for radionuclides, corer: Burke, John C. 06131

Oregon—Continued*Sedimentary petrology—Continued*

- Northwestern, Astoria Formation, concretions: Boggs, Sam, Jr. 10210
 Offshore, abyssal environments, Quaternary sedimentation, controls: Duncan, John R. 08482
 Offshore, sediments, clay minerals, distribution: Russell, Kenneth L. 08481
 Pumice Desert, Crater Lake Natl. Park, soils: Horn, Elizabeth Mueller. 05648
 Willamette Valley, soils, genesis: Parsons, R. B. 04192
 Yaquina Bay, sediment distribution, factors: Byrne, John V. 00943

Stratigraphy

- Cenozoic, Coos Bay area: Baldwin, Ewart M. 09589
 Cretaceous, Albian-Cenomanian strata, Mitchell quadrangle: Wilkinson, W. D. 09487
 Devonian, east-central: Danner, Wilbert R. 03182
 Eocene, Tyee Formation, facies, paleogeography: Lovell, J. P. B. 00011
 Eocene, Tyee Formation, southwestern, biostratigraphy: Bird, Kenneth John. 02026
 Jurassic-Eocene, Horse Sign Butte area: Baldwin, Ewart M. 09193
 Oligocene, John Day Formation, lower member, measured section: Fisher, Richard V. 02575
 Tertiary, John Day Formation, base, Horse Heaven district: Swanson, Donald A. 05188
 Tertiary, Umpqua Formation, southwestern, biostratigraphy: Thoms, Richard Edwin. 07204

Structural geology

- Burnt River Canyon area: Ashley, Roger P. 09963
 Continental shelf, Cape Blanco-Coos Bay, Cenozoic evolution: Mackay, A. J. 10434
 Coos Bay area: Baldwin, Ewart M. 09589
 Crater Lake region, lineaments, trends: Blank, H. Richard, Jr. 07747
 Klamath Mountains, tectonics: Kays, M. A. 00534
 Mantle, seismic, gravity data: Dehlinger, P. 03623
 Sea-floor tectonics, mechanism, off Cape Mendocino: McEvilly, T. V. 05048
 Steens-Pueblo Mountains, evolution: Avent, Jon C. 11253

Volcanology

- Fort Rock-Christmas Lake Valley area, tuff rings, evolution: Heiken, Grant. 10494
 Mount Hood, general description: Wise, William S. 07742
 Mount Mazama, volume of ejecta, caldera genesis: Williams, Howel. 07746
 Northwestern coast, oceanic extent, magnetic and gravity profiles: Emilia, David A. 10961
 Santiam and McKenzie Pass areas, field trip: Taylor, Edward M. 07745
 Yakima Basalt, flow velocities: Shaw, H. R. 08879

Weathering

- Eastern, John Day Formation, lower member: Fisher, Richard V. 02575

Organic materials*Adenosine*

- Phosphorylation, experimental: Schwartz, Alan. 01634

Alkanes

- Analytical methods, sedimentary rocks: Modzeleski, Vincent E. 09637

Organic materials—Continued*Amber*

- Infrared spectra, catalog: Langenheim, Jean H. 04786

Amino acids

- Bryozoa, Holocene, compositional-ecologic groups: Schopf, Thomas J. M. 08068
 Dinosaur bones: Miller, Mahlon F., 2d. 09135
 Fossil shells, diagenesis, potential geochronometer: Mitterer, Richard M. 08809
 Geologic and thermal stability, relation: Vallentyne, J. R. 06673
 Gunflint Iron-Formation, Ontario: Schopf, J. William. 09132
 Mineral surfaces, polymerization effects: Degens, Egon T. 08659
 Oolites: Mitterer, Richard M. 10124
 Pelecypod shells, fossil, non-protein: Hare, P. Edgar. 07956
 Shells, Recent and fossil, racemization, relation to life origin: Hare, P. E. 01584
 Virginia, York River estuary: Webb, Kenneth L. 09732

Analytical data

- Florida, Choctawhatchee Bay, sediments: Palacas, James G. 02718
 Greenland, Ivigtut region, Ketilidian coal-graphite layer: Pedersen, K. Raunsgaard. 09448
 Holocene sediments, Atlantic Ocean, northern, fatty acids: Cooper, W. J. 07059
 Meteorites, Murray and Holbrook: Hayes, J. M. 00295
 North America, eastern, continental shelf sediments: Hulsemann, Jobst. 09792
 Sporopollenin, composition: Traverse, Alfred. 02310
 X-ray diffraction patterns: Ergun, Sabri. 07012

Analytical methods

- Gas chromatography-mass spectroscopy, hydrocarbons: MacLeod, William D., Jr. 05441
 Mass spectrometry, high resolution: Hayes, J. M. 00295
 Oil, shales, mass spectroscopy: Haug, Patricia Ann. 03016
 Sediments, vitamin B-12 extraction and culture assay: Mauer, Larry G. 06341

Aromatics

- Precambrian-Holocene, traces in sediments: Hodgson, G. W. 02995

Bitumens

- Sandstone, cupriferous, Michigan: Ohle, Ernest L. 01898

Carbohydrates

- California, Ohio, Pleistocene plants: Morey, P. R. 02309
 Paleozoic plants, components, possible evolution: Swain, F. M. 06304

Carbonates

- Bryozoa, cheilostome, skeletal mineralogy: Rucker, James B. 11390

Carboxylic acids

- Green River Formation, Colorado: Haug, Pat. 09404

Carotenoids

- Ontario, Little Round Lake sediments, bacterial: Brown, Seward R. 02535

Chlorins

- Precambrian-Holocene, traces in sediments: Hodgson, G. W. 02995

Chlorophyll degradation products

- Lake sediments, Lakes Erie, Ontario: Kemp, A. L. W. 07089

Organic materials—Continued

Collagen

Fossil mammal bones, body temperature estimates: Ho, Tong-Yun. 07888

Coprolites

Bibliography, annotated: Hantzschel, Walter. 08998

Fatty acids

Environment indicator, possible dating method: Das, Salil K. 07045

Sediments: Peterson, David H. 07849

Sediments, modern cf. ancient, molecular distributions: Kvenvolden, Keith A. 08771

Shale, separation, identification techniques: Eglinton, G. 07706

Fecal pellets

Fossil nomenclature: El-Baz, Farouk. 01240

General

Marine, terrestrial microorganisms: Oro, John. 08832

Meteorites, source and microstructures: Nagy, Bartholomew. 03095

Sediments, Holocene, thermal reactions, California: Hoering, Thomas C. 08734

Sediments, marine, Holocene: Meinschein, W. G. 08803

Genesis

Forest soils, canopy drip source, North Carolina: Malcolm, R. L. 05962

Green River oil shale, probable kerogen precursor: Bradley, W. H. 11263

Indiana, New Albany Shale: Lineback, Jerry A. 03779

Space, proton interactions, origin of life: Zeller, E. J. 08499

Geochemistry

Absorption by montmorillonites: Lailach, G. E. 04743

Absorption by montmorillonites: Lailach, G. E. 08993

Ancient sediments: Burlingame, A. L. 07775

Carbon isotopes, aquatic: Scalani, Richard S. 08867

Continental margin, Florida, sediments: Hulsemann, Jobst. 01147

Exogenic cycle, chelating and sequestering agents: Pauli, F. W. 04711

Life, origin, applications: McCarthy, Eugene Desmond. 02620

Louisiana, Atchafalaya basin sediments, cf. Mississippi Delta: Ho, Clara. 01218

Marine sediments, coastal bay, bacterial decomposition: Seki, H. 04471

Water systems, Texas, C-13-C-12, pollution index: Calder, John A. 01774

X-ray diffraction analysis, interpretation: Ergun, Sabri. 07012

Humates

Sandstone, cement, New Mexico: Nash, J. Thomas. 06991

Humic acids

Exogenic cycle, chelating and sequestering agents: Pauli, F. W. 04711

Hydrocarbons

Bacterial production, experimental study with marine plankton: Oppenheimer, Carl H. 09643

Blue-green algae, significance to ancient sediments: Winters, Kenneth. 00037

Chemistry of petroleum genesis: Hunt, John M. 03809

Organic materials—Continued

Hydrocarbons—Continued

Fjord water, British Columbia, Lake Nitinat, anoxic zone extracts: Adams, Donald D. 05985

Fossil, processing: Lyon, Lloyd B. 08924

Genesis, kerogen in Recent sediments, experimental: Mitterer, R. M. 01582

Genesis, thermal alteration contribution: Henderson, W. 03161

Greenland, Precambrian rocks: Lam, Jorgen. 09418

Meteorites, evidence, validity: Urey, Harold C. 02956

Meteorites, genesis: Studier, Martin H. 00291

Ocean sediments, Puerto Rico Trench, plant affinities: Friedel, R. A. 11282

Paraffinic in sulfate-reducing bacterium: Davis, J. B. 03094

Ponca City reference petroleum, carbon-13 variations: Ferguson, William S. 08683

Role in petroleum genesis: Bond, D. C. 03204

Sea water, low-molecular-weight: Linnenbom, Victor J. 08781

Shale, Connecticut, East Berlin Formation: Lawlor, John Mary. 08778

Shale, Kansas, Little Osage Formation: Modzeleski, Vincent. 08810

Shale, separation, identification techniques: Eglinton, G. 07706

Wellsite chromatography, flame ionization detector: Mercer, R. F. 05948

Wyoming, Mowry Shale, geochemical prospecting: Schroyer, G. J. 05906

Zooplankton, diagenesis, model anerobic sediment: Brogren, W. B. 08625

Kerogen

Green River Shale: Robinson, W. E. 08086

Oil shale, possible genesis from petroleum: Marx, Paul C. 07872

Recent sediments, source of hydrocarbons, experimental: Mitterer, R. M. 01582

Sedimentary rocks, oxidation to fatty acids: Hoering, T. C. 07892

United States, Green River Formation, isoprenoid fatty acids: Burlingame, A. L. 01098

Lipids

Environment indicator, possible dating method: Das, Salil K. 07045

Sea water, content, zones: Jeffrey, Lela Mae. 08746

Methods

Freeze-drying: Malcolm, R. L. 02693

Microstructure

Meteorites, biogenic and indigenous nature: Claus, George. 09365

Organic acids

Oxidation of Recent sediments, experimental: Hoering, T. C. 01583

Phosphorylating agents

Primitive Earth, prebiotic: Rabinowitz, Joseph. 01635

Primitive Earth, prebiotic, experimental study: Schwartz, Alan. 01634

Porphyryns

Precambrian-Holocene, traces in sediments: Hodgson, G. W. 02995

Vitamin B-12

Geochemistry, Holocene and older sediments: Mauer, Larry G. 06341

Orogeny*Absolute age*

- Appalachian, Caledonian, Hercynian, K-Ar ages, comparison: Harper, C. T. 10731
 California, southeastern, Mesozoic: Adams, J. A. S. 07742
 Colorado, Utah, Uncompahgre Plateau, Precambrian: Hedge, Carl E. 02685
 New York-Connecticut, Taconic, Acadian, Alleghanian: Clark, George S. 05213

Acadian

- Appalachians, northern, major regional event: Harper, C. T. 02732
 Appalachians, northern, principal orogeny: Dennis, J. G. 02734
 Canada-New England: Cumming, L. M. 03163
 Extent, Canada, eastern, continental shelf: Sheridan, Robert E. 01997
 Massachusetts, Great Barrington area: Ratcliffe, Nicholas M. 08201
 New Hampshire-Maine, Connecticut Lakes-Parmachenee area: Green, John Chandler. 04298
 Quebec, Restigouche River area, lower, phases: Dineley, D. L. 02731
 Vermont, evidence in garnet rotations: Rosenfeld, John L. 07241

Appalachian

- History, problems: Rodgers, John. 09458
 Vermont, evidence in garnet rotations: Rosenfeld, John L. 07241

Aptian

- British Columbia, Taseko Lakes map-area: Jeletzky, J. A. 09409

Causes

- Vertical movements, experimental studies: McCunn, H. J. 09313

General

- Newfoundland, New Bay area, Paleozoic: Helwig, James Anthony. 02632
 Nova Scotia, northeastern mainland: Benson, David G. 09751

Hudsonian

- Great Lakes region: Church, William R. 07819

Laramide

- Idaho-Montana, Beaverhead Range: Scholten, Robert. 07899
 Nevada-Utah, Sevier orogenic belt: Armstrong, Richard Lee. 01076
 Utah, Wasatch area: Hintze, Lehi F. 10832
 Wyoming, Bighorn Mountains, northern: Jennings, Ted Vernon. 00853
 Wyoming, Grand Teton National Park: Love, J. D. 05987
 Wyoming, overthrust belt: Crosby, Gary W. 04512

Mesozoic

- Nevada, Carson Sink-Dixie Valley region: Speed, Robert C. 08331

Nevadan

- California, Klamath Mountains, time restriction: Lanphere, Marvin A. 02688
 Oregon, Klamath Mountains: Kays, M. A. 00534

Ouachita

- Arkansas, Ouachita Mountains: Morris, Robert C. 08815

Penokean

- Great Lakes region: Church, William R. 07819
 Michigan, Marquette Iron Range: Babcock, Larry L. 07796

Orogeny—Continued*Periodicity*

- Absolute age data as confirmation: Damon, Paul E. 09370
 Effects on climate, glaciation trigger: Damon, Paul E. 04167
 North America, Precambrian, cf. Europe: Sutton, John. 02571

Precambrian

- Wyoming, Bighorn Mountains, northern: Jennings, Ted Vernon. 00853

Taconian

- Appalachians, northern: Pavlides, Louis. 07138
 Appalachians, northern, major regional event: Harper, C. T. 02732
 Appalachians, northern, precursor to Acadian: Dennis, J. G. 02734
 Extent, Canada, eastern, continental shelf: Sheridan, Robert E. 01997
 Maine, Cupstiptic quadrangle, Ordovician-Silurian: Harwood, David S. 09786
 Massachusetts, Great Barrington area: Ratcliffe, Nicholas M. 08201
 New England, Taconic area: Zen, E-an. 07132
 New Hampshire-Maine, Connecticut Lakes-Parmachenee area: Green, John Chandler. 04298
 New York, Stony Point area, age of deformation: Ratcliffe, Nicholas M. 01905
 Pennsylvania, Piedmont, episodes: Lapham, Davis M. 08213

Wolfcampian

- New Mexico, Joyita uplift: Kottlowski, Frank E. 07920

Osmium*Abundance*

- Deep-sea sediments, cosmic matter accretion rate: Barker, John L., Jr. 02338

Analysis

- Activation, sulfide ores, submicrogram amounts: Chung, K. S. 06743

Ostracoda*Beyrichia kirki*

- Silurian, reassigned to *Craspedobolbina kirki*: Martinsson, Anders. 05564

Beyrichia lakemontensis

- Silurian, reassigned to *Craspedobolbina kirki*: Martinsson, Anders. 05564

Craspedobolbina kirki

- Silurian, Pennsylvania, revision and redescription: Martinsson, Anders. 05564

Cretaceous

- Texas, Austin Group, correlation: Paulson, Oscar L., Jr. 03857

Devonian

- Alberta, Swan Hills Fm., reef assemblages: Fischbuch, N. R. 07343
 Northwest Territories, Hay River Formation, correlation: Braun, Willi Karl. 02895
 Northwest Territories, Kee Scarp Formation, cf. Europe: McGill, Peter. 02870
 Oklahoma, Haragan Formation, descriptions, correlation: Lundin, Robert F. 06322

Diplospis Levinson

- Ordovician, Oklahoma, replaced by *Eoaquapulex*: Levinson, Stuart A. 09421

Ecology

- Mexico, Campeche, lagoon: Morales, Gustavo A. 07867

Eoaquapulex

- Ordovician, Oklahoma, replaces *Diplospis* Levinson, 1961: Levinson, Stuart A. 09421

Ostracoda—Continued

Geographic distribution

- Atlantic Coastal Plain, submarine canyons,
Pleistocene: Hazel, Joseph E. 05693
British Honduras, Holocene: Teeter, J. W.
00606

Metacypriis consobrina

- Cretaceous, Wyoming, Bear River Formation,
synonyms: Pinto, Irajá Damiani. 10772

Nomenclature

- Metacypriis*, Cretaceous, Wyoming and Africa:
Pinto, Irajá Damiani. 10772

Paleozoic

- Catalog, Field Museum Nat. History collection,
Chicago: Nitecki, Matthew H. 02834

Perissocytheridea meyerabichi

- Holocene, California, La Jolla submarine
canyon cliff: Holden, John C. 08063

Poloniella (Framella), n. subgen., n. spp.

- Devonian, Middle, Northwest Territories, El-
lesmere Island: Weyant, Marcel. 07293

Quaternary

- Atlantic Coastal Plain, submarine canyons,
Pleistocene distribution: Hazel, Joseph E.
05693

- Gulf of California, Holocene, distribution, cor-
rections, IBM data cards: Swain, F. M. 05690

- Yukon, Porcupine River, Pleistocene fresh-
water fauna: Delorme, L. D. 09027

Silurian

- Alabama, northwestern: Lundin, Robert F.
08787

Taxonomy

- Poloniella*, Silurian-Devonian, subgenera:
Weyant, Marcel. 07293

Tertiary

- Dominican Republic, Yague Group, Miocene:
Bold, W. A. van den. 00916

- Maryland, Brightseat Formation, Paleocene:
Hazel, Joseph E. 01131

- North Carolina, South Carolina, Waccamaw
Formation, Miocene-Pliocene: Swain,
Frederick M. 00262

Trachyleberidinae

- Miocene-Pliocene, Caribbean region, distribu-
tion: Bold, W. A. van den. 09130

United States

- Cretaceous-Pleistocene, continental margin,
northeastern: Gibson, Thomas G. 05234

Oxygen

Abundance

- Earth's crust: Volborth, Alexis. 08025

Analysis

- X-ray fluorescence, ultra-soft method: Fabbri, B.
P. 05549

Geochemistry

- Acidity and polarization, role in silicate weather-
ing: Kramer, Kenneth Francis. 01734

- Earth's crust: Volborth, Alexis. 08025

- Fugacity, buffer reaction: Burt, D. M. 04136

- O-CO₂ balance, atmosphere since Precambrian,
control: Tappan, Helen. 01832

- Permian atmosphere: Holser, W. T. 07894

- Water, exchange, reaction: Dresnack, Robert.
08469

Isotopes

- O-18, behavior in sulfate-water system: Lloyd, R.
M. 04360

- Abundance, ocean sediments: Savin, Samuel M.
08866

- Carbonatite, Quebec: Deines, Peter. 03037

Oxygen—Continued

Isotopes—Continued

- Composition, peridotite, Pennsylvania: Deines,
P. 07758

- Composition, travertine, Colorado, genesis:
Steven, T. A. 00801

- Fractionation, carbonates, silicates, California:
Clayton, R. N. 05269

- Fractionation, graphite-calcite-methane-carbon
dioxide: Bottinga, Yan. 04545

- Fractionation in lithosphere: Volborth, Alexis.
08025

- O-18, marine sediments, diagenesis: Choquette,
Philip W. 03167

- O-18, O-16, atmospheric precipitation, Great
Lakes, postglacial: Stuiver, Minze. 04062

- O-18, O-16, fractionation, calcareous marine in-
vertebrates: Weber, Jon N. 00299

- O-18:O-16, glaucophane schists: Taylor, Hugh
P., Jr. 05054

- O-18:O-16, igneous rocks, worldwide: Taylor,
Hugh P., Jr. 05353

- O-18:O-16, in phosphate, fossil marine organ-
isms: Longinelli, A. 01506

- O-18:O-16, marine phosphorites, variations:
Longinelli, A. 04525

- O-18:O-16, metamorphic rocks, Vermont, On-
tario: Sheppard, Simon M. F. 10800

- O-18:O-16, Pacific Foraminifera: Smith, P. B.
01881

- O-18:O-16, sedimentary rocks, minerals: Savin,
Samuel M. 10799

- O-18:O-16, sedimentary rocks, minerals: Savin,
Samuel Marvin. 01668

- O-18/O-16, Greenland Icecap, core: Hamilton,
W. L. 00321

- Ratios, British Columbia: Chrismas, L. 09363

- Ratios, British Columbia: Ohmoto, Hiroshi.
04153

- Ratios, chert, Precambrian: Perry, Eugene C.,
Jr. 08840

- Ratios, deep-sea cores, Pleistocene tempera-
tures: Lidz, Barbara. 00115

- Ratios, echinoid, calcite, Devonian-Recent:
Weber, Jon N. 00493

- Ratios, fluid inclusions: Rye, Robert O. 01914

- Ratios, iron-titanium oxide ores, Quebec: An-
derson, A. T. 04432

- Ratios, porphyry copper deposits: Sheppard,
Simon M. F. 09684

Pacific Islands

Geomorphology

- Coral islands, low-water platforms, evolution:
Newell, Norman D. 08824

- Coral reefs, submarine terraces, evolution: New-
man, W. A. 11000

Petrology

- American Samoa, Tutuila, alkalic igneous rocks:
Macdonald, Gordon A. 09584

Pacific Ocean

Absolute age

- Cobb seamount off Washington, basalt:
Dymond, J. R. 01941

- Deep-sea rocks, K-Ar ages, relations to sea-floor
spreading: Dymond, Jack. 10781

- East Pacific Rise, basalt, anomalous ages, excess
Ar-40: Funkhouser, John G. 05098

- East Pacific Rise, basalt, K-Ar: Fisher, David E.
01926

- Northeastern, Mount Mazama ash: Nelson, C.
Hans. 01920

- Seamounts, Hawaiian area, K-Ar: Dymond,
Jack. 01531

Pacific Ocean—Continued

Earthquakes

- 1962-65, Mendocino escarpment, mechanism: Bolt, B. A. 05458
Circumferential belt, popular account: Heintze, Carl. 06017
East Pacific rise: Northrop, John. 10541
Gorda Ridge, swarms: Northrop, J. 03060
Location by T-phase, Sofar speed and axis depth charts: Johnson, Rockne H. 02292
Northern, T-phases, source characteristics, relations: Northrop, John. 06556
Seismicity, tectonics, northeastern: Tobin, Don G. 01943

General

- Crust and upper mantle, symposium, 1966: Knopoff, Leon. 04674
Tsunamis, bibliography: Iida, Kumizi. 09827
Tsunamis, preliminary catalog: Iida, Kumizi. 09825

Geochemistry

- Be-7 concentration: Silker, W. B. 03066
East Pacific Rise, sediments, metallic enrichment, hydrothermal exhalations: Bostrom, K. 08243
Manganese, nodules composition, variations: Lorber, Harvey R. 00049
Mn, Co, Ni solids, stability conditions: Carvajal, Marta Campa. 07784
Near-shore and deep-sea sediments, spectrographic analyses: Young, Edward J. 01525
Northeastern, salinity, alkalinity, P, O distributions: Park, Kilho. 10849
Northeastern, silicate distribution: Hager, Stephen W. 10433

Geomorphology

- Aleutian abyssal plain, fossil channel: Grim, Paul J. 00036
Astoria submarine canyon, evolution: Carlson, Paul R. 10375
Eickelberg Ridge, seamounts: Nayudu, Y. R. 10028
Gulf of Alaska, general: Gershanovich, D. E. 06120
La Jolla submarine fan valley, channel geometry: Normark, W. R. 08461
Western, Erben Guyot: Boyce, R. E. 04426
Western, off California, La Jolla fan-valley: Shepard, Francis P. 04552

Geophysical surveys

- Aleutian Islands area, magnetic anomalies, lineations: Hayes, Dennis E. 02334
Aleutian Islands region, submarine volcanic eruptions, detection, hydrophones: Norris, Roger A. 08467
Aleutian Trench, south of, magnetic, east-west anomalies: Grim, Paul J. 08713
Bering Sea, review: Stone, D. B. 07062
California area, magnetic: Loughridge, Michael S. 07947
Chautauqua seamount, Hawaiian Ridge area, magnetic, gravity: Schimke, Gerald R. 00090
Chautauqua seamount, magnetic, age interpretation: Francheteau, Jean. 05000
Chautauqua seamount, magnetic, age interpretation: Schimke, Gerald R. 05001
Earth and ocean tides, off northern California: Nowroozi, A. A. 00002
Gorda Ridge, fracture zone, seismic: Northrop, J. 03060
Hawaiian arc, seismic, velocity anisotropy: Morris, G. B. 10560

Pacific Ocean—Continued

Geophysical surveys—Continued

- Hawaiian Arch, bottom topography, seismic: Beauchamp, Robert G. 10432
Hawaiian arch, seismic: Normark, William R. 04286
Hawaiian Islands area, refraction, interpretation: Helmberger, Donald V. 00040
Hawaiian ridge, northern, magnetic: Malahoff, Alexander. 11321
Juan de Fuca ridge, heat flow, magnetic: Lister, C. R. B. 08454
Juan de Fuca ridge to U.S., turbidites, seismic: Hamilton, E. L. 08455
Magnetic anomalies, sea-floor spreading: Pittman, W. C., 3d. 00573
Mantle, upper, seismic, anisotropy: Raitt, R. W. 10559
Mason-Raff lineations area, seismic, deep-towed system: Spiess, Fred N. 08465
Mesozoic-Cenozoic boundary, seismic: Ewing, John I. 07986
Mid-oceanic ridge, magnetic, anomaly pattern, interpretation: Heirtzler, James R. 00655
Murray fracture zone, structure: Malahoff, Alexander. 08464
North-central, seismic, crustal studies: Helmberger, Donald V. 10561
Northeastern, magnetic, anomaly lineations: Luyendyk, Bruce P. 04368
Northeastern, off Oregon, California, seismic: Shor, G. G., Jr. 00653
Northern, sediments, physical properties: Hamilton, Edwin L. 08476
Northern, seismic profiling sediments, distribution: Ewing, John. 09378
Seismic, Rayleigh-wave dispersion, map construction technique: Savage, J. C. 06653

Maps, bathymetric

- 35-39° N., California coast to 133° W.: Latimore, Robert K. 02939
Western, off California, La Jolla Canyon and fan-valley: Shepard, Francis P. 04552

Maps, gravity

- 35-39° N., California coast to 133° W.: Latimore, Robert K. 02939

Maps, magnetic

- 35-39° N., California coast to 133° W.: Latimore, Robert K. 02938

Mineralogy

- Glauconite, Washington-Oregon continental shelf, sediments: White, Stan M. 01391

Paleoclimatology

- Tertiary, floras, relations: Chaney, R. W. 04692

Paleomagnetism

- Cobb seamount off Washington, basalt: Dymond, J. R. 01941
North Pacific basin, northward movement, evidence: Vine, F. J. 08405

Paleontology

- Fauna, Quaternary, island shore, endemism, causes: McDowall, R. M. 07825
Foraminifera, Cenozoic, North, Globigerina evolution, zonation: Asano, K. 09128
Foraminifera, Miocene-Holocene, California to Japan, globigerinids: Asano, Kiyoshi. 03808
Mammalia, Tertiary, migration to Arctic: Mitchell, Edward. 07871
Protista, Cenozoic, calcareous nannoplankton, worldwide markers: Bukry, David. 06348
Radiolaria, Cenozoic, deep-sea cores, trisso-cyclids: Goll, R. M. 06006

Pacific Ocean—Continued*Paleontology—Continued*

Radiolaria, Holocene, surface sediments, northeastern: Ling, Hsin-Yi. 01175

Petrology

Eickelberg Ridge, seamounts: Nayudu, Y. R. 10028
 Volcanics, genesis: McBirney, Alexander R. 02009

Sedimentary petrology

Astoria submarine canyon, sediments, sedimentation rates: Carlson, Paul Roland. 00873
 California borderland, Tanner Basin, Quaternary sedimentation: Gorsline, Donn S. 01904
 Cascadia basin, Blanco Fracture zone, sedimentation: Duncan, John Russell, Jr. 07153
 Cascadia Channel, turbidity currents, sedimentation: Kulm, L. D. 07924
 Clay mineral distribution, sediment sources, transport: Griffin, John J. 05986
 Continental shelf, Washington-Oregon, sediments: White, Stan M. 01391
 East Pacific Rise, high-heat flow areas, sediments, provenance: Bostrom, Kurt. 08615
 Gulf of Alaska, sediment distribution, composition, rate: Gershanovich, D. E. 06120
 Hawaiian Archipelago, marine sediments: Belshe, John C. 09829
 Northeastern, abyssal environments, Quaternary sedimentation, controls: Duncan, John R. 08482
 Northern, manganese nodules, distribution: Ewing, M. 08484
 Sediments, properties: Keller, G. H. 05627

Structural geology

Chautauqua Seamount, sea-floor spreading: Schimke, Gerald R. 03921
 Darwin, East Pacific Rises, Murray fracture zone: Yeats, Robert S. 05052
 East Pacific Rise, ocean-floor spreading: Bonatti, Enrico. 03067
 Geosynclines, island arcs, tectonics: Sheynmann, Yu. M. 04663
 Gorda Ridge, nascent fracture: Northrop, J. 03060
 Gorda rise, sea-floor spreading, mechanism: Atwater, Tanya M. 08456
 Gulf of Alaska, continental shelf, tectonic trends: Wright, F. F. 08453
 Gulf of Alaska, sea-floor spreading, magnetic data: Pitman, Walter C., 3d. 03937
 Hawaiian Island chain, Emperor seamounts, evolution, sea-floor spreading: Christofferson, Eric. 08466
 Juan de Fuca ridge, tectonics: Morgan, W. Jason. 10657
 Mason-Raff lineations area, abyssal hills: Spiess, Fred N. 08465
 Middle America trench, crust: Heacock, John G. 08463
 Molokai and Clarion fracture zones, westward extension: Chase, Thomas E. 07787
 Murray fracture zone: Malahoff, Alexander. 08464
 Murray fracture zone, sediments, faulting: Zachariadis, R. G. 10431
 North American sector, Cenozoic, tectonics: Hamilton, Warren B. 04027
 Northeastern, East Pacific Rise, Aleutian arc, tectonics: Bostrom, R. C. 04655
 Northeastern, major faulting: Burk, Creighton A. 04028

Pacific Ocean—Continued*Structural geology—Continued*

Northeastern, sea-floor spreading, direction changes: Menard, H. W. 03917
 Northern basin, pre-Tertiary sediments, sea-floor spreading: Ewing, John. 09378
 Northern basin, rotation since Cretaceous, paleomagnetic evidence: Farrell, W. E. 00637
 Sea-floor spreading, magnetic anomalies: Pitman, W. C., 3d. 00573
 Tectonics, basin genesis, Tertiary: Niini, Aarno. 04998
Volcanology
 Circumferential belt, popular account: Heintze, Carl. 06017
 Cocos Ridge, Galapagos Fracture Zone, overlap of activity: Dalrymple, G. Brent. 00142
 Submarine eruptions, detection by Sofar: Norris, Roger A. 00022

Paleobotany*Cenozoic*

North America, sequential changes, climatic indicators: Barghoorn, E. S. 04691

Cretaceous

Alaska, northern: Smiley, Charles J. 08040

Cretaceous-Holocene

Associations, affinities to modern flora: Detling, LeRoy E. 03737

Cretaceous-Tertiary

Amber, North America, localities, sources, infrared spectra: Langenheim, Jean H. 04786

Devonian

Arizona: Canright, James E. 04386
 New Brunswick, Beaver Harbour, possibly Carboniferous: Helmstaedt, Herwart. 01605
 New York, Lodi Limestone: Wilcox, Margaret Schnaitman. 00829
 Quebec, Escuminac Formation, Escuminac Bay: Dineley, D. L. 03433

Environmental analyses

Idaho-Nevada, Eocene: Axelrod, Daniel I. 09966

Evolution

Adaptation: Gottlieb, Joan Eiger. 10123
 Charophyta, Devonian-Recent: Eyer, Jerome A. 01208
 Land plants, early history: Banks, Harlan P. 10859
 North Atlantic flora, dispersal, symposium: Love, Askill. 11425
 Phytoplankton, role in diversification of biota: Tappan, Helen. 01832
 Use in paleoclimatic reconstruction: Dorf, Erling. 04690

General

Current trends: Arnold, Chester A. 07302
 Developments, trends, outlooks: Moore, Raymond C. 06031

Geographic distribution

Alaska, Cenozoic, lichens: Krog, Hildur. 04410
 California, Sierra Nevada, Quaternary, alpine: Major, Jack. 02089
 New York, Bronx, Middle Pennsylvanian boulder: Zen, E-an. 01922

History

Arizona: Romans, Robert C. 04384

Methods

Automatic data processing, value in palynomorph taxonomy: Kremp, Gerhard O. W. 03202
 Scanning electron microscope: Taylor, T. N. 02311

Paleobotany—Continued*Methods—Continued*

Siliceous petrification, *in vitro*: Drum, R. W. 02955

Ontogeny

Carboniferous plants, Illinois coal beds: Delevoryas, Theodore. 07920

Pennsylvanian

Missouri, Drywood Fm.: Basson, Philip W. 08065

Utah, Manning Canyon Shale: Tidwell, William D. 08032

Quaternary

Iowa, Lake Okoboji, postglacial sediments: Dodd, John D. 07590

Research

Kansas, Carboniferous to Pleistocene flora, history: Leisman, Gilbert A. 07677

Silurian-Devonian

Land plants, stratigraphic occurrence, origin: Banks, Harlan P. 02873

Taxonomy

Noeggerathiopsida Boureau, suggested revision of class: Mamay, Sergius H. 10957

Tertiary

Arizona, San Cayetano Mts., volcanics: Damon, Paul E. 11423

Idaho, Snake River basin: Axelrod, Daniel I. 01890

Idaho, Weiser area, Miocene-Pliocene: Shah, Syed Mohammad Ibrahim. 06559

Oregon, Linn County, wood, popular account: Gregory, Irene. 09263

Pacific Ocean, margin, paleoclimatic relations: Chaney, R. W. 04692

Rocky Mountains, middle, Eocene: MacGinitie, H. D. 10834

Textbooks

Evolution and classification of angiosperms: Cronquist, Arthur. 06165

Triassic

Arizona, New Mexico, Chinle Formation: Ash, Sidney R. 10201

Paleoclimatology*Applications*

Paleomagnetism, axial dipole field, duration: Briden, James C. 05892

Cenozoic

Arctic and alpine tundra ecosystems: Hoffman, R. S. 02080

Caribbean Sea, Pliocene-Pleistocene, oxygen-isotopes: Bolli, H. M. 01070

Cooling trend, continental drift, increasing altitudes: Hamilton, Warren. 04170

Miocene-Holocene, Foraminifera, planktonic, zonation: Bandy, Orville L. 09127

North America, flora, sequential changes: Barghoorn, E. S. 04691

North America, Great Plains, inorganic-organic association: Reider, Richard G. 00259

Cretaceous

North Dakota, Montana, Upper: Frye, Charles Isaac. 02034

Worldwide: Lowenstam, H. A. 04688

Cycles

Barbados, Pleistocene terraces, solar-radiation maximums: Mesolella, Kenneth J. 08805

Epeirogeny and orogeny, periodicity effects: Damon, Paul E. 04167

Glaciation, air-ocean-icecap interactions, model: Eriksson, Erik. 04164

Ocean surface salinity changes, glaciation theory: Weyl, Peter K. 04162

Paleoclimatology—Continued*Cycles—Continued*

Pleistocene, astronomical theory, thermal Rossby number: Kutzbach, John E. 04171

Quaternary, astronomical theory, insolation variations: Broecker, Wallace S. 04172

Quaternary, solar activity theory, C-14 in atmosphere: Damon, Paul E. 04140

Quaternary, solar activity theory, C-14 in atmosphere: Suess, Hans E. 04173

Theories, validity, quantitative evidence: Mitchell, J. Murray, Jr. 04141

General

NATO paleoclimate conference: Bucher, Walter H. 04689

Relations to paleomagnetism: Runcorn, S. K. 04695

Symposium, causes of change: Mitchell, J. Murray 04161

Indicators

Anthozoa, Tabulata, growth patterns, Silurian, evaluation: Fischer, A. G. 04678

Arctic Ocean, cores, sediments: Tsunemasa, Saito. 08186

Beetle remains in glacial deposits, Ohio, Cleveland area: Coope, G. R. 01886

Cenozoic, Atlantic Ocean, planktonic Foraminifera: Bartlett, Grant A. 02087

Cenozoic, floras, sequential changes: Barghoorn, E. S. 04691

Clay fraction of sediments, tenuous evidence: Ehlmann, Arthur J. 03528

Cretaceous, Alaska, northern: Smiley, Charles J. 08040

Deep-sea sediments, continental glaciation: Ewing, M. 04681

Deep-sea sediments, glacial, Atlantic Ocean: Conolly, J. R. 11271

Eolian deposits, evaporites, aridity: McKee, E. D. 04682

Evolutionary trends, evolution: Teichert, Curt. 04677

Faults, strike-slip: Hulley, J. C. L. 04697

Feldspar stability: Todd, Thomas W. 03542

Foraminifera, plankton, selective solution effect: Berger, Wolfgang H. 04438

Idaho, Weiser area, flora, Miocene-Pliocene: Shah, Syed Mohammad Ibrahim. 06559

Limestone, Ca:Mg content: Fairbridge, R. W. 04685

Marine evaporites, halite and potash, Precambrian-Tertiary, paleolatitudes: Hite, Robert J. 09111

North America, continental margins, foraminiferal extinctions: Rothwell, W. T., Jr. 01191

Paleontological data, arid climates: Colbert, E. H. 04683

Palynology: Bryant, Vaughn M., Jr. 00260

Palynology, Quaternary, Canada, Arctic mainland, western: Terasmae, J. 02583

Patterned ground, warm and cold climates, distinction: White, Everett M. 01995

Permian, paleosalinity, reduction, faunal crisis: Fischer, A. G. 04675

Planktonic faunas, California, Miocene-Pliocene: Bandy, Orville L. 09968

Planktonic Foraminifera, review: Kane, Julian. 01597

Plant fossils: Dorf, Erling. 04690

Pleistocene, Alberta, sand wedges: Berg, T. E. 07822

Pleistocene, Maine, southern: Kilbourne, Richard T. 00884

Paleoclimatology—Continued

Indicators—Continued

- Pleistocene, reef corals, deep-sea sediments, isotopic dating: Broecker, W. S. 08624
 Pleistocene, United States, Great Basin, periglacial features, disjunct plants: Major, Jack. 02089
 Potash and phosphates, paleomagnetism, paleolatitude: Irving, E. 09108
 Quaternary, Alberta, Foremost-Cypress Hills area, prairie mounds: Bik, M. J. J. 07342
 Quaternary, Idaho, Owl Cave, sediment structures: Dort, Wakefield, Jr. 02539
 Quaternary, North America, eastern, alpine vegetation: Dansereau, Pierre. 00565
 Red beds: VanHouten, F. B. 04680
 Sand grain surfaces, electron microscopy: Krinsley, David H. 01888
 Sedimentary rocks, incorporated megaclasts: Crowell, J. 04693
 Sedimentary rocks, paleolatitude spectra: Briden, J. C. 04696
 Shell porosity, Holocene planktonic Foraminifera: Be, Allan W. H. 03065
 Stream sediments, placers: Krook, Leendert. 06980
 Tertiary, California, Sespe Formation, arid redbeds: Flemal, Ronald C. 01209
 Thermoluminescence of rocks, effect of microclimatic variations: Zeller, Anke N. 04013
 Thermoluminescence, relative values: Ronca, Luciano B. 04012
 Thorium-uranium dating, Pleistocene climatic changes, time scale: Thurber, D. L. 08196
 Turbidites, correlation with glaciation: Heezen, Bruce. 04694
 Vertebrata, terrestrial, climatic zonation: Colbert, E. H. 04679
 Virginia, Norfolk area, Pleistocene vertebrates: Ray, Clayton E. 03172
 Wind-eroded boulders, New Jersey: Minard, James P. 08203
 Wyoming, Cody area, landslide mass, Quaternary: Pierce, William G. 10250

Jurassic

- Gulf Coastal Plain, Louann Salt, paleobiology: Bowen, Richard L. 09316

Methods

- Isotope studies, C-13 and O-18 in shells: Mook, W. G. 00173
 Oxygen-isotope analysis, Pacific Foraminifera: Smith, P. B. 01881
 Paleolimnology, Pleistocene: Reeves, C. C., Jr. 07657

Model studies

- Thermodynamic: Shaw, David M. 08435

Paleolatitudes

- Evidence for axial dipole magnetic field: Briden, James C. 05892
 Evidence for axial dipole magnetic field: Stehli, Francis G. 05893

Permian

- Paleosalinity, reduction, faunal crisis: Fischer, A. G. 04675
 Worldwide: Lowenstam, H. A. 04688

Precambrian-Cenozoic

- Atlantic Ocean, northern regions, summary: Schwarzbach, Martin. 11397

Quaternary

- Alaska, interior, late Pleistocene: Guthrie, R. D. 00812
 Arctic, glacial-interglacial stages, control: Donn, William L. 04166

Paleoclimatology—Continued

Quaternary—Continued

- Atlantic and Caribbean regions, Pleistocene: Ericson, David B. 05167
 Atlantic Ocean, submarine canyons: Hazel, Joseph E. 05693
 Barbados, Milankovitch hypothesis supported by absolute dating: Broecker, Wallace S. 00211
 California, Searles Lake basin: Smith, G. I. 03975
 California, Sierra Nevada, Pleistocene: Curry, Robert Rodney. 07188
 Canada, eastern, palynology: Livingstone, D. A. 09798
 Caribbean region: Lidz, Barbara. 00115
 Caribbean region: Zonneveld, J. I. S. 07296
 Correlation, Pleistocene chronology, evolution of man: Emiliani, Cesare. 10951
 Deep-sea cores, oxygen-isotope and carbonate cycles, dating: Emiliani, Cesare. 10951
 Desert, northern hemisphere, Pleistocene: Quinn, James Harrison. 08550
 Fossil and magnetic evidence, Pleistocene: Burkholder, Paul R. 07970
 Great Lakes region: Cleland, Charles Edward. 10126
 Great Lakes region, O-18 indicator, postglacial: Stuiver, Minze. 04062
 Minnesota, changes, vegetational sequences: Watts, W. A. 07992
 Minnesota, late-glacial and postglacial forest history: Wright, H. E., Jr. 06124
 Minnesota, northern, late- and postglacial pollen zones: Janssen, C. R. 09025
 Missouri, western Ozarks, late Pleistocene: Mehringer, Peter J., Jr. 03104
 North America, eastern, late Pleistocene, mastodon extinction: Dreimanis, A. 10976
 Oceanic-island shore faunas, endemism cause: McDowall, R. M. 07825
 Oceans, evolution, main water masses, salinity, temperatures: Worthington, L. V. 04163
 Pleistocene glaciation dynamics, model: Eriksson, Erik. 04164
 Pleistocene oscillations, causes: Broecker, Wallace S. 08356
 Postglacial, Alberta, southern: Bik, M. J. J. 07342
 Quebec, Saint Lawrence Lowland: Terasmae, J. 01971
 South Dakota, Pickerel Lake area: Watts, W. A. 01999
 Symposium: Mitchell, J. Murray 04161
 Texas, southwestern: Bryant, Vaughn M., Jr. 10067
 United States, eastern, moraines, pollen zones: Sirkin, Leslie A. 08188
 United States, southern, Pleistocene, rodent distribution: Martin, Robert A. 09032
 Worldwide, review, Pleistocene: Horie, Shoji. 10192
 Wyoming, Converse County, Pleistocene: Anderson, Elaine. 08060

Tertiary

- Atlantic Coastal Plain, Miocene-Pliocene: Ispording, Wayne C. 10313
 British Columbia-Washington, Miocene: Hopkins, William S., Jr. 01885
 California, southern, feldspar stability: Todd, Thomas W. 03542
 Idaho-Nevada, Eocene: Axelrod, Daniel I. 09966

Paleoclimatology—Continued*Tertiary—Continued*

Nebraska, Wyoming, Vertebrata: Voorhies, M. R. 11049

Pacific Ocean, margin, floras, relations: Chaney, R. W. 04692

Wind directions

Miocene, Nevada, Nye County: Poole, F. G. 09156

Paleolatitudes, validity tested: Runcorn, S. K. 04684

Paleoecology*Algae*

Permian, marine, Texas: Klement, Karl W. 08902

Reducing environment, fatty acids: Das, Salil K. 07045

Amphibia

Aqueous-terrestrial transition, evolution of groups: Schmalhausen, I. I. 04888

Miocene, pond, Florida, Thomas Farm: Holman, J. Alan. 02824

Permian, terrestrial: DeMar, Robert. 05708

Analysis

Application, petroleum exploration, reefs: Loranger, D. M. 05443

Arctic and alpine tundra ecosystems, Cenozoic: Hoffman, R. S. 02080

Carbonate environments, lateral facies studies: Laporte, Leo F. 10864

Evaporites: Kinsman, D. J. J. 01171

Evolution of life, Earth environments: Termier, Henri. 07867

Fossil communities, information loss: Lawrence, David R. 03866

Fossil record, deficiencies: Durham, J. W. 04676

Fossil spores, review: Chaloner, William G. 10861

Species abundances, covariation patterns, alternate model types: Imbrie, John. 01213

Annelida

Devonian, marine, New York, Cardiff Shale, serpulids: Cameron, Barry. 03209

Anthozoa

Devonian Rugosa, variation, genetic vs. environment: Oliver, William A., Jr. 05755

Brachiopoda

Ordovician, shelf, Appalachians: Bretsky, S. S. 08622

Silurian, Lower, benthonic communities, reconstruction: Ziegler, Alfred M. 07394

Bryozoa

Eocene-Oligocene, marine, Alabama: Askren, L. T., Jr. 04099

Miocene, marine, Florida, Chipola Fm., biofacies: Scolaro, Reginald J. 11393

Ordovician, marine, shelf, Appalachians: Bretsky, Peter W. 01320

Carboniferous

Continental, Canada, eastern: Belt, Edward S. 03439

Cenozoic

Marine-continental borders, North Carolina-Georgia, faunal isolation: Colquhoun, Donald J. 01232

Changes

Clay minerals, cumulative record: Keller, W. D. 01170

Marine biota, continental shelves, hydroclimatic effects: Valentine, James W. 11367

Mexico, Baja California, Cretaceous-Cenozoic, lateral facies: Allison, Edwin C. 10700

Paleoecology—Continued*Changes—Continued*

Paleosalinity, Permian, reduction, faunal crisis: Fischer, A. G. 04675

Unit evolution, above population level: Valentine, James W. 02966

Cretaceous

Marine, Kansas, central: Scott, Robert W. 01354

Marine, Kansas, Kiowa Formation: Scott, Robert W. 10876

Marine, South Dakota, Fox Hills Formation: Waage, Karl M. 09882

Marine, United States, western, Colorado Group: Kauffman, Erle G. 10877

Marine, United States, Western Interior, symposium: Kauffman, Erle G. 10874

Marine-terrestrial transition, South Dakota, central: Waage, Karl M. 10881

Devonian

Lacustrine, Quebec, Escuminac Bay: Dineley, D. L. 03433

Diatoms

Eocene, fresh-water, Wagon Bed Formation, Wyoming: Lohman, Kenneth E. 02435

Pleistocene, estuarine, New York, Massena area: O'Brien, Neal R. 04401

Quaternary, dry-lake or soil, Nevada, mine-tailings: VanLandingham, S. L. 06080

Quaternary, Lake Huron, core assemblage, distribution: Stoermer, E. F. 07085

Experimental studies

Radioisotope tracer studies: Dodd, J. Robert. 08665

Flora

Eocene-Miocene, terrestrial: Axelrod, Daniel I. 01890

Foraminifera

Cretaceous, Colorado-New Mexico, San Juan Basin: Lamb, George M. 01893

Cretaceous, marine, Alabama, Georgia: Nikravesh, Rashel. 00856

Cretaceous, marine, Alberta, British Columbia: Wall, John H. 11033

Cretaceous, marine, British Columbia, Vancouver Island: Langhus, B. G. 05528

Cretaceous, marine, Colorado, water depths: Eicher, Don L. 10878

Cretaceous, Upper, marine, California-Mexico: Sliter, William V. 06699

Holocene, marine, depth effects: Golik, Abraham. 04429

Miocene, marine, North Carolina: Schnitker, Detmar. 08556

Pleistocene, pelagic, depth habitat: Lidz, Barbara. 00115

Tertiary, Nova Scotia, continental margin, Oligocene-Miocene: Bartlett, Grant A. 09353

Gastropoda

Cretaceous, United States, Western Interior: Sohl, Norman F. 10875

Devonian, marine, Ohio, Ontario, Michigan: Linsley, Robert M. 03053

General

Textbook, ancient environments: Laporte, Leo F. 03150

Uniformitarianism, relations: West, Ronald R. 09298

Indicators

Bryozoa: Askren, L. T., Jr. 04099

Calcspheres, North America: Stanton, Robert J., Jr. 08004

Calcspheres, possible algal origin: Rupp, Arthur W. 08062

Paleoecology—Continued*Indicators—Continued*

- California, Tanner Basin, Foraminifera, Holocene: Gorsline, Donn S. 01904
- Carbonate environments, Holocene: Laporte, Leo F. 10864
- Foraminifera, Cretaceous, Colorado: Kent, Harry C. 10880
- Foraminiferal depth zones: Gibson, Thomas G. 03850
- Foraminiferal depth zones: Leutze, Willard P. 03849
- Marine currents, sole marks in siltstone and shale: Pryor, Wayne A. 01187
- Marine evaporites, halite and potash, Precambrian-Tertiary, paleolatitudes: Hite, Robert J. 09111
- Mastodon(?) tusk, Kansas, Manhattan area, Pleistocene: O'Brien, Patricia J. 07966
- Mollusca, Holocene, Alaska, glacial habitats: Tuthill, Samuel J. 10803
- Oncolites, Cretaceous-Paleocene, Utah, central: Weiss, Malcolm P. 10196
- Paleocurrents, anisotropy of magnetic susceptibility in sediments: Galehouse, Jon S. 01078
- Palynology, Nevada, Tule Springs site: Mehninger, Peter J. 07195
- Palynology, Quaternary, Canada, Arctic mainland, western: Terasmae, J. 02583
- Palynomorphs, Quaternary, Arizona, lake sediments: Whiteside, Melbourne C. 11426
- Palynomorphs, Upper Pennsylvanian coal swamp: Bourn, Oscar B. 01318
- Pelecypod shell positions, continental shelf vs. beach: Emery, K. O. 06604
- Pollen zones, Rocky Mountains, Cretaceous, tectonic events: Newman, Karl R. 11072
- Protista, coccolithophores, Atlantic Ocean: McIntyre, Andrew. 07877
- Protista, Cretaceous, Colorado: Trexler, David W. 10879
- Protista, stratigraphic applications: Loeblich, Alfred R., Jr. 07944
- Sabellarid worm reefs: Kirtley, David W. 01476
- Sedimentation, relation to plant cover: Schumm, S. A. 04283
- Shell material variation, experimental studies: Sliter, William V. 04994
- Sponge spicules, Pleistocene, Ohio, loess transport: Wilding, L. P. 09083
- Trace elements in clay minerals, Saskatchewan: Williams, G. D. 01411

Insecta

- Pleistocene, Ohio, Garfield Heights area: Coope, G. R. 01886

Jurassic

- Lacustrine, New Mexico, Morrison Formation: Tanner, William F. 01201

Malacostraca

- Pliocene, littoral, California, Etchegoin Formation: Sissons, J. Dale. 00492

Mammalia

- Miocene, terrestrial, Oregon, southeastern basins: Shotwell, J. Arnold. 07300
- Oligocene, terrestrial, tapirids, South Dakota: Bjork, Philip R. 03669
- Oligocene-Holocene, horses, manus osteology, evolution: Sondaar, P. Y. 07006
- Pleistocene, forest, eastern North America, mastodon extinction: Dreimanis, A. 10976
- Pleistocene, late, grassland, Alaska, interior: Guthrie, R. D. 00812
- Pleistocene, terrestrial, Alaska: Guthrie, R. D. 05659

Paleoecology—Continued*Mammalia—Continued*

- Pleistocene, terrestrial, Texas, Friesenhahn Cave, mice: Martin, Robert A. 05566
- Quaternary, terrestrial, tar pits, California: Miller, George J. 01132

Methods

- Ancient shorelines, wave energy, sand grain erosion: Margolis, Stanley V. 07915

Mississippian

- Marine, algal biostrome, Montana: Gutschick, Raymond C. 07950
- Marine, bioherms, New Mexico: Ruedisili, Lon Chester. 02042
- Marine, Illinois, Chester area: Carozzi, Albert V. 03136

Mollusca

- Marine, California, southern, Santa Barbara fauna: Meade, Robert F. 07879
- Ordovician, benthonic, Tennessee, Minnesota: Yochelson, Ellis L. 01146
- Ordovician, shelf, Appalachians: Bretsky, P. W. 08621
- Pliocene, marine, California: Meade, Robert Francis. 02037
- Quaternary, flood-plain regions, Kentucky, Peoria loess: Browne, Ruth G. 01681

Ordovician

- Lagoonal, Indiana-Kentucky, Saluda Formation: Hatfield, Craig Bond. 03724
- Littoral, New York, Black River Group: Textoris, Daniel A. 05631
- Marine, biogeography: Fell, Barraclough H. 10862
- Marine, Indiana, factor analysis: Fox, William T. 05678
- Marine, nearshore, New York, Black River Group: Walker, Kenneth R. 11018

Pelecypoda

- Cenozoic, marine, venericards, Atlantic-Gulf Coastal Plain: Park, Richard A. 05673
- Cretaceous, marine, North America: Kauffman, Erle G. 07908
- Littoral, post-Paleozoic, infaunal siphon-feeders: Stanley, Steven M. 00558
- Marine, Jurassic-Holocene, infaunal vs. epifaunal percentages: Nicol, David. 09021
- Oligocene, cf. Holocene, losses in fossil communities: Lawrence, David R. 03866
- Oligocene, North Carolina, Belgrade area: Lawrence, David R. 08540
- Pennsylvanian, deep marine, Texas: Bird, Samuel O. 01640
- Pleistocene, marine, Florida: Lewis, Jackson E. 03012

Pennsylvanian

- Swamp, West Virginia, Redstone coal seam: Habib, Daniel. 02506

Pennsylvanian-Permian

- Deltaic, Oklahoma, Bluejacket Sandstone, road log: Visher, Glenn S. 09066

Permian

- Marine, United States, Phosphoria Formation, facies: Yochelson, Ellis L. 09100
- Marine, United States, western, Phosphoria rock complex: Yochelson, Ellis L. 00126
- Reef, Texas, Glass Mountains: Bain, Roger J. 09177

Pisces

- Permian, dipnoans, herbivorous, Texas, Lueders Fm.: Berman, David S. 03208
- Permian, lacustrine, lungfish estivation: Carlson, Keith J. 05679

Paleoecology—Continued*Pliocene-Pleistocene*

Lagoonal, Florida, Belle Glade area: Skinner, Hubert C. 08039

Porifera

Pennsylvanian, marine, Ohio: Hoare, R. D. 00497

Precambrian

Marine, general, life origin: Weyl, Peter K. 01921

Quaternary

Arctic and alpine environments, symposium: Wright, H. E., Jr. 02079

Arizona, Sonoran Desert, palynology, Holocene: Hevly, Richard H. 11384

Lacustrine, Iowa, Lake Okoboji: Dodd, John D. 07590

Lacustrine, Ontario, Wasaga Beach marl, glacial lake Nipissing, mollusks: Farrand, W. R. 10975

Lacustrine, Quebec, gastropoda: Warner, David J. 03757

Lacustrine, South Dakota, Pickerel Lake: Watts, W. A. 01999

Lagoonal, California, La Jolla submarine canyon: Holden, John C. 08063

Marine, Maine, southern: Kilbourne, Richard T. 00884

Marine shallow water, California: Lipps, Jere H. 02202

Oceanic-island shore faunas, endemism, causes: McDowall, R. M. 07825

Periglacial, United States, Great Basin: Major, Jack. 02089

South Carolina, Wicomico Formation and terrace: Colquhoun, D. J. 03005

Terrestrial, Appalachians, north-central: Stin-gelin, Ronald W. 10936

Terrestrial, Great Lakes region: Cleland, Charles Edward. 10126

Terrestrial, Kansas, Atchison County, Muscotah marsh: McGregor, Ronald L. 07686

Terrestrial, Nevada, Mohave Desert, Pleistocene: Mehninger, Peter J. 11386

Terrestrial, New Jersey, northern forest succession: Harmon, Kathryn Parker. 06533

Tundra, United States, eastern: Sirkin, Leslie A. 08188

Radiolaria

Marine, Pacific Ocean, northeastern: Ling, Hsin-Yi. 01175

Reptilia

Jurassic, terrestrial, Utah, Dinosaur Natl. Monument: White, Theodore E. 04796

Sedimentary structures

Oklahoma, eastern, Bluejacket Sandstone, road log: Visher, Glenn S. 09066

Sedimentation

Clay minerals, cumulative records: Keller, W. D. 01170

Clay-mineral analysis, Jurassic, Wyoming: Furlong, Robert B. 06946

Florida, Choctawhatchee Bay: Goldsmith, Victor. 08530

Louisiana, Catahoula Formation, thin-section data: Paine, William R. 01436

Ohio-Michigan, Sylvania Sandstone: Hatfield, Craig B. 01469

Pleistocene, Juan de Fuca Strait, Washington, British Columbia: Anderson, Franz E. 07649

Precambrian-Cambrian, Ontario, Holleford crater: Saint John, Brian E. 02730

Paleoecology—Continued*Silurian*

Benthonic, brachiopod-dominated communities, Lower: Ziegler, Alfred M. 07394

Stromatoporoida

Devonian, marine, Alberta: Stearn, Colin W. 02885

Tertiary

Lacustrine and mudflat, Utah, Green River Formation: Moussa, Mounir T. 06007

Marine, California, Miocene-Pliocene, planktonic faunas: Bandy, Orville L. 09968

Marine, California, Ventura basin, Pliocene: Kern, John Philip. 06552

Marine, foraminiferal depth zones, North Carolina, Miocene: Gibson, Thomas G. 03850

Marine, foraminiferal depth zones, North Carolina, Miocene: Leutze, Willard P. 03849

Marine, Georgia, Oligocene, middle: Herrick, S. M. 10308

Marine, Miocene, California, Salinas Valley: Smith, Patsy B. 09470

Marine, North Carolina, oyster community: Lawrence, David R. 07929

Marine, Nova Scotia, continental slope: Bartlett, Grant A. 09353

Marine, Oregon, Tyee Formation: Bird, Kenneth John. 02026

Terrestrial, Miocene, British Columbia-Washington, Whatcom basin: Hopkins, William S., Jr. 01885

Terrestrial, Idaho-Nevada, Eocene: Axelrod, Daniel I. 09966

Triassic

Marine, Alberta, Jasper region: Gibson, D. W. 02678

Terrestrial, Arizona, Chinle Formation: Gottesfeld, Allen S. 07739

Trilobita

Cambrian, lagoon facies, Missouri: Lochman, Christina. 05710

Vertebrata

Pliocene, fluvial-terrestrial, Kansas: Wilson, Richard Leland. 06938

Terrestrial, paleoclimatic zonation: Colbert, E. H. 04679

Paleogeography*Appalachians*

Pennsylvanian-Permian, paleocurrents, ostracod indicators: Jones, Michael L. 05582

British Columbia

Jurassic-Cretaceous, Taseko Lakes map-area: Jeletzky, J. A. 09409

Cambrian

United States, Late, mid-continent, southern: Chenoweth, Philip A. 03766

Cambrian-Ordovician

North America, eastern continental margin: Rodgers, John. 07133

Carboniferous

Pennsylvania, effect on limestone thickness, geochemistry: Williams, E. G. 03573

Cenozoic

Alaska, Bering land bridge: Cohen, Gaston. 03132

Tropical oceans, land barriers, fish distribution: Greenfield, David W. 00907

Colorado

San Juan Mountains: Baars, D. L. 01075

Cretaceous

California, northern: Lowe, Donald Ray. 02635

California, Sacramento Valley: Ojakangas, Richard W. 02696

Paleogeography—Continued*Cretaceous—Continued*

- Colorado, northern: Kent, Harry C. 05719
 Colorado-New Mexico, San Juan Basin: Lamb, George M. 01893
 Oregon, Mitchell quadrangle: Wilkinson, W. D. 09487
 Texas, central: Boone, Peter A. 07066

Cycles

- Oceanographic, glacial control, Cenozoic: Bandy, Orville L. 04016

Devonian

- Alaska: Gryc, George. 03792
 Alberta, Zama area: McCamis, John G. 04507
 Arizona, east-central: Pine, Gordon Leroy. 04542
 Canada, plains, west of Shield: Bassett, H. G. 03179
 Early, Appalachian Province, faunal: Boucot, A. J. 02968
 New York, Middle: McCave, I. N. 03442
 New York-Pennsylvania, Late: Woodrow, Donald L. 02970
 North America, eastern, Bois Blanc-Schoharie time: Boucot, A. J. 04114
 North Atlantic region, sedimentary basins: Allen, J. R. L. 03441

Indicators

- Sedimentary structure, biogenic, point-bar deposits: Pryor, Wayne A. 08847

Mapping, methods

- Paleocurrent analysis, problems: Hayes, Miles O. 08725
 Paleoslopes and paleocurrents, models, classification: Selley, Richard C. 00531
 Stratigraphic map diagrams, regional: Melton, Frank A. 00308

Mapping, principles

- Anthozoa, Tabulata, growth patterns, Silurian, evaluation: Fischer, A. G. 04678

Mesozoic

- Marine environments, potential upwelling sites, phosphorite deposition: Freas, Donald H. 09107

Nevada

- Paleozoic-Cenozoic: Armstrong, Richard Lee. 01076

New Mexico

- Pennsylvanian-Permian, Pedernal uplift: Kottowski, Frank E. 01173
 Permian basin, Paleozoic: Hills, John M. 01012

New York

- Precambrian to Holocene, New York City region: Schuberth, Christopher J. 06968

Northwest Territories

- Cretaceous-Tertiary, Somerset Island: Dineley, D. L. 02724

Ordovician

- Appalachians, northern, Magog belt: Neuman, Robert B. 07136
 New York, Normanskill Formation, paleocurrents: Fagan, John J. 00015
 Texas, Franklin Mountains: Lucia, F. J. 10172
 United States, mid-continent, southern: Chenoweth, Philip A. 03766

Paleozoic

- Gulf of Saint Lawrence region, cf. Europe: Dineley, D. L. 07016
 Illinois basin, Mississippi embayment, Ouachita orogenic belt: Mann, C. John. 09329
 World, pre-Permian, paleoclimatic interpretations, evaluation: Teichert, Curt. 04677

Paleogeography—Continued*Pennsylvanian*

- Appalachian Plateau, shorelines: Cavaroc, V. V., Jr. 00468
 Appalachians, Conemaugh Formation: Morris, David Albert. 09851
 Missouri, Bates County: Gentile, Richard J. 08064
 Missouri, Blackjack Creek Fm.: Neal, William Joseph. 07155
 Oklahoma, Arkoma basin, Hartshorne time: McDaniel, Gary A. 01159
 Oklahoma, Bluejacket Formation, deltaic complex, subsurface: Saitta B., Sandro. 09068
 Oklahoma, Bluejacket-Bartlesville Sandstone, depositional framework: Visser, Glenn S. 09067

Permian

- Marine environments, potential upwelling sites, phosphorite deposition: Freas, Donald H. 09107
 New Mexico, Joyita uplift: Kottowski, Frank E. 07920

Quaternary

- Carolina-Florida coastal plain: Zarudzki, E. F. K. 05050
 Florida, Keys, Pleistocene: Hoffmeister, J. E. 04292

Silurian

- Quebec, Matapedia-Temisouata region: Lajoie, J. 01468

Tertiary

- California, Carrizo Plain-Temblor Range, fault slip: Addicott, Warren O. 04037
 California, central, post-Miocene: Berry, Frederick A. F. 07823
 California, southern, Paleogene: Woodford, A. O. 04291
 Florida, Miocene-Pliocene, phosphorite deposition, Ocala arch: Freas, Donald H. 09104
 Florida, northern, indicators: Olsen, S. J. 04006
 Marine environments, potential upwelling sites, phosphorite deposition: Freas, Donald H. 09107
 Oregon Coast Range, Eocene, middle: Lovell, J. P. B. 00011

Texas

- Permian basin, Paleozoic: Hills, John M. 01012

Triassic

- British Columbia, Milligan Creek area, Halfway Formation: Mothersill, John S. 04078
 New Jersey: Abdel-Monem, Abdalla A. 02977

Utah

- Paleozoic-Cenozoic: Armstrong, Richard Lee. 01076

Paleomagnetism*Applications*

- Continental drift, polar wandering: Runcorn, S. K. 03634
 Continental drift, sea-floor spreading: Vine, Frederick J. 05085
 Deep-sea lavas, ocean-spreading hypothesis: Irving, E. 02727
 Mineral exploration, potash and phosphates, paleolatitude changes: Irving, E. 09108
 Pole positions, paleoclimatology: Runcorn, S. K. 04695
 Quaternary correlation, principles: Cox, Allan. 03986
 Sedimentation rates, cf. ionium method: Ku, Teh-Lung. 01606

Paleomagnetism—Continued*Applications—Continued*

Stratigraphy, magnetic field history, oceanic cores: Opdyke, N. D. 05898

Cambrian

Missouri, LaMotte Formation: Al-Khafaji, Saadi. 08394

Oklahoma, Wichita and Arbuckle Mts.: Spall, Henry. 00435

Cenozoic

Alaska, Nunivak Island, basalt: Hoare, Joseph M. 06353

Atlantic Ocean, deep-sea core, Plio-Pleistocene boundary: Berggren, W. A. 09126

Hawaii, Kauai, Oahu, lava: Doell, Richard R. 08373

Mexico, Valley of Mexico, lava: Nairn, Alan E. M. 08372

New Mexico, Valles Caldera, rhyolites and associated rocks: Doell, Richard R. 06579

Pacific Ocean, north basin, northward movement: Vine, F. J. 08405

Cretaceous

Arkansas, igneous rocks: Sharon, LeRoy. 08379

North America: Helsley, Charles E. 02495

Pacific Ocean seamounts and North America, evidence of Pacific rotation: Farrell, W. E. 00637

Quebec, Monteregian Hills: Larochelle, A. 00957

Devonian

New Brunswick, Perry Formation, rotation of Newfoundland: Robertson, W. A. 05468

Worldwide, paleolatitudes: Creer, K. M. 05258

General

Continental drift evidence, validity questioned: Stehli, Francis G. 09700

Field intensity, Precambrian to present: Carmichael, C. M. 00319

Geological tool: Watkins, N. D. 08565

Relation to planetary physics: Kaula, William M. 09412

Geochronology

Costa Rica, Cocos Island, basalt flows, cf. Galapagos: Dalrymple, G. Brent. 00142

Lava flows, application of thermoluminescence dating: Aitken, M. J. 03971

Plio-Pleistocene, Atlantic Ocean, north, cores: Phillips, J. D. 02676

Methods

Polarity epochs, boundary confidence limits, calculations: Cox, Allan. 08371

Statistical measurements, standard deviations, variance: Larochelle, A. 07383

Mississippian

New Brunswick, Maringouin Formation, diagenetic remanent magnetism: Roy, J. L. 01960

Pennsylvania, Appalachians, origin of curvature: Knowles, Raymond R. 03931

Paleolatitudes

Calculation, sedimentary rocks: Briden, J. C. 04696

Devonian, worldwide: Creer, K. M. 05258

Permian, worldwide: Nairn, A. E. M. 04686

Validity tested, paleowind directions: Runcorn, S. K. 04684

Paleontology

Faunal distributions: Stehli, Francis G. 10863

Paleozoic

Polar wandering curves, upper, continent reconstruction: Creer, K. M. 02972

Paleomagnetism—Continued*Paleozoic—Continued*

United States, Europe, remagnetization of lower: Creer, K. M. 03127

Upper, supercontinent reconstruction: Creer, K. M. 02972

Pennsylvanian

Colorado, red beds, Kiaman magnetic division: McMahon, B. E. 01616

New Brunswick, Hurley Creek Formation: Roy, J. L. 00079

Pennsylvanian-Triassic

Colorado: McMahon, B. E. 01616

Colorado, Kiaman magnetic division, red beds, Rocky Mts.: McMahon, Beverly E. 01086

Permian

Dipole field, axial or nonaxial, paleoclimatic evidence: Stehli, Francis G. 05893

Worldwide: Nairn, A. E. M. 04686

Worldwide, cf. zoogeographic poles: Helsley, C. E. 04687

Phanerozoic

Dipole field, axial, paleoclimatic evidence: Briden, James C. 05892

Pole positions

Cores, agreement with dipole hypothesis: Opdyke, Neil D. 08368

Correlation with gravity anomalies, strike-slip faults: Hulley, J. C. L. 04697

Geologic time, North America cf. Europe: Runcorn, S. K. 04695

Texas, Oklahoma, igneous rocks: Spall, Henry R. 10085

Wandering, continental drift as cause: Irving, E. 08369

Wandering curves, North America, Europe, interpretation: Hospers, J. 07064

Precambrian

Canada, cf. Africa, relative positions: McElhinny, M. W. 01101

Colorado-Wyoming, Front Range, reversals: Egger, D. H. 00369

Field strength, variations, equatorial: Schwarz, E. J. 00589

Labrador, Michikamau anorthositic intrusion: Murthy, G. S. 05469

Lake Superior region, Keweenaw lava flows: Books, Kenneth G. 05202

Lake Superior region, Keweenaw volcanic units: Palmer, H. C. 11336

Michigan, Keweenaw lavas, partial self-reversal: Vincenz, S. A. 00512

Michigan, Portage Lake lavas, reversals: Vincenz, S. A. 00519

Montana, Stillwater complex: Bergh, Hugh W. 08384

North America, field intensity: Kobayashi, Kazuo. 06333

Oklahoma, Wichita and Arbuckle Mts.: Spall, Henry. 00435

Processes

Crustal paleo-inertia: Deutsch, E. R. 10625

Quaternary

Arizona, Flagstaff area, Holocene basalt: Strangway, David W. 04285

Glaciation onset, possible relations: Cox, Allan. 04168

Reversals

Application to stratigraphic correlation: Burek, P. J. 08382

Cenozoic, United States, western, absolute age: Dalrymple, G. Brent. 10697

Coincidence with faunal boundaries: Geophysics Correspondent. 00638

Paleomagnetism—Continued*Reversals—Continued*

Effect on organic evolution: Harrison, C. G. A. 00634

Gauss normal epoch, events, deep-sea cores: Foster, John H. 08404

Kiama interval, Colorado, red beds: McMahon, B. E. 01616

Length of polarity intervals: Cox, Allan. 00979

Matuyama epoch: Cox, A. V. 10410

Mechanism, California, Bucks pluton: Merrill, Ronald Thomas. 01754

Pleistocene, correlation with deep-sea sediments: Burkholder, Paul R. 07970

Pleistocene time scale: Ericson, David B. 05167

Pliocene, Oregon, Still Creek intrusion: Ito, H. 08376

Pliocene-Pleistocene, correlation, deep-sea sediments: Glass, Billy Price. 04537

Relation to oxidation state of minerals: Wright, J. B. 04290

Submarine sedimentary cores: Watkins, N. D. 10354

Tertiary, New Mexico, 3.6-3.7 m.y.: Dalrymple, G. Brent. 00290

Tertiary, New Mexico, 3.6-3.7 m.y.: Ozima, M. 00272

Time scale of polarity epochs: Cox, Allan. 05895

Time-scale, K-Ar dating, late Pliocene-Holocene: Cox, Allan. 07330

Triassic, Appalachians: DeBoer, Jelle. 01167

Warm thunderstorms, relations: Hughes, William H. 08403

Stability

Neogene basalts, results, application: Irving, E. 02727

Thermoremanence, destruction by deformation, nickel: Shive, Peter N. 05043

Terminology

"Virtual geomagnetic pole": Doell, Richard R. 04362

"Virtual geomagnetic pole": Runcorn, S. K. 04361

Tertiary

Colorado, Thirtynine Mile volcanic field, Oligocene: Graebner, P. 11069

Montana, Gallatin Range, Yellowstone Valley, volcanic rocks: Chadwick, Robert A. 07682

Nevada, Thirsty Canyon Tuff: Noble, Donald C. 02715

Nevada, volcanics, Nevada Test Site, relation to magnetic anomalies: Bath, Gordon D. 06806

Oregon, basalt, Miocene: Goldstein, M. A. 08377

Oregon, Still Creek intrusion: Ito, H. 08376

Washington, Oregon, Columbia River basalt: Reitman, Jan D. 08375

Triassic

Colorado, Moenkopi Formation, reversals: Helsley, Charles E. 08381

Connecticut, intensity, reversal: DeBoer, Jelle. 01167

Nova Scotia, North Mountain basalt: Carmichael, C. M. 00658

Paleontology*Automatic-data processing*

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Diatoms, fossil and Recent, Mills' index revision: VanLandingham, Sam L. 07918

Echinoidea, Mesozoic-Cenozoic, Mexico: Buitron, Blanca Estela. 09180

Foraminifera, smaller, index species, Paleozoic, Cretaceous: Ellis, Brooks F. 03145

Protista, Pyrrhophyta (dinoflagellates), index: Loeblich, Alfred R., Jr. 00557

Protista, silicoflagellates and ebridians: Loeblich, Alfred R., 3d. 05666

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General: Matthews, William H., 3d. 01829

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Correlation

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Education

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Environmental analyses

Fossil record, deficiencies, paleobiologic interpretations: Durham, J. W. 04676

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Temperature, benthonic foraminifers, Pacific: Smith, P. B. 01881

Vertebrata, terrestrial, paleoclimatic zonation: Colbert, E. H. 04679

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Causes, geomagnetic field reversal, and climatic change: Harrison, C. G. A. 00634

Dinosaurs, Cretaceous: Axelrod, Daniel I. 03742

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Fossilization

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General

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Permian, zoogeographic, cf. magnetic poles: Helsley, C. E. 04687

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Illustrated atlas: Case, Gerard R. 04347

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General: Broms, Allan. 02507

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Methods

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Correlation, dendrograph, two-dimensional tool: McCammon, Richard B. 04281

Correlation, model: Horowitz, Alan Stanley. 07897

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Sample disaggregating, detergent Quaternary "O": Zingula, R. P. 05670

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Scanning electron microscope, specimen stub, new: Sandberg, Philip A. 05249

Spectrochemical analysis, ectoproct bryozoans: Schopf, Thomas J. M. 03221

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United States-Asia, Bering land bridge: Cohen, Gaston. 03132

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Alaska

Alaska Range, Birch Creek Schist, Keevy Peak Formation, age(?): Wahrhaftig, Clyde. 01659

Lake Peters area, Devonian-Pennsylvanian stratigraphy: Reed, Bruce L. 04488

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General: Stelck, Charles R. 10924

Limestone Mountain area, stratigraphy: Ollerenshaw, N. C. 06571

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Southeastern, stratigraphic units, distinctive features: Bryant, Donald L. 02640

Southern, absolute age: Damon, Paul E. 02639

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Kootenay arch, Slocan syncline: Ross, John V. 02726

Bryozoa

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Canada

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Cephalopoda

Ammonoidea, late, shell modifications: Davis, Richard Arnold. 06548

Colorado

Canyon City area, pre-Pennsylvanian sedimentation: Gerhard, Lee C. 07262

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Paradox basin, stratigraphy: Peterson, James A. 01018

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Paleozoic—Continued

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Northeastern, Brimfield-Paxton Formations:
Pease, Maurice H., Jr. 06045

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Index species, catalog, smaller, benthonic and planktonic: Ellis, Brooks F. 03145
Nonfusulinid, bibliography: Toomey, Donald Francis. 09476

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Oaxaca, Invertebrata, Lower: Robison, Richard A. 11003

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Forest City basin, history: Anderson, K. H. 00265
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Thickness and distribution, southern: Ekren, E. B. 06822
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Woodstock-Millville-Coldstream map-areas, stratigraphy: Anderson, F. D. 02400

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New Hampshire

Boundary Mountains anticlinorium, stratigraphy: Green, John C. 07246
Connecticut Lakes-Parmachenee area, Cambrian to Devonian: Green, John Chandler. 04298

Paleozoic—Continued

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Lusk Strawn oil and gas field, stratigraphy: Thornton, Dewey E. 00069
Mockingbird Gap quadrangle, stratigraphy: Bachman, George O. 05470
Sedimentation, Pedernal uplift effect: Kottowski, Frank E. 00059
Southeastern, Permian Basin, stratigraphy: Hills, John M. 01012

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Northwest Territories

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Ellesmere Island, fold belt tectonics: Trettin, H. P. 00005
Franklin, Agu Bay-Easter Cape area, Cambrian-Silurian: Blackadar, R. G. 02463
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Franklin, Berlinguet Inlet-Bourassa Bay area, lower: Blackadar, R. G. 02460
Franklin, Erichsen Lake area, Cambrian-Silurian: Blackadar, R. G. 02441
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Southeastern, Goldenville Formation: Harris, I. McK. 04399

Ohio

Adams-Scioto Counties, Ordovician-Pennsylvanian strata: Calvert, Warren L. 01336
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Correlation, Wheatland area, pre-Pennsylvanian subsurface: Ahmeduddin, Mir. 05584

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Paleomagnetism

United States, Europe: Creer, K. M. 03127

Pelecypoda

Nuculids, type species, taxonomy: McAlester, A. Lee. 03709

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Correlation, nomenclature, Lake Megantic range area: Marleau, R.-A. 03173

Paleozoic—Continued*Quebec—Continued*

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 Southern, mio- and eugeosynclinal zones: Cady, Wallace M. 07134

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 Invertebrata, evolution of marine communities, rate: Bretsky, Peter W. 00178
 Limestones, phylloid algal, late: Wray, John L. 05628
 Western, northern, basal Sauk clastics, sedimentation: Seeland, David Arthur. 09463

Utah

- Cordilleran miogeosyncline, stratigraphy: Armstrong, Richard Lee. 01871
 Grouse Creek area, metamorphosed section: Compton, Robert R. 10830
 Paradox basin, stratigraphy: Peterson, James A. 01018
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Virginia

- Appalachians, stratigraphy, tectonics: Cooper, Byron N. 02477
 Botetourt-Rockbridge Counties, boundary area, lower: Spencer, Edgar W. 00950
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 Southwestern, Salem synclinorium, stratigraphy: Tillman, C. G. 08124

Wisconsin

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 Nomenclature, revisions, lithostratigraphy: Ostrom, Meredith E. 09194

Wyoming

- Grand Teton National Park, stratigraphy: Love, J. D. 11319
 Wind River Range, carbonates, environment: Tucker, M. M. Riddler. 03630

Palladium*Abundance*

- Manganese nodules: Harriss, Robert C. 04893

Analysis

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Palynology*Carboniferous*

- New Brunswick, Moncton map-area, lists: Carr, P. A. 00977

Correlation

- Principles, floral succession: Gibson, L. B. 02187

Cretaceous

- Alberta, Battle and Edmonton Formations, southern: Binda, P. L. 09354

Palynology—Continued*Cretaceous—Continued*

- Atlantic Ocean, Cat Island region, deep-sea cores: Habib, Daniel. 10902
 Atlantic Ocean, deep-sea, seismic horizon beta: Habib, Daniel. 05166
 British Columbia, Upper: Rouse, Glenn E. 08084
 Colorado, Paleocene rocks: Newman, Karl R. 07834
 Kansas, Pierre Shale: Lammons, James M. 07926
 Northern and southern hemispheres compared: Stover, Lewis E. 08008
 Oklahoma, Marshall County, Albian assemblages: Hedlund, R. W. 03740
 Oklahoma, Omadi Formation, coal: Potter, Delbert E. 10079
 Rocky Mountains, pollen zones, tectonic events: Newman, Karl R. 11072
 South Dakota, Inyan Kara Group: Cahoon, Elizabeth J. 02317
 Texas, Lower, Glen Rose Formation: Kessler, L. G., 2d. 10946
 Utah, Straight Cliffs Sandstone: Orlansky, Ralph. 00858

Cretaceous-Tertiary

- Rocky Mountains, Mississippi embayment, boundary: Tschudy, Robert H. 10796
 Wyoming, Lance-Fort Union Formations: Leffingwell, Harry A. 07933

Devonian

- Northwest Territories, Buffalo River Shales, Great Slave Lake area: Audretsch, A. P. 02881
 Wyoming, Beartooth Butte Formation: Brush, Grace S. 07807

Environmental analyses

- Archaeological sites, possibilities: Hevly, Richard H. 11433
 Canada, Quaternary, Arctic mainland, western, problems: Terasmae, J. 02583
 Canada, Western Interior, Holocene: Lichti-Federovich, S. 11421
 Fossil spores, review: Chaloner, William G. 10861
 Lake Superior, post-glacial bottom sediments: Benninghoff, W. S. 07802
 Nevada, Tule Springs site, Quaternary: Mehringer, Peter J. 07195
 New Jersey, Pleistocene forest history: Harmon, Kathryn Parker. 06533
 North America, eastern, alpine vegetation, Quaternary: Dansereau, Pierre. 00565
 Pennsylvanian, Upper, coal swamp, nonmarine and marine: Bourn, Oscar B. 01318
 Possibilities, United States, eastern, offshore sediments: Stanley, Edward A. 10854
 Role in prehistory: Bryant, Vaughn M. 00260
 Type pollen spectrum, climax domain, Quebec, Montmorency forest: Richard, Pierre. 02050

General

- Pollen, lake sediments, seasonal redeposition, effects: Davis, Margaret. 04075

Geographic distribution

- Gulf of California, provenance: Cross, A. T. 02320

Jurassic

- Mexico, Isthmus of Tehuantepec, salt domes, Chinameca Limestone: Contreras V., H. 03354
 Michigan, Michigan basin: Shaffer, Bernard L. 10083

Palynology—Continued

Marine

Possibilities, limitations, problems: Groot, Johan J. 09784

Mesozoic

Catalog: Traverse, A. 01651
Greenland, South Dakota, catalog: Traverse, A. 01651

United States, Fort Dodge gypsum: Cross, Aureal T. 07796

Mesozoic-Cenozoic

Catalog: Traverse, A. 04328

Methods

Electron microscopy: Martin, Paul S. 04385

Electron microscopy, exine sections, ultramicrotomy: Skvarla, John J. 08923

Sampling and analysis: Bryant, Vaughn M., Jr. 00260

Scanning electron microscope: Drew, Charles M. 05259

Water-miscible mountant: Wilson, L. R. 02528

Nomenclature

Pre-Pleistocene, confusion, automatic data processing value: Kremp, Gerhard O. W. 03202

Paleozoic

Pennsylvania, Bear Meadows Bog, eolian, redeposition: Stingelin, Ronald W. 09938

Paleozoic-Mesozoic

Alabama, Wilcox County, in Paleocene Naheola Formation: McLean, Dewey M. 06008

Pennsylvanian

Appalachians, southern: Upshaw, Charles F. 09723

Illinois, Carbondale Formation, coal: Peppers, Russel A. 08839

Kansas, Bonner Springs Shale, Johnson County: Clendening, J. A. 02350

Oklahoma, coal seams: Wilson, L. R. 00413

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Oklahoma, Coffeyville Formation: Upshaw, Charles F. 10091

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Oklahoma, Elk City area: Sanders, Robert Bruce. 00863

Oklahoma, Secor Coal: Clarke, Robert T. 10068

Oklahoma, Seminole Formation, Dawson coal: Wilson, L. R. 10094

United States, central, structures: Darrah, Elsie Louise. 00937

West Virginia, Redstone seam, paleoecology: Habib, Daniel. 02506

Permian

Oklahoma, El Reno Group: Morgan, Bill Eugene. 11331

Oklahoma, Wellington Formation: Bond, T. A. 07368

Precambrian

Minnesota, Biwabik and Soudan Iron-Formations: Cloud, Preston E., Jr. 10986

Preparations

Sediment samples, obtaining uniform volume: Stevenson, Anne L. 07366

Quaternary

Appalachians, north-central: Stingelin, Ronald W. 10936

Arizona, Sonoran Desert, Holocene: Hevly, Richard H. 11384

Arizona, southern, Lake Cochise deposits, Pleistocene: Hevly, Richard H. 11381

Palynology—Continued

Quaternary—Continued

Canada, eastern, paleoclimatology: Livingstone, D. A. 09798

Canada, Western Interior, Holocene: Lichti-Federovich, S. 11421

Greenland, Umanak district, shell-bed chronology: Rosenkrantz, Alfred. 05112

Iowa, Lake Okoboji, postglacial sediments: Dodd, John D. 07590

Manitoba, Holocene cores, Tiger Hills area: Ritchie, J. C. 02736

Maryland-West Virginia, Cranesville Swamp, profile: Cox, Donald D. 04346

Massachusetts, western, late-, postglacial environments: Whitehead, Donald R. 09950

Minnesota, "Big Woods" area, protohistoric development: McAndrews, John H. 11172

Minnesota, late-glacial, postglacial forest, pine and spruce: Wright, H. E., Jr. 06124

Minnesota, northern, late- and postglacial pollen diagram: Janssen, C. R. 09025

Missouri, western Ozarks, Pleistocene boreal forest: Mehringer, Peter J., Jr. 03104

Nevada, Mohave Desert, Pleistocene: Mehringer, Peter J. 11386

New York, Ithaca area, interglacial deposit: Bloom, Arthur L. 09752

North Carolina, Lake Singletary, sediments, spores: Wolf, Frederick A. 00726

North Carolina, Long Beach area, peat: Whitehead, Donald R. 10356

Quebec, Saint Hilaire area, late glacial: Terasmae, J. 01971

South Dakota, Pickerel Lake, sediment core: Watts, W. A. 01999

Texas, southwestern: Bryant, Vaughn M., Jr. 10067

Utah, Sevier Playa, Holocene: Baer, J. L. 10202

West Virginia, Morgantown area, Pleistocene lake deposit: Clendening, John A. 10291

Silurian

Alabama, Birmingham area, relation to climate: Cramer, Fritz H. 01502

Tertiary

British Columbia: Rouse, Glenn E. 08084

British Columbia-Washington, Whatcom basin, Miocene: Hopkins, William S., Jr. 01885

California, San Joaquin Valley, catalog: Traverse, A. 04328

Caribbean region, correlation: Germeraad, J. H. 07373

Idaho, Nevada, Colorado, gymnosperm pollen: Ting, William S. 07632

Northern and southern hemispheres compared: Stover, Lewis E. 08008

Texas, lignite, Eocene: Traverse, Alfred. 09720

Texas, Paleocene, Rockdale lignite: Elisk, William. 07367

Washington, western, Lower: Sparks, Dennis M. 08043

Triassic

Arizona, Chinle Formation: Gottesfeld, Allen S. 07739

Palynomorphs*Aquilapollenites*

Cretaceous, Alberta, Edmonton Fm., new species: Srivastava, Satish K. 07921

Photographs, scanning electron microscope: Drew, Charles M. 05259

Ariadnaesporites varius, n. sp.

Cretaceous, Minnesota, Windrow Formation: Hall, John W. 05021

Palynomorphs—Continued

Azolla

Cretaceous, Alberta, Edmonton Formation:
Srivastava, Satish K. 11354

Azolla hamata, n.sp.

Cretaceous, Alberta, Edmonton Formation:
Srivastava, Satish K. 11354

Azolla sagittifera, n.sp.

Cretaceous, Alberta, Edmonton Formation:
Srivastava, Satish K. 11354

Cristatisporites

Pennsylvanian, West Virginia, Redstone coal
seam: Habib, Daniel. 02506

Densosporites

Pennsylvanian, West Virginia, Redstone coal
seam: Habib, Daniel. 02506

Dibrochosporites nodosus, n.gen., n.sp.

Devonian, Iowa, Cedar Valley Formation: Ur-
ban, James B. 05017

Ephedrales

Alberta, Cretaceous, Edmonton Formation,
form-genera: Srivastava, Satish K. 01989

Fungal spores

Cretaceous, Alberta, Edmonton Formation, n.
spp.: Srivastava, Satish K. 09024

Gillespieisporites venustus, n.gen., n.sp.

Pennsylvanian, Pennsylvania, Dunkard Group,
Jollytown area: Clendening, John A. 06303

Henrisporites

Cretaceous, Alberta, Upper, emendations, new
species: Binda, P. L. 09354

Horstisporites

Cretaceous, Alberta, Upper, new species: Binda,
P. L. 09354

Laevigatosporites plicatus, n.sp.

Pennsylvanian, West Virginia, Dunkard Group,
Monongalia County: Clendening, John A.
06303

Mancicarpus

Emendation: Srivastava, Satish K. 07921

Morphology

Microstructures, Pennsylvanian seeds and
spores: Darrah, Elsie Louise. 00937

Paleocene, Texas, Rockdale lignite: Elsik, Wil-
liam C. 07631

Sporopollenin, geochemistry: Traverse, Alfred.
02310

Pediastrum

Quaternary, Arizona, Coconino County, lake
sediments: Whiteside, Melbourne C. 11426

Rosannia manika, n. gen., n. sp.

Cretaceous, Alberta, Edmonton Formation, tri-
orate pollen: Srivastava, Satish K. 09023

Selenasporites, n.gen.

Cretaceous, Alberta, Upper: Binda, P. L. 09354

Singhia, n.gen.

Alberta, Cretaceous, Edmonton Formation:
Srivastava, Satish K. 01989

Spencerisporites

Paleozoic, North America, morphology: Felix,
C. J. 02348

Stelckisporites, n.gen.

Cretaceous, Alberta, Upper: Binda, P. L. 09354

Stripites, n.gen.

Pennsylvanian, West Virginia, Redstone coal
seam: Habib, Daniel. 02506

Tenellisporites spinatus, n. sp.

Cretaceous, Minnesota, Windrow Formation:
Hall, John W. 05021

Verrutritiles, n.gen.

Cretaceous, Alberta, Upper, emendations, new
species: Binda, P. L. 09354

Panama

Economic geology

Copper, Petaquilla and Botija prospects,
geochemical discovery: World Mining. 08173

Geochemistry

Petaquilla and Botija prospects, discovery:
World Mining. 08173

Paleontology

Foraminifera, Holocene, Gulf of Panama, fauna:
Golik, Abraham. 04429

Sedimentary petrology

Gulf of Panama, Holocene sedimentation histo-
ry: Golik, Abraham. 04429

Stratigraphy

Holocene, foraminiferal sediments, Gulf of
Panama: Golik, Abraham. 04429

Paragenesis

Basalt

Hawaii, Makaopuhi lava lake: Wright, Thomas
L. 09742

Copper deposit

Haiti, Meme mine: Kesler, Stephen E. 10956

Epidote

California, Salton Sea geothermal system: Keith,
Terry E. C. 07537

Fe-Ti oxides

Diabase: Davidson, A. 07640

Flint clay

Paludal deposition, crystallization, geochemical
reactions: Keller, W. D. 11239

Manganese, veins

Nevada, Nye County: Hewett, D. F. 04221

Metal deposits

New Mexico: Clark, K. F. 04226

Ni-Co-Ag ore

Ontario, Cobalt area: Kulkarni, P. H. 04732

Polymetallic ores

Sudbury-type deposits: Craig, J. R. 01559

Precious-metal suite

Colorado, Gilman area: Titley, Spencer R.
10269

Serpentinite

California, Tiburon Peninsula: Page, Norman J.
00800

Silver, nickel, veins

New Mexico, Burro Mountains: Gillerman, El-
liot. 01915

Silver ore

Nevada, Morey district: Williams, Sidney A.
03754

Sulfantimonides

Ontario, Madoc district, experimental studies:
Jambor, J. L. 03755

Veins

Ontario, Cobalt district: Petruk, William. 09450

Whewellite

Ohio, Milan area: Leavens, Peter B. 06755

Patterned ground

Arctic

Alaska, Arctic slope: Tedrow, J. C. F. 02091
Northwest Territories, Prince Patrick Island: Pis-
sart, A. 07391

Desiccation polygons

United States, Great Basin playas: Neal, James
T. 00542

Gilgai

South Dakota, contemporary formation: White,
Everett M. 01995

Humid climate

Newfoundland, Avalon Peninsula: Henderson,
E. P. 07232

Patterned ground—Continued

Nomenclature

Warm vs. cold climate features: White, Everett M. 01995

Pimple mounds

Minnesota, animal origin: Ross, B. A. 00818

Pingos

Alaska, central: Holmes, G. William. 09400

"Potato Hills"

Texas, Sabine County, origin, processes: Van-Siclen, DeWitt C. 09082

Tree-throw mounds

New York, Plattsburgh area, ancient beaches: Denny, Charles S. 00738

Peat

Appalachians

Resources, review: Cameron, Cornelia C. 01398

Engineering properties

Shear strength, vane tests: Wilson, N. E. 05371

Florida

Southwestern, types, environments, thin section study: Cohen, Arthur D. 08646

Genesis

Forest bog succession, Alaska, P and cations availability: Heilman, Paul E. 03103

Newfoundland

Resources: Pollett, Frederick. 06569

Wyoming

Bogs, hydrologic properties, bulk density, saturation: Sturges, David L. 04984

Pebbles

Alaska

Three Entrance Bay and Easter Egg Hill, beach, carbonate and gizzard stones: Hoskin, Charles M. 01219

Alberta

Foremost-Cypress Hills area: Westgate, J. A. 06698

California

Central, Santa Clara Formation, Corte Madera facies: Cummings, Jon C. 04053
Rubicon River, flood surge, shape, size analyses: Scott, Kevin M. 07531

Counts

Methods, new: Hunter, Ralph E. 01465

Louisiana

Mississippi delta, gastrolithic beach gravel, fish otoliths: Dixon, Mark A. 01239

Montana

Beartooth Mountains, periglacial clusters, piping process: Smith, H. T. U. 07392

New Jersey

Coastal Plain, boulders, wind-eroded: Minard, James P. 08203

North America

Atlantic coast, flint, European source: Emery, K. O. 01928

Orientation

Till, Colorado, Arapahoe Glacier: Harris, Stuart A. 02509

Periglacial areas

Boulder clusters, piping process: Smith, H. T. U. 07392

Provenance

Paleogene conglomerates, California, southern: Woodford, A. O. 04291

Sedimentation

Beach, movement, shape sorting: Giese, Graham S. 09779

Shape analysis

California, Merced River, granitic clasts: Pittman, Edward D. 04991

Pebbles—Continued

Surface texture

Beach pebbles, abrasional characteristics: Krinsley, David. 06727

Texas

Trans-Pecos area, Marathon Formation, boulder beds: Young, Leonard M. 10095

Wyoming

Beartooth Mountains, periglacial clusters, piping process: Smith, H. T. U. 07392

Pegmatite

Genesis

Tectonic-hydrothermal model: Gresens, Randall L. 07740

Geochemistry

Weathered, phosphates, phase relations: Leavens, Peter B. 07931

Georgia

Troup County, Oxford mine, structure, genesis: Bailey, Arthur C., Jr. 00896

North Carolina

Blue Ridge area, occurrence: Lesure, Frank G. 00261

Northwest Territories

Yellowknife-Beaulieu area, occurrence: Kretz, R. 04382

Ontario

Bancroft area, uranium-bearing, genesis: Cunningham-Dunlop, Peter K. 02607

Quebec

Val d'Or pegmatites, lithium-bearing, micas: Rimsaite, J. 03601

South Dakota

Berne quadrangle, genesis, classification: Redden, Jack A. 01701

Black Hills, mineral check list and mine dump sampling: Lingard, Amos L. 05877

Black Hills, southern, general description: Norton, James J. 05876

Wyoming

Wind River Mountains, layered: Proctor, Paul Dean. 10940

Pelecypoda

Ambonychiidae

Paleozoic, lower, eastern North America, type material: Pojeta, John, Jr. 05704

Astartella aueri, n.sp.

Permian, Wyoming: Boyd, Donald W. 03869

Color pattern

Cretaceous, North Dakota, tellinid: Feldmann, Rodney M. 00500

Crassostrea

Oligocene, cf. Holocene, North Carolina, paleoecology, analysis: Lawrence, David R. 03866

Cretaceous

Growth increments, evidence of longer month and year: Berry, William B. N. 00354

Mexico, San Luis Potosi, Cardenas Fm.: Myers, Ralph L. 07967

Cretaceous-Quaternary

Mexico, Baja California, northwestern: Perrilliat Montoya, Maria del Carmen. 09131

Evolution

Crassatellid: Boyd, Donald W. 07810

Post-Paleozoic adaptive radiation, siphonate groups: Stanley, Steven M. 00558

Geographic distribution

Cretaceous, Rudistacea: Coogan, Alan H. 10695

Marine, Jurassic-Holocene, infaunal vs. epifaunal percentages: Nicol, David. 09021

Pelecypoda—Continued*Jurassic-Pleistocene*

California, San Diego County: Moore, Ellen J. 04354

Meiocardia palmerae, n. sp.

Eocene, Florida, Crystal River Formation: Nicol, David. 09019

Mercenaria

Miocene-Pleistocene, shells, amino acids: Hare, P. Edgar. 07956

Mercenaria mercenaria

Geochemistry, Ca-48 to total Ca: Corless, James T. 09367

Recent, shell growth bands, periodic patterns, experiment: Pannella, Giorgio. 05858

Mesozoic

Shell-growth layering, day, month time-spans: Barker, Richard M. 11256

Morphology

Penitella, Oregon coast, growth rate vs. rock hardness: Evans, John W. 04763

Shell growth bands, periodic patterns, Pennsylvanian to present: Pannella, Giorgio. 05858

Oriocrassatella elongata, n.sp.

Permian, Wyoming: Boyd, Donald W. 03869

Paleozoic

Shell-growth layering, day, month time-spans: Barker, Richard M. 11256

Pectinidae

Miocene, Guadeloupe Island: Mongin, Denise. 05149

Penitella penita

Burrow shape, rock hardness effect: Evans, John W. 02465

Holocene, Oregon coast, growth rate vs. rock hardness: Evans, John W. 04763

Pennsylvanian

Texas, Gaptank Formation, Marathon basin: Bird, Samuel O. 01640

Permian

Evolution, crassatellacean hinge: Boyd, Donald W. 03869

Quaternary

North Carolina, Holocene, beaches, burrows: Frey, Robert W. 02185

Sphenia tumida, n.sp.

Pleistocene, Florida, Pamlico Formation: Lewis, Jackson E. 03012

Taxonomy

Nuculids, Paleozoic type species: McAlester, A. Lee. 03709

Tellina scitula

Cretaceous, North Dakota, Fox Hills Formation, color pattern: Feldmann, Rodney M. 00500

Thyasira

Cretaceous, North America, ecology, evolution: Kauffman, Erle G. 07908

Venericardia

Tertiary, United States, Gulf and east coasts, alticostate evolution: Heaslip, William Graham. 04377

Venericardia s.l. subgenera

Cenozoic, Atlantic-Gulf Coastal Plain, paleoecology: Park, Richard A. 05673

Pennsylvania*Areal geology*

Bradford County: Woodrow, Donald L. 09499

Dauphin County: Carswell, Louis D. 11415

Franklin County, southeastern: Root, Samuel I. 06744

Pennsylvania—Continued*Economic geology*

Coal, general, review: Edmunds, William E. 07076

Coal, southwestern, computer methods: Kent, Bion H. 07913

Coal, western, pyritic sulfur, distribution, paleotopography, relations: Reidenouer, David R. 09819

Coal, Wyoming Basin, abandoned mines, map catalog, microfilms: Eaton, W. L. 01162

Construction materials, Waterville quadrangle, flagstone: Colton, George W. 07668

Iron, Berks County, Grace mine: Sims, Samuel J. 05420

Iron, other metals, Cornwall deposit: Lapham, Davis M. 05418

Mineral resources, Houtzdale quadrangle: Edmunds, William E. 06745

Mineral resources, Monongahela quadrangle, occurrence: Roen, John B. 01803

Petroleum and natural gas, developments, 1967: Lytle, William S. 05727

Petroleum, natural gas, popular account: Wagner, W. R. 09006

Salt, Salina Group, occurrence: Fergusson, William B. 06505

Uranium, resources: Butler, Arthur P., Jr. 01365

Zinc, iron, Friedensville mine, Lehigh County: Callahan, William H. 05419

Engineering geology

Areal studies, Delaware Valley, Pleistocene deposits: Depman, A. J. 10808

Dams, Holtwood area, Muddy Run project: Wilson, Stanley D. 01835

Land subsidence, ground-water withdrawal, effect: Foose, Richard M. 06051

Shorelines, Lake Erie, stabilization: Berg, Dennis W. 07009

Soils, textural classes, moisture, retention: Petersen, G. W. 01854

Waste disposal, Bedford area, Tuscarora Sandstone, synclinal basin, potential reservoir: Hardaway, John E. 05602

Waste disposal, coal mine waters: Stefanko, Robert. 06858

Waste disposal, State College area, ground-water recharge: Parizek, Richard R. 09551

General

Education, earth-space science program, revision: Moss, John H. 10824

Geochemistry

Dixonville, C and O isotopes, peridotite carbonate: Deines, P. 02357

Dixonville, peridotite, C and O isotopes: Deines, P. 07758

Fluvial sediments, trace metals, distributions: Dahlberg, Eric C. 07756

South Mountain, geochemical prospecting: Dahlberg, Eric C. 04236

Stream sediments, geochemical prospecting, heavy metals: Rose, A. W. 06854

Western, limestone, freshwater, paleoslope effect: Williams, E. G. 03573

Western, Pottsville, Allegheny underclays, composition: Williams, E. G. 06595

Geomorphology

Blue Mountain, Blue Rocks, block field solifluction: Potter, Noel, Jr. 00467

Lancaster Valley anticline, peneplanation, waxing slope: Bethune, P. de. 10918

Pennsylvania—Continued

Glacial geology

Blue Mountain, periglacial features, Blue Rocks block field: Potter, Noel, Jr. 00467

Hydrogeology

Brandywine Creek basin, hydrology, urbanization effects: Leopold, Luna B. 02819

Chester County, metamorphic and igneous rocks, ground-water yields: Poth, Charles W. 03192

Dauphin County, Martinsburg Formation: Carswell, Louis D. 11415

Nittany Valley, carbonate aquifers, porosity, lithologic controls: Rauch, Henry. 08427

Schuylkill River basin, resources: Biesecker, J. E. 08171

State College area, ground-water recharge from renovated sewage: Parizek, Richard R. 09551

Susquehanna River basin, aquifer yields, cost: Holliday, Este F. 02743

Western, acid mine drainage, ground-water interactions: Caruccio, Frank Thomas. 03026

Western, water pollution sources, color airphoto: Bay, Charles A., Jr. 02383

Maps, geologic

Bradford County: Woodrow, Donald L. 09499

Dauphin County, Martinsburg Formation: Carswell, Louis D. 11415

Greencastle and Waynesboro quadrangles: Root, Samuel I. 06744

Houtzdale quadrangle, northern half: Edmunds, William E. 06745

Klingerstown quadrangle: Trexler, J. Peter. 01786

Lykens quadrangle: Trexler, J. Peter. 02273

Minersville quadrangle: Wood, Gordon H., Jr. 01112

Monongahela quadrangle: Roen, John B. 01803

Pine Grove quadrangle: Wood, Gordon H., Jr. 01782

Scotland, Caledonia Park and Arendtsville quadrangles: Fauth, John L. 06754

Southern anthracite field, west-central: Wood, Gordon H., Jr. 04245

Swatara Hill quadrangle: Wood, Gordon H., Jr. 01781

Tower City quadrangle: Wood, Gordon H., Jr. 01784

Tremont quadrangle: Wood, Gordon H., Jr. 01783

Valley View quadrangle: Trexler, J. Peter. 01785

Waterville quadrangle: Colton, George W. 07668

West Chester-Unionville and Coatesville-Parkesburg quadrangles: Poth, Charles W. 03192

Mineralogy

Prehnite, Cornog area, unusual habit: Haefner, Richard C. 09094

Paleomagnetism

Mauch Chunk Formation, origin of curvature in Appalachians: Knowles, Raymond R. 03931

Paleontology

Coelenterata, Silurian, Shawangunk formation, Dipleurozoa: Fox, Steven K., Jr. 03845

Conodonts, Devonian, Tully Formation: Mayr, U. 05505

Crinoidea, Pennsylvanian, Conemaugh Group, new: Burke, J. J. 04331

Devonian, Tully Formation, correlation, Cedar Valley Formation: Cooper, G. Arthur. 02886

Pennsylvania—Continued

Paleontology—Continued

Gymnosperms, Devonian, Oswayo Formation, cupulate seeds: Pettitt, John M. 08999

Gymnosperms, Pennsylvanian, Allegheny Group: Delevoryas, T. 02322

Ostracoda, Silurian, *Craspedobolbina*, revision: Martinsson, Anders. 05564

Palynology, Paleozoic, Bear Meadows Bog, eolian redeposition: Stingelin, Ronald W. 09938

Palynomorphs, Pennsylvanian, Dunkard Group, new: Clendening, John A. 06303

Pisces, Devonian, Oswayo Formation, new rhipidistian: Thomson, Keith Stewart. 04798

Petrology

Northwestern, Precambrian basement complex, cf. Ohio and West Virginia: Saylor, Timothy E. 09077

State Line Serpentinite: McKague, H. Lawrence. 09803

Triassic diabase: Davidson, A. 07640

Sedimentary petrology

Appalachian region, Catskill Formation, facies: Allen, J. R. L. 03441

Carboniferous limestone, freshwater, paleoslope effects: Williams, E. G. 03573

Central, Carboniferous, point-bar sandstones, structures: Gwinn, Vinton E. 02088

Central, Ordovician marine-continental transition, lithofacies: Thompson, Allan M. 09941

Gatesburg Formation, carbonate-quartz system, porosity, genesis: Smith, Richard E. 08042

Hamburg area, Martinsburg Formation, grain orientation vs. texture: Rukavina, Norman A. 08060

Mauch Chunk sandstones, provenance, transport patterns: Haq, Mominul. 08178

Montoursville gravel, variance analysis, automatic data processing: Griffiths, John C. 07588

Northeastern, Devonian sedimentation: Woodrow, Donald L. 08192

Northeastern, Upper Devonian facies, paleogeography: Woodrow, Donald L. 02970

Schuylkill Gap, Clinton Formation, facies, cyclic: Smith, Norman D. 06601

Soils, silt loam, moisture retention: Petersen, G. W. 05934

South-central, Mauch Chunk Formation, sandstones: Hoque, Momin ul. 00311

Western, Appalachian geosyncline, Devonian sedimentation: Manspeizer, Warren. 09799

Western, Pottsville and Allegheny underclays: Williams, E. G. 06595

Stratigraphy

Cambrian-Ordovician, Lancaster quadrangle, carbonate units: Meisler, Harold. 01644

Cambro-Ordovician, paleogeography, continental margin: Rodgers, John. 07133

Carboniferous, Quaternary, Monongahela quadrangle, section: Roen, John B. 01803

Devonian, Catskill Formation, Appalachian region: Allen, J. R. L. 03441

Devonian, Catskill Formation, Lehigh Gap: Glaeser, J. Douglas. 09781

Devonian, Late, paleogeography, northeastern: Woodrow, Donald L. 02970

Devonian, Tully Formation, correlation, Cedar Valley Formation: Cooper, G. Arthur. 02886

Devonian, Tully Formation, correlation, subdivision: Mayr, U. 05505

Pennsylvania—Continued*Stratigraphy—Continued*

- Devonian, Upper, Bradford County: Woodrow, Donald L. 09499
- Devonian-Pennsylvanian, Houtzdale quadrangle, revision: Edmunds, William E. 06745
- Devonian-Pennsylvanian, Minersville quadrangle, sections: Wood, Gordon H., Jr. 01112
- Mississippian, Mauch Chunk Formation, south-central: Hoque, Momin ul. 00311
- Ordovician-Quaternary, Pine Grove quadrangle, sections: Wood, Gordon H., Jr. 01782
- Ordovician-Quaternary, Swatara Hill quadrangle, sections: Wood, Gordon H., Jr. 01781
- Precambrian-Ordovician, Caledonia Park area: Fauth, John L. 06754
- Silurian, Salina Group, salt beds, correlation: Fergusson, William B. 06505
- Silurian, Salina Group, western: Fergusson, William B. 09773
- Silurian-Pennsylvanian, Quaternary, Lykens quadrangle, sections: Trexler, J. Peter. 02273
- Silurian-Quaternary, Klingerstown quadrangle, sections: Trexler, J. Peter. 01786
- Silurian-Quaternary, Tower City quadrangle, sections: Wood, Gordon H., Jr. 01784
- Silurian-Quaternary, Tremont quadrangle, sections: Wood, Gordon H., Jr. 01783
- Silurian-Quaternary, Valley View quadrangle, sections: Trexler, J. Peter. 01785

Structural geology

- Caledonia Park area, South Mtn. anticlinorium: Fauth, John L. 06754
- Fayette and Greene Counties, relation to dike, emplacement: Brownfield, James. 11265
- Lancaster County, Conococheague Formation, folds, tectonic transport lineations: Henderson, John R. 08179
- Martic area, type, tectonic events: Wise, Donald U. 08190
- Mount Holly Springs quadrangle: Freedman, Jacob. 08219
- Northeastern, Devonian folding: Fletcher, Frank W. 09775
- Piedmont, Taconic deformations: Lapham, Davis M. 08213
- Southern anthracite field, west-central, sections: Wood, Gordon H., Jr. 04245
- Southwestern, strike-slip fault: Roen, John B. 02700

Pennsylvanian*Alabama*

- Pottsville Formation, coal splits, sedimentation: Culbertson, William C. 07798

Appalachians

- Conemaugh Group, biofacies: Merrill, Glen K. 07880
- Conodonts, Allegheny rocks: Merrill, Glen K. 08804
- Gymnosperms: Darrah, W. C. 02321
- Paleogeography, Conemaugh Formation: Morris, David Albert. 09851
- Plateau, deltaic sequences, paleogeography: Cavaroc, V. V., Jr. 00468
- Southern, correlation, time relations: Upshaw, Charles F. 09723

Arizona

- South-central, Naco Formation, biostratigraphy: Reid, Alastair Milne, 2d. 07201

Arkansas

- Atoka rocks, nomenclature, problems: Quinn, James H. 02497

Pennsylvanian—Continued*Arkansas—Continued*

- Bloyd Formation, ammonoids, correlation with Eurasia: McCaleb, James A. 03723
- Hale Formation, biostratigraphy: Quinn, James H. 10080
- Northern, Cephalopoda, correlation with England: Quinn, James H. 02958
- Northwestern, Cephalopoda, Hale Formation: Gordon, Mackenzie, Jr. 09388
- Washington County, Cephalopoda, Bloyd Formation: Mikesch, David L. 03628
- Winslow area, Winslow Formation, reference section: Henbest, Lloyd G. 02496

British Columbia

- Cache Creek Group, Foraminifera, biostratigraphy: Danner, Wilbert R. 07769

Cephalopoda

- Phylogenetic sequences, Atokan Stage: Furnish, W. M. 02494

Colorado

- Colorado Front Range, red beds, paleomagnetism: McMahon, B. E. 01616
- Conodonts, Desmoinesian rocks: Stone, Dwayne David. 07129
- Elk Mountains, stratigraphy, nomenclature: Bartleson, Bruce L. 02714
- Molas Pass area, algae, reef: Girdley, W. Arch. 01226
- Paradox and Eagle basins, Desmoinesian carbonates: Peterson, James A. 01183
- Paradox basin, salt beds: Jones, C. L. 01025
- Paradox basin, salt deposits, stratigraphy: Hite, Robert J. 01029
- Rocky Mountains, red beds, paleomagnetism: McMahon, Beverly E. 01086
- San Juan Mountains, coralline limestone, sedimentation: Girdley, W. Arch. 09308
- Western, algae: Wray, John L. 10279

Fungi

- Morphology, mycelium with clamp connections: Dennis, R. L. 02347

Glacial geology

- Northwestern, pre-late Wisconsinan tills: White, George W. 10797

Illinois

- Barry area, Spoon and Carbondale Formations: Illinois State Geological Survey. 05855
- Berryville area, Calhoun coal, pteridophytes: Phillips, Tom L. 00622
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- Carbondale Formation, coal, palynology: Peppers, Russel A. 08839
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Pennsylvanian—Continued*Missouri—Continued*

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 Henry and Cedar Counties, flora, Drywood Fm.: Basson, Philip W. 08065
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United States

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Permeability*Alluvium*

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Experimental studies

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Georgia, coastal plain, buried karst, effects: Her- rick, S. M. 08728

Permeability—Continued*Metamorphic rocks*

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Petroleum reservoirs

Heterogeneity, circular discontinuity, impact on displacement front: Parsons, R. W. 06162

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Sandstone

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Permian—Continued

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Northwest Territories

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 Insecta, mayfly nymphs: Kukalova, Jarmila. 11182
 North-central, Foraker Formation: Mogharabi, Ataolah. 00158
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 Vertebrata, Early, summary: Olson, Everett C. 11171
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Quebec, Mont Tremblant Park, evolution: Katz, Michael. 02725

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Second-order shear stress parallel to tectonic B: DeVore, George W. 08523

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 Great Plains province, occurrence, evaporitic rocks: Fuller, J. G. C. M. 01224
 Occurrence, Devonian, Muskeg Formation: Klingspor, A. M. 01172
 Production, reserves, present and future: Sproule, J. C. 05162
 Reserves and potential: Sproule, J. C. 07056
 Resources, general: Hilborn, James D. 07079
 Western, exploration history: Sproule, J. C. 07080
 Western, reserves, 1967: Connell, Gordon A. 07083

Caribbean region

- Possibilities, Paleozoic rocks: Meyerhoff, A. A. 01161
 Possible provinces: McCaslin, John C. 11267

Central America

- Exploration, promising areas: McCaslin, John C. 09507

Colorado

- Banty Point quadrangle, Rangely field: Cullins, Henry L. 01601
 Eastern, Las Animas arch, occurrence: Clair, Joseph R. 07261
 Elk Springs quadrangle, occurrence: Dyni, John R. 01432
 Kiowa County, Brandon field, occurrence, production: Stoddard, John. 07265
 North Park area, occurrence: Oburn, Richard C. 02147
 Southeastern, exploration, Mississippian and Pennsylvanian: Matson, Roger M. 07260

Experimental studies

- Formation evaluation, grain density effect: Granberry, Raymond J. 07278

Petroleum—Continued

Experimental studies—Continued

- Retention by clay-containing sandstone: Reed, M. G. 07029

Exploration

- American geologists overseas, problems: Wengert, Sherman A. 11220
 Automatic data processing, geologists' participation: Olson, John P. 00104
 Automatic data processing, need for accurate data: Brown, Randy. 05613
 Boron as paleosalinity indicator: Walker, C. T. 03859
 Carbonate reservoirs, evaluation, sample studies: Harris, John F. 03782
 Computer applications: Stauff, D. L. 01718
 Computer techniques: Lea, Graham. 00951
 Dipmeter data, stratigraphic applications: Campbell, R. L., Jr. 03784
 Domestic reserves in future: Cram, Ira H. 11215
 Education, responsibilities: Croneis, Cary. 11219
 Electrical logging, mapping from Rw and Sh data: Jones, Bob. 05916
 Electrical methods: Keller, George V. 04562
 Evaporite basins, unconformities, tectonic origin: Storey, T. P. 01199
 Flame ionization detection, wellsite application: Mercer, R. F. 05948
 Geochemical methods: Law, Charles. 04322
 Geologic contributions, future needs: Cordell, Robert J. 00928
 Geologic maps, supplements to subsurface data: Wilson, Edward N. 09631
 Geophysical activity, 1967, world statistics: Tucker, L. R. 06145
 Geophysical methods, trends: Green, Cecil H. 11406
 Geophysical tools, new: Gibson, Ray. 09513
 Giant oil and gas fields: Halbouty, Michel T. 03775
 Gravity method, reef structures, effectiveness: Haye, Edward F. 02573
 Hydrodynamics, applications: Hoeger, Roger L. 09230
 Independent producer, modern role: Halbouty, Michel T. 11408
 Low-resistivity sands, well-logging, Gulf Coastal Plain: Tixier, M. P. 06513
 Magnetic methods, dual-level airborne: Jenny, W. P. 00363
 Major fields, elements of chance, sagacity, history: Owen, Edgar W. 11213
 Motivation: Gonzalez, Richard J. 11430
 Needs, coordination of geology, geophysics, engineering: Halbouty, Michel T. 07891
 Net porosity isopach maps, technique of construction: Harvey, Ralph L. 05034
 Offshore areas, world: Weeks, Lewis G. 11216
 Offshore, deep, importance: Hedberg, Hollis D. 11221
 Offshore, possibilities: Weeks, Lewis G. 05432
 Offshore, problems: Atwater, Gordon I. 11411
 Paleozoic Bryozoa, potential use: Boardman, Richard S. 11388
 Philosophy: Hill, Mason L. 11434
 Potential, Illinois basin: Miller, D. N., Jr. 07963
 Reef facies, analysis, Payne reef, Ontario: Hill, J. V. 00149
 Reefs, paleoecology as tool: Loranger, D. M. 05443
 Reefs, strontium as indicator, Alberta: Weaver, Charles E. 05723

Petroleum—Continued*Exploration—Continued*

- Reservoir location and productivity, Log-Test-Log drill stem test: Powell, A. R. 07004
- Sedimentary directional features and scalar properties, application: McDaniel, Gary A. 03765
- Seismic methods, Mexico: Fraga Purata, Jorge A. 09843
- Source beds, Foraminifera assemblages as indicators: Seiglie, George A. 05712
- Source rock, role of clay in developing: Powers, Maurice C. 00826
- Statistical methods: Tucker, Delos R. 03884
- Technical group, evolution: Schoonmaker, G. R. 11214
- Training programs, future requirements: Murray, Grover E. 11217
- Trend-analysis: Schramm, Martin W., Jr. 03781
- United States, contributions, Everett Carpenter: McMurtry, Wilbur E. 03877
- Well logging, radioactivity, response: Gaymard, R. 06519
- Well logging, technological advances: Hamilton, R. G. 11405

Florida

- Exploration, 1965, production: Babcock, Clarence. 08976
- Exploration, 1966, production: Babcock, Clarence. 08977

General

- Directory of information, Illinois basin: Smith, Avery E. 07885
- Thesaurus, exploration and production, retrieval use: Tulsa University. 03522
- United States, Canada, western, occurrence, selected papers: Warner, M. A. 09485

Genesis

- Carbonate rocks, habitat: Malek-Aslani, M. 09311
- Chromatographic separation during migration: Ritchie, Arthur S. 00097
- Experimental study, hydrocarbons from Recent sediment: Mitterer, R. M. 01582
- Formation and accumulation: Hunt, John M. 03809
- Organic geochemical processes, role of environmental electric forces: Sisler, F. D. 09642
- Significance of high-wax oils: Hedberg, Hollis D. 03858
- Solution of organic material in sedimentary rocks: Meinschein, W. G. 05107
- Sources, accumulation conditions: Bond, D. C. 03204
- Thermal alteration contribution: Henderson, W. 03161
- Trapping mechanism, differential formation pressures: Myers, John C. 09852

Geochemistry

- Carbon isotopes, Ellenburger Formation: Kvenvolden, Keith A. 07925
- Composition, relation to stratigraphy: Holmquest, Harold J., Jr. 00106
- Multipay fields, composition, common source: Coester, B. B. 00100
- Naphtha and gas-oil content, relation to age and depth: Smith, Harold M. 05142
- Permian basin, C-13, composition: Meister, Frederic H. 01180
- Ponca City reference petroleum, carbon-13 variations: Ferguson, William S. 08683

Gulf Coastal Plain

- Central, potential, review: Rainwater, E. H. 09324

Petroleum—Continued*Gulf of Mexico*

- Possibilities, Paleozoic rocks: Meyerhoff, A. A. 01161
- Possible provinces: McCaslin, John C. 11267

Illinois

- Geochemistry, Waltersburg Formation, trends: Mast, R. F. 01519
- Helm Reservoir site, possibilities: Renick, Abbott. 09457
- Illinois basin, fields, list: Brownfield, Robert L. 07832
- Louisville Reservoir site, occurrence, possibilities: Renick, Abbott. 06093
- Map of fields, 1968: Meents, Wayne F. 06799
- Production, history: Illinois State Geological Survey. 09407
- Saint Elmo area, Loudon field, occurrence: Illinois State Geological Survey. 05857
- Tuscola area, occurrence, production: Bristol, H. M. 01520

Illinois basin

- General, symposium: Illinois Geological Society. 07826

Illinois-Indiana-Kentucky

- Illinois basin, exploration, geophysical: Dawson, Woodson H. 07960

Indiana

- Geochemistry, Waltersburg Formation, trends: Mast, R. F. 01519
- Gibson-Pike Counties, occurrence: Fritz, Arthur J. 07828
- Production, 1966: Carpenter, G. L. 06664
- Production, 1967: Carpenter, G. L. 06665
- Southwestern, fields, list: Brownfield, Robert L. 07832
- Trenton field and Illinois basin, occurrence, production: Dawson, T. A. 07830

Kansas

- Anadarko basin, controlling factors: Swanson, Donald C. 09860
- Eastern, Bartlesville sand, production history: Weirich, T. E. 09069
- Nichols field, occurrence, production: Curtis, Graham R. 03417
- Panhandle-Hugoton field, occurrence: Pippin, L. 00416
- Production, 1966: Oros, Margaret O. 07664
- Spivey-Grabs field, occurrence, production: Frenslley, Robert W. 03415
- Western, Las Animas arch, occurrence: Clair, Joseph R. 07261

Kentucky

- Camp Breckinridge, resources, evaluation: Avila, John. 09628
- Dundee quadrangle, occurrence: Goudarzi, Gus H. 00993
- Eastern, Cambro-Ordovician rocks, exploration: McGuire, William H. 03236
- Eastern, central, exploration, 1965-66: Wilson, Edward N. 03235
- Eastern, exploration, geophysical methods: McGuire, William H. 03239
- Exie quadrangle, occurrence: Moore, Samuel L. 02913
- Graham quadrangle, occurrence: Kehn, Thomas M. 07013
- Greensburg quadrangle, occurrence: Taylor, Alfred R. 02414
- Monroe County, occurrence, possibilities: Perkins, Hunt. 03234
- Nortonville quadrangle, occurrence: Palmer, James E. 04770

Petroleum—Continued*Kentucky—Continued*

- Olaton quadrangle, occurrence: Johnson, William D., Jr. 00451
 Owensboro East quadrangle, occurrence: Johnson, William D., Jr. 02912
 Pleasant Ridge quadrangle, occurrence: Goudarzi, Gus H. 06672
 Quality quadrangle, occurrence: Gildersleeve, Benjamin. 00334
 Redbush quadrangle, occurrence: Rice, Charles L. 00335
 Rough Creek uplift, possibilities: Rehn, E. E. 03243
 Western, Bethel Sandstone: Reynolds, Douglas W. 09627
 Western, fields, list: Brownfield, Robert L. 07832
 Western, occurrence, production: Smith, Avery E. 07831
 Western, possibilities: Stanonis, Frank L. 03242

Louisiana

- Coastal area, Pleistocene: Sabate, R. W. 09342
 Timbalier Bay area, occurrence, salt dome complex: Frey, M. G. 01211

Mexico

- Exploration, 1966: Mina U., Federico. 09228
 North-central, possibilities: Salas, Guillermo P. 01451
 Southeast saline basin, geology: Salas, Guillermo P. 09227
 Veracruz, Tampico embayment, Golden Lane fields, occurrence: Viniegra, Francisco. 01205

Michigan

- Fields, symposium: Michigan Basin Geological Society. 08018
 Occurrence, producing formations: Champion, Beverly L. 07927
 Production, fields: Michigan Geological Survey. 03525

Mississippi

- Pelahatchie field, case history, potential: Karges, Harold E. 09333
 Resources, production, Pascagoula River basin: Arndt, Robert H. 02459

Missouri

- Western, heavy oil, occurrence: Wells, J. S. 03767

Montana

- Bell Creek field, discovery: Gary, Samuel. 00168
 Bell Creek field, occurrence: Berg, Robert R. 04506
 Bell Creek field, occurrence: Biggs, Charles A. 05908
 Bell Creek field, occurrence, production: McGregor, Alexander A. 04505
 Bell Creek field, occurrence, production history: Haddenhorst, Fred A. 05909
 Southeastern, exploration, geochemical, organic carbon in Mowry Shale: Schrayner, G. J. 05906
 Southeastern, Muddy Sandstone, production history: Guess, Roy H. 05907
 Southeastern, occurrence, Muddy Sandstone: Wulf, George R. 05905

Nebraska

- Denver basin, occurrence, exploration: Exum, F. A. 04504

Nevada

- Developments, 1953-67: Schilling, John H. 04181
 Eagle Springs field, occurrence: Schilling, John H. 04181

Petroleum—Continued*New Brunswick*

- Stony Creek field, occurrence: Howie, R. D. 09402

New Mexico

- Lusk Strawn field, occurrence, production: Thornton, Dewey E. 00069
 Permian basin, composition, relation to stratigraphy: Holmquest, Harold J., Jr. 00106
 Permian basin, composition, Yeso shelf reservoirs cf. basin: Rodgers, Elton E. 00098
 Southeastern, Abo reef trend, source rocks, ages: Sax, N. A. 00099

North America

- Giant fields: Moody, J. D. 00418
 Paleozoic, lower, occurrence, summary: Kuznetsov, A. S. 11409

North Dakota

- Possibilities, Cretaceous, Newcastle Formation: Reishus, Mark. 04724
 Williston basin, Sanish pool, occurrence: Murray, G. H., Jr. 00064

Northwest Territories

- Arctic areas, exploration: Mining in Canada. 07882
 Arctic islands, potential: Hunt, A. D. 07081
 Arctic, western, possibilities: Gallup, W. B. 00109

Ohio

- Hocking County, Clinton sand reservoir, evaluation: Schrider, Leo A. 09278

Oklahoma

- Anadarko basin, controlling factors: Swanson, Donald C. 09860
 Anadarko basin, exploration, gravity: Scott, R. L. 00947
 Anadarko Basin, possibilities: Withrow, Philip C. 03780
 Burbank field, development: Largent, B. C. 00421
 Canadian County, occurrence, possibilities: Bado, John T. 02471
 Eastern, Bartlesville sand, production history: Weirich, T. E. 09069
 Exploration, production, 1967: Roberts, John F. 03168
 Franks graben area, occurrence, production: Withrow, Jon R. 00137
 Healdton field, reservoirs, structural control: Latham, J. W. 00420
 Love and Marshall Counties, Marietta basin, possibilities: Henry, Gary E. 05575
 Oklahoma City area, occurrence, history: Taylor, John Allen. 00949
 Oklahoma City field, structure, exploration history: Gatewood, Lloyd E. 00422
 Panhandle-Hugoton field, occurrence: Pippin, L. 00416
 Wheatland area, production, possibilities: Ahmeduddin, Mir. 05584

Ontario

- Lake Erie and Hudson Bay-James Bay area, new finds: Beards, Ronald J. 05161
 Sarnia area, history, development: Elford, Jean. 09623
 Southwestern, Cambrian formations: Pounder, Jack A. 09629
 Southwestern, occurrence, production: Sanford, B. V. 09460

Oregon

- Exploration, 1967: Newton, V. C., Jr. 09262

Petroleum—Continued

Pennsylvania

Developments, production, 1967: Lytle, William S. 05727

Popular account: Wagner, W. R. 09006

Prince Edward Island

Exploration: Williams, E. P. 01593

Production

Development, impact of government policies: Heitman, George. 06841

Economic success, factors: Hardin, George C., Jr. 05718

Flow measurements in producing well: Schaller, Herman E. 07283

Marine, limiting water depth, technology gap: Coene, G. T. 06107

Oil sands, techniques: Farouq Ali, S. M. 09273

Rock mechanics, applications: Komar, C. A. 10972

Quebec

Anticosti Island, exploration: Roliff, W. A. 04718

Reservoirs

Accumulation, meteoric waters, effects: Dickey, Parke A. 11212

Analysis, use of dynamic basic data: Havlena, D. 05333

Capillary pressures, interpretation procedure: Helmer, L. L. 05950

Carbonate, evaluation, well logging: Baird, D. E. 07285

Development, mathematical model of trap: Ojakangas, Dennis Roger. 00857

Evaluation, gravity logging: McCulloh, T. H. 07279

Evaluation, well data system, computer program: Jeffries, Frank. 06514

Experimental studies, permeability, in-situ evaluation: Timur, A. 11363

Fractures, evaluation: Pickett, G. R. 05945

Migration and accumulation of fluids: Gussow, William C. 07892

Oxbow traps: Mettler, Donald E. 05914

Permeability, fluid flow, radioactive tracer studies: Deem, Richard L. 02602

Permeability heterogeneity effect, mathematical model: Parsons, R. W. 06162

Permeability, reduction with salinity change: Mungan, Necmettin. 05340

Rock wettability, evaluation: Raza, S. H. 09276

Sandstone, predicting location: Exum, F. A. 04504

Resources

Continental margin, public policy, coastal-nation boundaries: Hedberg, Hollis D. 06108

Continental shelf, worldwide: Weeks, Lewis G. 01418

Offshore areas, world, assessment: Weeks, Lewis G. 11216

Pre-Silurian reservoir rocks: Becker, Leroy E. 00310

Ultimate, Canada, Montana, North Dakota: Carlson, C. E. 11230

Rocky Mountains

Colorado-Utah, Paradox and Eagle basins, occurrence: Peterson, James A. 01183

Saskatchewan

Quill Lake area, possibilities, reef: Jordan, Stuart P. 00942

Western, possible traps, Wymark Member of Duperow Formation: Kent, D. M. 04785

Petroleum—Continued

South Dakota

Black Hills area, northern, heavy oil, occurrence, Minnelusa Formation: Tenney, Charles S. 05915

Tennessee

Cookeville East quadrangle, Spring Creek field: Munn, M. J. 11189

Hilham quadrangle: Taylor, Landon C. 03584

Smithville quadrangle, content in Chattanooga Shale: Wilson, Charles W., Jr. 05542

Springfield North quadrangle, occurrence: Hershey, Robert E. 07607

Texas

Anadarko basin, exploration, gravity: Scott, R. L. 00947

Cooke and Grayson Counties, Marietta basin, possibilities: Henry, Gary E. 05575

East Texas field and related areas, reserves, Woodbine Sandstone: Hudnall, James S. 01221

Eastern, Cretaceous, possibilities: Bushaw, Dewey J. 09346

Eastern, Jurassic fields: Rinehart Oil News Company. 06164

Hardeman basin, resources, evaluation: Thornton, John E. 11361

Karnes County, northwestern, exploration: Tucker, Delos R. 03884

Old Ocean field, reserves: Halbouty, Michel T. 02115

Palo Duro basin, occurrence: Soderstrom, Glen S. 00058

Panhandle-Hugoton field, occurrence: Pippin, L. 00416

Pecos County, Yates field, production history: Craig, D. H. 01233

Permian basin, composition, relation to stratigraphy: Holmquest, Harold J., Jr. 00106

Permian basin, composition, Yesso shelf reservoirs cf. basin: Rodgers, Elton E. 00098

Refugio County, Tom O'Connor field, occurrence: Mills, H. G. 01181

Rio Grande embayment, Vicksburg fault zone, entrapment: Stanley, Thomas B., Jr. 01197

Runnels County, Palo Pinto Limestone fields, production: Doss, A. K., Jr. 00070

South-central, occurrence: Rives, John S. 04317

West-central, occurrence: Mattis, Lynn. 11428

Western, Horseshoe atoll, Scurry reef production: Vest, E. L., Jr. 01204

Western, Pennsylvanian and Wolfcamp, geochemical classification: Chuber, Stewart. 00057

United States

Anadarko basin, western, exploration and development, map: Stevens, Curtis. 02930

Continental margin, exploration and production technology: Barrow, Thomas D. 06106

Continental margin, exploration rights, offshore: Goldie, L. F. E. 05110

Great Plains province, occurrence, evaporitic rocks: Fuller, J. G. C. M. 01224

Reserves, ultimate, discovery status: Hubbert, M. King. 11307

Reservoirs, estimates vs. production, case histories: Keplinger, C. H. 11223

Resources, estimates, effects on mineral policy: Flawn, Peter. 11218

Utah

Circle Cliffs area, possibilities, impregnated sandstones: Ritzma, Howard R. 06130

Petroleum—Continued*Virginia*

Lee County, production, 1967: Young, David M. 01136

West Virginia

Greenbrier Limestone: Haught, Oscar L. 07617
Ohio, Brooke, and Hancock Counties: Haught, Oscar L. 08926

Vadis field: Milner, William. 05577

Wyoming

Black Hills area, possibilities, Dakota Sandstone: Runge, John S. 05912

Casper area, Iron Creek field, occurrence, production: Dahill, Murray P. 09369

Kitty field, occurrence: Swirczynski, Richard P. 05910

Northeastern, exploration, geochemical, organic carbon in Mowry Shale: Schrayner, G. J. 05906

Northeastern, Muddy Sandstone, production history: Guess, Roy H. 05907

Northeastern, occurrence, Muddy Sandstone: Wulf, George R. 05905

Powder River basin, stratigraphic traps, genesis: Berg, Robert R. 05720

Recluse field, occurrence: Hinton, Gene. 05911

South Coyote Creek field, production: Hegna, Earl T. 05913

West Moorcroft and Wood fields, occurrence, Dakota Sandstone: Mettler, Donald E. 05914

Petrology*Education*

Rock and mineral identification, quick-key guide: Bowser, Carl J. 06188

General

Standard rocks, worldwide, chemical analyses: Pendias, Henryk. 06746

Instruments

Counting template, fabric analyses: Stirewalt, Gerry L. 09704

Microscope slide ring holder: Willard, R. J. 09056

Methods

Carbonate rocks, acetate peels: Ali, Syed A. 05612

Fused beads, basalt, refractive indices, Washington: McKee, Edwin H. 02711

High pressure studies, pressure vessel, improved: Williams, D. W. 07550

High-pressure, high temperature studies, thermocouple: Bell, P. M. 01590

Matrix methods, phase rule, analytical solution: Greenwood, H. J. 06057

Solid-state galvanic-cell measurements: Scarfe, C. M. 08066

Staining anorthoclase phenocrysts: Ford, Arthur B. 02222

Staining techniques for cordierite and feldspars: Boone, Gary M. 02209

Statistical, theoretical open variables from Harker arrays, negative variables: Chayes, F. 01581

Thin film preparation: Zeidler, W. 07553

Rock classification

Algebra, applications: Perry, Kenneth, Jr. 07838

Textbooks

Analysis techniques, chemical, spectrographic: Maxwell, John A. 07301

Introductory: Bayly, Brian. 00727

Metamorphic petrology, mineralogical and field aspects: Turner, Francis J. 03126

Phanerozoic*Continental margin*

Thickness and distribution, Atlantic: Uchupi, Elazar. 05552

Phase equilibria*Ag-As-S*

Experimental studies: Wehmeier, F. H. 03153

Ag-As₂S₂

Synthetic trechmannite: Roland, George W. 06771

Ag-Sb-S

Experimental studies: Hall, H. T. 01907

Ag-Au-S

Phase diagram to 200°C: Graph, R. B. 05932

Ag-Fe-S

Relationships: Taylor, Lawrence A. 09716

Sulfide deposits, genesis: Taylor, Lawrence A. 05496

Ag-Sb-S

Phase relations, 200-600° C: Keighin, C. W. 07909

Albite

Experimental studies, solubility in supercritical water: Currie, K. L. 02449

Albite-anorthite-quartz-water

Anorthite component, effects: Yoder, H. S., Jr. 01571

Albite-silica

Eutectic liquids, composition, pressure effects: Luth, W. C. 01573

Alkalic rocks

Undersaturated, melting relations, crystallization sequences: Edgar, A. D. 08670

Alkaline igneous complex

Greenland, Kungnat: McDowell, S. Douglas. 08799

Al-Mn-Fe-Si-O-H

Almandine and spessartine stability relations: Hsu, L. C. 01933

Al-O-Cr-Si

Mullite, corundum solid solutions, relations: Roeder, P. L. 09253

Al-O-Ge

High-pressure subsolidus relations: Birle, John David. 01705

Al-Si-O

Quartz + corundum stability: Carr, R. M. 07526

Amphibole

Experimental studies, summary: Ernst, W. G. 01771

Andesite

Experimental studies, hydrous conditions: Green, Trevor H. 00166

Anorthite

High pressure and high temperatures: Hariya, Y. 00645

Aragonite-dolomite

Low temperature conversion: Thrailkill, John. 02083

Ba-Al-Si-O

Polymorphism of celsian: Lin, H. C. 09423

Basalt

Experimental studies, hydrous conditions: Green, Trevor H. 00166

Nevada, Santa Rosa Range: LeMasurier, Wesley E. 02695

Basanite

Tholeiite-lherzolite-nepheline, 40 kb: Ito, Keisuke. 05344

Berzeliite-Mn-berzeliite

Experimental study: Ito, Jun. 09408

Phase equilibria—Continued

Biotite

Experimental study: Rutherford, Malcolm John. 05495

Ca-Al-O-Si-Mg

Liquidus relations, petrologic significance: Rao, M. Ramakrishna. 10968

CaCO₃-H₂O

Calcite-aragonite transition, kinetics: Metzger, William J. 02232

Ca-CO-Mg

Calcite-aragonite transition: Goldsmith, Julian R. 11121

Ca-Fe-Mg-Mn-C-O

Subsolidus relations on dolomite join: Rosenberg, P. E. 06582

Ca-Fe-Si-C-O

Oxygen buffer reaction: Burt, D. M. 04136

Calcite-aragonite

Transition boundary, determination: Boettcher, A. L. 03450

Calcite-dolomite-siderite

Hydrogen, effects: Salotti, C. A. 10343

Reactions with hydrogen: Salotti, Charles A. 11122

Ca-Mg-Fe-Si-O

Ferric Fe in diopside, in absence of soda: Huckenholz, H. G. 01537

Ca-Mg-Si-C-O

Carbonates, genesis: Franz, Gilbert W. 10102

CaO-Al₂O₃-SiO₂

35 kb, 1100-1500° C: Hays, James Fred. 07961

CaO-MgO-SiO₂

Akermanite stability: Yoder, H. S., Jr. 01570

Chloritoid

Stability limits: Ganguly, Jibamitra. 10727

Clay minerals-water

Stability relations, weathering of schist: Bricker, Owen P. 04307

Clays

Compaction behavior, reactive hot-pressing kinetics: Chaklader, A. C. D. 11041

C-O-Fe

Diamonds, genesis: Kennedy, George C. 04229

Cu-Fe-Ni-S

Basalt magma, Hawaii: Desborough, George A. 04124

High temperature relations: Craig, J. R. 01554

Cu-Fe-Pb-S

Phase relations, 200°-700° C, sulfide melts: Craig, J. R. 08650

Cu-Fe-S

High temperature relations: Kullerud, G. 01552

Cu-Ni-S

High temperature relations: Kullerud, G. 01553

Cu-Pb-S

Galena, chalcocite, digenite, covellite, djurleite, lead, copper: Craig, James R. 02218

Cu-S

High-pressure study: Kullerud, G. 01563

Diopside-albite-anorthite

Boundary curve, pressure effect: Lindsley, D. H. 01572

Earth materials

Experimental studies, high-pressure, equipment and results: Simmons, Gene. 00617

Enstatite

Polymorphism, shearing effect at high P-T: Munoz, J. L. 01543

Fayalite

Stability at high P-T: Wones, D. R. 01551

Phase equilibria—Continued

Fe hydrous oxides

Soils and waters, Eh-pH stability field: Jenne, E. A. 03751

Fe-Al-Si-H-O

Staurolite, chloritoid stabilities: Ganguly, Jibamitra. 01011

Fe-Al-Si-O-H

Staurolite stability: Richardson, Stephen W. 04811

Fe-Co-S

Variations, cobaltiferous pyrite: Riley, John F. 02233

Fe-C-O-S + H₂O

Application to iron formations, Ontario, Labrador: Seguin, Maurice. 06926

Experimental results: Seguin, Maurice. 06925

Feldspar

Planes, 3, 5, 7.5, 10 percent anorthite: James, R. S. 11110

Feldspar-silica

Liquid mixtures, structural characteristics: Flood, H. 10969

Fe-Mg olivine

Subsolidus stability: Fisher, G. W. 07720

Fe-Mg-Si-O

Experimental, bearing on chondrite petrology: Larimer, John W. 05290

Pressure-temperature oxygen fugacity, relations: Speidel, D. H. 02545

Fe-Ni-S

Isothermal diagram, 400°C: Craig, J. R. 01562

Partial pressure of sulfur in vapor: Naldrett, A. J. 01561

Pentlandite exsolution: Naldrett, A. J. 07862

Violarite stability: Craig, J. R. 01560

Fe-Ni-S-O

Melting relations of Ni-pyrrhotite ores: Craig, J. R. 01555

FeO assemblages

Temperature phase diagrams: Butler, Patrick, Jr. 11229

Fe-O-SiO₂

Pressure-temperature-oxygen fugacity, relations: Lindsley, D. H. 02450

Fe-S

Sulfur, partial pressure: Giletti, B. J. 04137

Fe-Se

Experimental studies: Warren, C. Gerald. 04235

Fe-S-O

Melting relations, influence on crystallization temperatures of magmas: Naldrett, A. J. 01556

Fe-staurolite-quartz

Stability: Richardson, S. W. 01550

Fe-Ti-O

Diabase, differentiation: Davidson, A. 07640

Ge-O-H

Hydrothermal stability, experimental: Hill, V. G. 09397

Gneiss

Volume in chemical equilibrium, garnet-biotite assemblage: Blackburn, W. H. 05297

Granite

Melting relations, experimental: Boettcher, A. L. 00463

Granite-basalt

Hybridization, rapakivi texture: Elders, Wilfred A. 08673

Gypsum-anhydrite

Transition temperatures: Blount, Charles W. 11123

Phase equilibria—Continued

Hedenbergite-ferrosilite

Subsolidus relations in join, low pressures: Lindsley, D. H. 01541

High pressures and temperatures: Lindsley, D. H. 07428

Hydroxides

Compaction behavior, reactive hot-pressing kinetics: Chaklader, A. C. D. 11041

Iron minerals

Theoretical treatment: Curtis, C. D. 01916

Iron-carbon-oxygen

800°-1100°C, 250-2000 bars: Weidner, Jerry R. 09733

Iron-formation silicates

Metamorphic facies: Hashimoto, T. 02737

Jadeite-analcite-nepheline-albite

Pressure-temperature relations: Newton, M. S. 04498

K-Al-Si-O-H

Hydrolysis equilibria: Burnham, C. Wayne. 07777

Kaolinite-mullite

Fluoride effects: Shutt, T. C. 11023

Kaolinite-Na-carbonate

Experimental studies: Kubo, Yasushi. 06584

KO-MgO-SiO₂-H₂O

K-poor portion, ultramafic magmas: Seifert, Friedrich. 08077

K-O-Na-Al-Si-H

Na:K ratios, aqueous: Hemley, J. J. 10905

Kyanite-andalusite-sillimanite

Intersection of curves: Richardson, S. W. 10728

Kyanite-sillimanite

Equilibrium, compositional variations, effects: Zen, E-an. 09745

Equilibrium from 700°-1500°C, applications: Richardson, S. W. 01548

Experimental studies, 700° and 1500°C: Richardson, S. W. 02442

Li-Al-Si-O

Spodumenes, alpha-beta transition: Edgar, A. D. 07421

Marcasite-pyrite

Transition mechanism, cross-twinning: Kullerud, G. 01580

Mg-Al-Si-H-O

Stability relations, 10-25 kb: Schreyer, W. 01547

Yoderite, stability, relation to other phases: Schreyer, W. 01546

Mg-Li-Ni-Zn-Al-Cr-O

Order-disorder: Datta, R. K. 07570

MgO-FeO-SiO₂

Phase compositions, free energies: Nafziger, R. H. 07861

Mg-Si-H-O

Melting relations at high pressure, experimental: Kushiro, I. 05058

Orthoenstatite, synthesis, stability: Sclar, C. B. 10760

MgSiO₃-FeSiO₃

Spinel, synthesis, characteristics: Sclar, C. B. 08074

Mn hydrous oxides

Soils and waters, Eh-pH stability field: Jenne, E. A. 03751

Muscovite-calcite-quartz

Upper stability limits, feldspar segregation: Hewitt, David A. 11238

Phase equilibria—Continued

Na-Al-Si-C-H-O

Liquid immiscibility, carbonatite genesis: Koster van Groos, A. F. 05215

Na-Al-Si-H-O

Experimental studies: Anderson, P. A. M. 03610

Quartz-coesite transition, piston-cylinder apparatus, calibration: Boettcher, A. L. 02521

Sodalite stability: Wellman, Thomas. 10724

NaAlSiO₃-CaCO₃-H₂O

Magma, carbonatite derivatives: Watkinson, D. H. 07974

Na-Al-Si-O-F-H

Melting relations to 4 kb: Koster van Groos, A. F. 00520

Na-Al-Si-O-H

Jadeite stability: Boettcher, A. L. 03930

NaCl-KSO₄-MgSO₄-CaSO₄

GNOME melt, crystallization: Rowe, Jack J. 08058

Nepheline-diopside-anorthite

Basalt fractionation: Schairer, J. F. 01569

Ni-Mg-Si-O

Olivine and pyroxene stability: Campbell, F. E. 02199

Olivine-orthopyroxene

Mg, Fe partitioning: Medaris, L. G., Jr. 11024

Olivine-spinel

Stability, structural basis: Kamb, Barclay. 07569

Transition in mantle: Akimoto, Syun-iti. 00281

Orthopyroxene series

Mg-Fe order-disorder kinetics: Hafner, Stefan. 10903

Pb-As-S

Experimental studies, jordanite stability: Roland, George W. 04428

Pb-Si-O

Silica transformations: Negas, Taki. 09254

Pb-Zn-Si-H-O

Hydrothermal synthesis of lead-zinc silicates: Ito, Jun. 02214

Peridotite

Spinel-, garnet-bearing: MacGregor, Ian D. 07938

Phase diagrams

Arrangement changes, systematization: Roseboom, Eugene H., Jr. 08860

Phase rule

Matrix methods, analytical solution: Greenwood, H. J. 06057

Phlogopite

Stability relations: Wones, David R. 07997

Plagioclase

Peristerite solvus, Vermont, Giles Mountain Formation: Crawford, Maria Luisa. 08225

Plagioclase-magma system

Quantitative relations, equations: Kudo, Albert M. 07923

Pumpellyite

Decomposition to anorthite and clinopyroxene: Landis, C. A. 06450

Pyrophyllite

High-pressures and temperatures: Kerrick, Derrell M. 00646

Pyroxene

Hedenbergite-wollastonite, solid solution inversion, Greenland: Lindsley, D. H. 01539

Pigeonitic, inversion relations: Brown, G. M. 01538

Pyrrhotite

Phase relations below 325°C: Hall, H. T. 07952

Phase equilibria—Continued*Pyrrhotite and enstatite-ferrosilite*

High-temperature reaction: Naldrett, A. J. 01557

Rhodochrosite

Mn-C-O system, stability relations: Huebner, J. Stephen. 08743

Rock-forming minerals

Irreversible reactions with aqueous solutions: Helgeson, Harold C. 11432

Salt systems

Ternary, molten: Blander, Milton. 02558

Sanidine-quartz

Hydrothermal melting to 20 kb: Lambert, I. B. 11111

Eutectic liquids, composition, pressure effects: Luth, W. C. 01573

Sepiolite

Equilibrium constant of formation: Wollast, Roland. 11377

Silica

Quartz, cristobalite, silicic acid, surface states compared: Harris, J. R. 09252

Silicate melts

Algebraic structure: Perry, Kenneth, Jr. 10670
Equilibrium crystallization, term questioned: Wagener, H. D. 03852

Experimental study, zirconium behavior: Dietrich, R. V. 00330

Granodiorite and tonalite: Piwinskii, A. J. 00462

Si-Na-Fe-O-H

Grunerite, synthesis: Kopp, Otto C. 10315

Spinel

Stability, basaltic melts: Hill, Robin. 10906
Synthesis, isothermal reaction, sintered ceramics: Bailey, Joseph T. 09188

Spodumene

High pressure stability relations: Munoz, J. L. 01544

Staurolite

Fe-, synthesis, stability: Richardson, Stephen W. 08053

Sylvite-aqueous solution

Rubidium partition, temperature effects: McIntire, W. L. 01106

Techniques

Apparatus, temperature-controlled water bath: Hostetler, P. B. 05198

Electron diffraction scanning, polytypic materials: Gibbon, Donald L. 08704

Field boundaries, locating by discriminant functions: Chayes, Felix. 05930

TiO₂

Polymorphism: Dache, Frank. 07534
Pressure-temperature relations: Simons, Philip Y. 08047

Troilite-pyrrhotite

Miscibility gap at 140°C: Yund, Richard A. 03130

Yttrialite

Crystal chemistry: Ito, Jun. 07516

Zn-Fe-S

Experimental studies: Chernyshev, L. V. 06979
Experimental studies: Einaudi, Marco T. 06976

Zn-W-O-Mo-Mn

Subsolidus phase relations: Chang, Luke L. Y. 09061

Phosphate*Appalachians*

Resources, review: Wedow, Helmuth, Jr. 01328

Phosphate—Continued*Atlantic Coastal Plain*

North Carolina-Florida, genesis: Cathcart, James B. 07449

Atlantic Ocean

Blake Plateau, geochemistry: Mannheim, F. T. 08791

California

Salinas Valley, Monterey Shale: Smith, Patsy B. 09470

Exploration

Marine phosphorite, paleogeographic approach, Permian-Tertiary: Freas, Donald H. 09107

Marine phosphorites, prospecting techniques: McKelvey, V. E. 09106

Paleomagnetism, paleolatitude changes, depositional climates: Irving, E. 09108

Underseas, economics: Overall, M. P. 03658

Florida

Bone Valley Fm., potential: Stow, Stephen H. 07688

Central, genesis: Freas, D. H. 07442

Exploration, Tertiary districts: Freas, Donald H. 09104

Genesis

Marine phosphorites, Permian-Tertiary: Freas, Donald H. 09107

Phosphorite, marine, in situ formation in carbonate sediments: d'Anglejan, Bruno F. 02173

Geochemistry

Apatite, characterization, commercial deposits: Lehr, J. R. 06379

Soils, organic components, fractionation: McKercher, R. B. 07432

Gulf Coastal Plain

Cretaceous-Paleocene deposits, genesis: Cathcart, James B. 07449

Idaho

Southeastern, exploration: Harris, H. D. 09109

Iowa

Maquoketa Formation, genesis: Bromberger, Samuel H. 11264

Kentucky

Fayette County, Trenton limestones, genesis: Jillson, Willard Rouse. 03123

Mexico

Occurrence: Sanchez Mejorada, Pedro. 09528

North Carolina

Beaufort County, Lee Creek open-pit mine: Caldwell, A. Blake. 09591

Beaufort County, mineralogical study: Rooney, Thomas Peter. 01757

Continental shelf: Luternauer, John L. 08544

Production

Marine phosphorite deposits, minability factors: Cathcart, James B. 09110

Resources

Ocean vs. land mining, economics: Brooks, David B. 06102

Principal types, summary: Collette, W. J. 09105

Submarine: Ocean Industry. 01603

South Carolina

Hawthorne Fm.: Heron, S. Duncan, Jr. 08528

Tennessee

Central, Ordovician, origin, prospecting: Collette, W. J. 09105

Perryville quadrangle, occurrence: Wilson, Charles W., Jr. 03689

Sevier County, Ocoee Series, occurrence: Wedow, Helmuth, Jr. 08567

Silver Point quadrangle, Maury Shale, possibilities: Wilson, Charles W., Jr. 03076

Phosphate—Continued

Texas

Hopkins County, nodules, composition, occurrence: Milton, Charles. 00798

United States

Atlantic and Gulf Coastal Plains, occurrence, possibilities: Cathcart, J. B. 10982

Wyoming

Munger Mountain quadrangle, occurrence: Albee, Howard F. 01424

Phosphorus

Abundance

Diabase, New Mexico, Burro Mts.: Gillerman, Elliot. 01915

Analysis

Colorimetric, vanadate-molybdate reagent: Tandon, H. L. S. 00900

Flame photometry, fuel-rich air-hydrogen flames, shielded and unshielded: Syty, Augusta. 03475

Geochemistry

Soils, organic fraction: McKercher, R. B. 07432

Photogeology

Alaska

Montague Island, Hanning Bay fault scarp, 1964 earthquake effects, color airphoto: Whitten, Charles A. 02384

Applications

Coal mining, exploration and production: Carmichael, V. W. 06869

Geomorphology: Miller, V. C. 08910

Geomorphology, integrating natural resources surveys: Steiner, D. 08915

Land use, rural, mapping methods: Steiner, D. 11038

Mapping for multiple purposes, experimental: Webster, R. 08914

Mineral exploration: Wobber, Frank J. 08172

Mineral exploration, Mexico, Jalisco and Colima, metals: Garcia Castaneda, Fausto. 08913

Soils reconnaissance, color photos: Anson, Abraham. 00143

Water resources: Schumm, S. A. 11036

Canada

Economic development, aerial photos, future needs, panel discussion: Drolet, J. P. 10933

Dominican Republic

Yaque del Sur basin, reconnaissance: Redonnet, J. 08911

Education

Secondary schools: Sully, G. Barry. 09672

University courses: Hilborn, W. H. 09673

General

Black and white, color: Slaney, V. R. 11148

Color aerial photography, manual: Smith, John T., Jr. 02604

Greenland

Icecap and glaciers, velocity, other observations: Bauer, A. 05289

Western, glaciers, velocity: Carbone, M. 05305

Instruments

Stereoscopic plotters, color compatible: Lewis, James G. 02489

Interpretation

Aerial photography, color, water contamination sources: Bay, Charles A., Jr. 02383

Agriculture, future, panel discussion: Jackson, K. B. 09668

Agriculture, soil studies, water resources: Munn, L. C. 09669

Photogeology—Continued

Interpretation—Continued

Alaska, Middleton Island, shoreline terraces, tilt, color airphoto: Swanson, Lawrence W. 02372

Alaska, Prince William Sound area, earthquake effects: Hackman, Robert J. 06490

Alberta, Rocky Mountain Forest Preserve, soil erosion prediction: Rutter, N. W. 05334

Appalachians, water pollution, infrared imagery: Strandberg, Carl H. 02376

Canada, scope, applications: Mollard, J. D. 09655

Colorado, McClure Pass, landslide area: Pryor, William T. 02378

Engineering soil surveys, aerial photos: Mathur, B. Sen. 09659

Engineering soils, landslide studies, aerial photos, color: Mintzer, Olin W. 02542

Engineering studies, panel discussion: Gamble, S. G. 09656

Environmental geology, planning tool: Tomlinson, R. F. 09663

Florida, Everglades, water resources, color airphoto indicators: Schneider, William J. 02375

Ground water exploration, Canada, western: Mollard, J. D. 09671

Highway planning, Canada: Higgs, R. W. 09658

Infrared reflectance, Gulf of Mexico, U.S. coast, Gemini photos: Anson, Abraham. 02373

Land use planning, panel discussion: Vink, A. 11247

Mountain, shield areas, high-altitude, small-scale photos: Cameron, H. L. 09666

Oklahoma-Texas, Anadarko basin area, geomorphic clues to structure: Trollinger, William V. 01646

Ontario, Camp Petawawa training area, terrain evaluation: Parry, J. T. 08882

Panel discussion: Fortier, Y. O. 09664

Permafrost areas, engineering properties: Pihlainen, J. A. 09657

Recent developments, improvements needed: Colwell, Robert N. 09670

Remote imaging data, techniques, bibliography: Holmes, Robert F. 04183

Rural planning: Fraser, I. S. 09661

Satellite TV photography: Taggart, C. I. 09674

Terrain analysis: Colwell, Robert N. 08885

Textbook: Avery, T. Eugene. 00810

Underdeveloped areas: Vink, A. P. A. 10932

Urban development, planning tool: Erb, D. K. 09662

Volcanology, Alaska, Saint Augustine Island: Sobieralski, V. Ralph. 02374

Marine

Storage, retrieval system: Manchester, Keith S. 08474

Methods

Aerial, remote sensing: Fischer, W. A. 09665

Current trends: Miller, V. C. 04503

Field mapping, orbital photographs: Lowman, Paul D., Jr. 08785

Interpretation, textbook: Avery, T. Eugene. 00810

Multiband photography: Burke, Robert Francis. 01340

Orbital photos, Arizona, interpretation: Titley, Spencer R. 02673

Remote sensing, electromagnetic, instruments, interpretation: Reeves, Robert G. 09119

Research: Guy, M. 08909

Photogeology — Continued*Methods* — Continued

Satellites, photoimage maps, EROS program:
Fischer, William A. 00352

New York

Catskill Front, Devonian sandstone, interpretation:
Mutch, Thomas A. 01463

North Carolina

Capes Hatteras to Fear, shoreline changes: El-
Ashry, Mohamed T. 07369

Northwest Territories

Great Slave Lake, interpretation: Haman, Peter
J. 07879

Ontario

Montreal area, landform analysis, aerial photos,
color: Mollard, J. D. 02379

Photography

Apollo-502, earth resources, evaluation: Sabels,
B. E. 10443

Catalog, Canada, geomorphologic features:
Bostock, H. S. 04069

Color, aid to interpretation: Anderson, D. T.
09667

Earth's terrain, panorama, Gemini space flight:
Lowman, Paul D., Jr. 06022

Ektachrome cf. Infrared Ektachrome, aerial at
2,500 and 11,000 feet: Pressman, Albert E.
02371

Engineering studies, terrain, soils: Mintzer, O.
W. 06392

Gemini space flights, United States and Mexico:
U.S. Natl. Aeronaut. and Space Adm. 11366

Multiband-color technique, advantages: Orr,
Donald G. 02488

Orbital, Gemini Program, applications: Low-
man, Paul D., Jr. 04176

Soils, color and color infrared aerial film, en-
gineering features: Mintzer, Olin W. 02542

Space, application, geographic studies: Colwell,
Robert N. 06402

Space, Earth resources surveys, structural rela-
tions, Gemini IX: Carter, William D. 02377

Three-dimensional color oblique: Hall, William
B. 07953

Water resources studies, color: Schneider, Wil-
liam J. 09141

Puerto Rico

Geographic zones and subzones, vegetation:
Dansereau, Pierre. 08912

Quebec

Ungava, periglacial region, mineral exploration,
methods: Avias, J. 11037

Status

1964: Guy, M. 08909

United States

Landforms, descriptive catalog: Denny, Charles
S. 02291

Western, alp slopes, geomorphic processes:
Thompson, Will F. 04999

Pisces*Acanthodes*

Permian, gill-arch structure, relation to
elasmobranchs: Nelson, Gareth J. 08936

Acanthodii

Silurian-Devonian, Northwest Territories, El-
lesmere Island: Spjeldnaes, Nils. 02874

Arthrodira

Devonian, morphology of spinal plate, taxono-
my: Heintz, Anatol. 08937

Devonian, morphology of spinal plate, taxono-
my: Stensio, E. A. 08938

Pisces — Continued*Asarotidae, n.fam.*

Cretaceous, United States: Schaeffer, Bobb.
05716

Asarotiformes, n. ord.

Cretaceous, United States: Schaeffer, Bobb.
05716

Asarotus arcanus, n.sp.

Cretaceous, United States, Niobrara Formation:
Schaeffer, Bobb. 05716

Belonostomus, sp.

Cretaceous, Texas, north-central, Austin Chalk,
holostean, cf. Europe: Bardack, David. 05697

Caranx sp.

Miocene, California, Sharktooth Hill, dorsal-fin
hyperostoses: Fierstine, Harry L. 06801

Cheiracanthoides stonehousensis n.sp.

Silurian, Nova Scotia, Arisaig area, Stonehouse
Formation: Legault, J. A. 06732

Choanichthyes

Morphology, evolution: Schmalhausen, I. I.
04888

Clupeomorpha

Cretaceous-Holocene, tail evolution, relations:
Cavender, Ted. 10944

Cretaceous

North Carolina, Black Creek Formation,
Phoebe Landing: Miller, Halsey W. 06760

Devonian

Idaho, Lemhi Range, Jefferson Fm.: Denison,
Robert H. 07168

Northwest Territories, Idlorak Formation,
Cretaceous-Tertiary, reworked: Dineley, D. L.
02724

Northwest Territories, Prince of Wales Island
area, Peel Sound Formation: Broad, D. S.
03134

Quebec, Escuminac Formation, Escuminac Bay:
Dineley, D. L. 03433

Dipnoi

Devonian, Lower, Wyoming, Idaho, Utah:
Denison, Robert H. 02833

Permian, Texas, Lueders Formation,
paleoecology, evolution: Berman, David S.
03208

Dunkleosteus

Devonian, Ohio, Cleveland Shale, spinal plate:
Heintz, Anatol. 08937

Devonian, Ohio, Cleveland Shale, spinal plate:
Stensio, E. A. 08938

Ectosteorhachis nitidus Cope

Permian, Texas, Wichita Group, redescription,
vertebral structure: Thomson, Keith Stewart.
07337

Evolution

Skeletal development, delamination principle:
Jollie, Malcolm. 08935

Ganopristinae

Cretaceous-Paleocene, Texas, coastal plain, ros-
tral teeth, evolution: Slaughter, Bob H. 00485

Geographic distribution

Odontaspis, Tertiary species, cf. recent sand
shark: Applegate, Shelton P. 09190

Tropical oceans, *Myrpristis*, Cenozoic: Green-
field, David W. 00907

Virginia, Pleistocene, Kempsville Formation, cf.
modern: Ray, Clayton E. 03172

Gnathorhiza

Permian, ancestral to modern lungfish: Carlson,
Keith J. 05679

Permian, Texas, Lueders Fm., dipnoan, her-
bivorous: Berman, David S. 03208

Pisces—Continued

Gnathorhiza serrata

Permian, Oklahoma, Wellington Formation, skull, estivation burrows: Carlson, Keith J. 05679

Gyroptychius? taylori n.sp.

Devonian, British Columbia, Nahanni Formation, osteolepidid: Jessen, H. 06691

Helicoprion, sp.

Permian, Alberta, Banff area, Ranger Canyon Formation: Logan, Alan. 05686

Hemicyclaspis murichisoni

Devonian, Lower, Northwest Territories, Somerset Island: Dineley, D. L. 06690

Holmesella? sp.

Pennsylvanian, Indiana, scales, morphology and growth: Zangerl, Rainer. 08943

Holonema haiti, n.sp.

Devonian, Idaho, Lemhi Range, arthrodire: Denison, Robert H. 07168

Hynieria lindae, n.gen. n.sp.

Devonian, Pennsylvania, Oswayo Formation: Thomson, Keith Stewart. 04798

Ischnacanthus(?) scheii, n.sp.

Silurian-Devonian, Northwest Territories, Ellesmere Island: Spjeldnaes, Nils. 02874

Istiophoridae undet. gen.

Miocene, Pleistocene, California, southern, vertebrae: Fierstine, Harry L. 01649

Lohsania utahensis, n.gen., n.sp.

Permian, Utah, Halgaito Shale, vertebral structure: Thomson, Keith Stewart. 07337

Makaira sp.

Miocene, California, southern, bill and pre-dentary bone: Fierstine, Harry L. 01649

Morphology

Carangidae, hyperostoses of dorsal-fin base: Fierstine, Harry L. 06801

Istiophoridae, pre-dentary bone, function:

Fierstine, Harry L. 01649

Odontaspis, Tertiary species, cf. recent sand shark: Applegate, Shelton P. 09190

Rhipidistia, Paleozoic, snout structure, taxonomic: Thomson, Keith Stewart. 00486

Rhipidistia, Permian, vertebral structure: Thomson, Keith Stewart. 07337

Myripristis

Cenozoic, tropical oceans, zoogeography, phylogeny: Greenfield, David W. 00907

Odontaspis macrotia

Tertiary, Oregon, Yamhill Formation: Applegate, Shelton P. 09190

Orodus

Pennsylvanian, Indiana, scales, morphology and growth: Zangerl, Rainer. 08943

Osteichthyes

Origin, evolution of major groups: Schaeffer, Bobb. 08939

Osteostraci

Devonian, Lower, Northwest Territories, Somerset Island: Dineley, D. L. 06690

Pennsylvanian

Illinois, lamprey: Bardack, David. 05254

Permian

Wyoming, Phosphoria rock complex, distribution: VanSickle, Dianne H. 00125

Petalodus

Mississippian-Permian, Nebraska-Kansas, cf. Ohio, Pennsylvanian: Hansen, Michael C. 02486

Psephaspis idahoensis, n.sp.

Devonian, Idaho, Lemhi Range, pteraspigid heterostracan: Denison, Robert H. 07168

Pisces—Continued

Quaternary

California, San Pedro, Timms Point silt, Pleistocene, otoliths: Fitch, John Edgar. 06804

California, Tomales Bay, Holocene: Follett, W. I. 01777

Virginia, Pleistocene, Kempsville Formation: Ray, Clayton E. 03172

Quebec

Devonian, Battery Point Formation, Gaspé Peninsula: Pageau, Yvon. 06906

Rhipidistia

Evolution, relation to modern Amphibia, diphyletic theory: Thomson, Keith Stewart. 08941

Paleozoic, taxonomic relations, snout structure: Thomson, Keith Stewart. 00486

Rhizodontidae

Devonian, evolution, origin of Amphibia: Thomson, Keith Stewart. 04798

Selachii

Paleozoic, scales, morphology and growth: Zangerl, Rainer. 08943

Silurian

Nova Scotia, Arisaig area, Stonehouse Formation, scales: Legault, J. A. 06732

Taxonomy

Teleostomi, subclasses, fourfold division: McAllister, D. E. 03055

Teleostomi

Morphology, branchiostegals, hyoid arch, evolution: McAllister, D. E. 03055

Tertiary

Florida, Pliocene, Bone Valley Formation, Manatee County: Webb, S. David. 05212

Nebraska, Wyoming, seasonal growth evidence: Voorhies, M. R. 11049

Oregon, Clarno Formation, freshwater: Cavender, Ted M. 10970

Oregon, concretions, new, Pliocene: Dalzell, Bonnie. 08259

South Dakota, Turtle Butte: Skinner, Morris F. 11351

Triassic

Greenland, Cape Stosch area: Birkelund, Tove. 01857

Uranolophus wyomingensis, Denison

Devonian, Lower, Wyoming, oldest lungfish, evolution: Denison, Robert H. 08940

Uranolophus wyomingensis, n.gen., n.sp.

Devonian, Wyoming, Beartooth Butte Fm.: Denison, Robert H. 02833

Placers*General*

Exploration and mining: Daily, Arthur F. 02393

Genesis

Flood scour: Gunn, Christopher B. 00479

Flood scour: Krook, Leendert. 06980

Gold: Tuck, Ralph. 01899

Sampling

Gold, Alaska, Bering Sea: Hopkins, David M. 09845

Sedimentation

Hydraulic equivalence, quartz, magnetite, gold, silver: Tourtelot, Harry A. 00112

Uranium

Ontario, northern, Precambrian: Robertson, James A. 07916

Platinum*Analysis*

Emission spectroscopy, after fire assay, rocks: Haffty, Joseph. 02278

Platinum — Continued*Analysis* — Continued

Fire assay, ion exchange, spectroscopy, combined technique: Barnett, Paul R. 02686

Spectrophotometric, rocks: Grimaldi, F. S. 00774

Geochemistry

Nickel ores, Ontario, electron-probe analysis of grains: Rucklidge, John. 03602

Wyoming

Centennial district, New Rambler mine area, exploration: Theobald, P. K., Jr. 05734

Centennial Ridge district, occurrence: McCallum, M. E. 07982

New Rambler district, occurrence: McCallum, M. E. 07983

Plutonium*Analysis*

X-ray fluorescence, rare earths: Hakkila, E. A. 03485

Isotopes

Pu-244 fission tracks, meteorites, cooling rate: Fleischer, R. L. 00298

Pu-244, galactic nucleosynthesis: Reynolds, J. H. 05989

Polymetallic ores*Alabama*

Cragford district, occurrence: Neathery, Thornton L. 07653

Alteration

Leached outcrops, ore guide: Blanchard, Roland. 03143

Canada

Massive sulfides, exploration, geological concepts, 1930-67: Sullivan, C. J. 09212

Experimental studies

Cu-Fe-Ni-S system, high temperature relations: Craig, J. R. 01554

Cu-Fe-S system, high-temperature relations: Kullerud, G. 01552

Cu-Ni-S system, high-temperature relations: Kullerud, G. 01553

Fe-S-O system, magma composition: Naldrett, A. J. 01556

High-temperature relations: Naldrett, A. J. 01557

Iron-nickel sulfides, isothermal diagram, 400°C: Craig, J. R. 01562

Iron-nickel sulfides, partial pressure of sulfur: Naldrett, A. J. 01561

Iron-nickel sulfides, violarite stability: Craig, J. R. 01560

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Paragenesis, sulfide assemblages: Craig, J. R. 01559

Pyrrhotite-magnetite assemblages, melting, water effect: Naldrett, A. J. 01558

Sulfide and silicate liquids, coexistence: Kullerud, G. 01564

Exploration

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Leached outcrops: Blanchard, Roland. 03143

Genesis

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Geochemistry

Osmium and ruthenium, neutron activation analysis: Chung, K. S. 06743

Polymetallic ores — Continued*Idaho*

Alder Creek mining district, occurrence, production: Nelson, W. H. 04109

Maine

Exploration, recent activity, review: Young, Robert S. 05421

Passamaquoddy Bay area: Ruitenbergh, A. A. 07696

Somerset County, prospecting method, structural analysis: Delaney, John R. 09767

Manitoba

Lynn Lake orebodies, reserves, grade control: Ruttan, G. D. 05216

Mexico

Santa Eulalia district, occurrence, genesis: Hewitt, William Paxton. 01509

Minnesota

Aitkin County, Cuyuna sulfide deposit, genesis: Han, Tsu-Ming. 03131

Duluth Complex: Sims, P. K. 10920

New Brunswick

Brunswick open-pit mine, reserve estimation, grade control: Welwood, R. J. R. 05327

Passamaquoddy Bay area: Ruitenbergh, A. A. 07696

Newfoundland

Buchans orebodies, reserve estimation: Swanson, E. A. 05220

Ontario

Cobalt area: Petruk, W. 10163

Denison-Waters area, occurrence: Card, K. D. 01007

Gauthier Township, Upper Beaver mine: Bragg, J. G. 10150

Geco mine, reserves and grade estimation: Brooks, L. S. 05316

Lac des Iles area, occurrence, possibilities: Pye, E. G. 01043

Sudbury area, Strathcona mine, genesis: Naldrett, A. J. 05036

Sudbury, Falconbridge orebodies, reserves estimation, grade control: Potapoff, P. 05221

Timmins district, occurrence: George, Peter T. 10152

Quebec

Abitibi County, Maniitou Barvue mines: Ramsay, B. A. 10136

Matagami area, occurrence: Sharpe, John I. 07859

Noranda area: Spence, C. D. 10140

Noranda area, Delbridge mines: Boldy, J. 10144

Noranda area, Lake Dufault mines: Purdie, J. J. 10143

Noranda area, occurrence: Sharpe, John I. 10145

Noranda area, West Norbeck mine, reserve estimation: Purdie, J. J. 05317

Noranda district, Delbridge deposit, genesis: Boldy, J. 07758

Quemont mine, reserve estimation: Weeks, Ross M. 05219

Rouyn Township, Horne mine: Hodge, H. J. 10141

Rouyn Township, Quemont mines: Weeks, Ross. 10142

Tennessee

Ducktown, genesis, metamorphism: Salotti, C. A. 06856

Washington

Cascade Range, exploration potential: Grant, Alan R. 09573

Polymetallic ores—Continued*Yukon*

Whitehorse area, occurrence: Morinaga, Shigeru. 01833

Popular and elementary geology*Appalachians*

General: Connelly, Thomas L. 06969

Arizona

Dinosaurs, evolution: Breed, William J. 04337

California

Death Valley, ancient Lake Manly: Houghton, S. G. 10811

Southern, vertebrates: Downs, Theodore. 07895

Caves

Mineralogy: Nickell, Walter P. 08113

Speleothem formation: Broughton, Paul L. 01598

Coal

Pennsylvania, occurrence, production, reserves: Edmunds, William E. 07076

Colorado

Garden of the Gods: Nesbit, Paul W. 08157

Continental drift

General: Frisch, Bruce. 04795

Mechanism, sea-floor spreading: Opdyke, Neil D. 05205

Continental margin

Mineral resources, shelf: Bodenhorn, Gregory S. 10825

Crystal growth

Synthetic: Weaver, Kenneth F. 08139

Dinosaurs

General: Shuttlesworth, Dorothy E. 09183

Earth

Age, origin, composition, geomorphology, mineral resources: Beiser, Arthur. 01873

Composition, landforms, structure, fossil record: Matthews, William H., 3d. 00728

Evolution, geologic processes: Hyde, Margaret O. 11202

History, flood theory: Clark, Harold W. 11203

Earthquakes

Pacific Ocean, circumferential belt: Heintze, Carl. 06017

Evolution

General: Hotton, Nicholas, 3d. 05665

General: Moore, Ruth. 04332

Man, fossil: Clymer, Eleanor. 09182

Florida

Water resources, Orange County: Joyner, B. F. 08168

Fossils

California, San Diego County, Mollusca, collecting guide: Moore, Ellen J. 04354

Collecting, vertebrates: Zeitner, June Culp. 10813

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Reptilia, *Stegosaurus*, history of restorations: Dunkle, David H. 01799

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Identification: Pearl, Richard M. 08132

North America, occurrence, value, history, collections: Kunz, George Frederick. 02596

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Popular and elementary geology—Continued*General*

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History: Seibel, Clifford W. 04791

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Invertebrata

General: Walters, George. 09585

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Man, fossil

General: Bailey, John. 08127

Meteor craters

General: Ley, Willy. 09143

Meteorites

Michigan falls: Chamberlain, Von Del. 06970

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Mineral collecting

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North America

Geologic history: Ogburn, Charlton, Jr. 02239

Ohio

Pennsylvanian coal beds, fossils: Hoare, Richard D. 08112

Permian, Dunkard Series, fauna: Hlavin, William J. 10826

Ontario

Ottawa area: Baird, David M. 04804

Paleobotany

Oregon, Linn County, wood, Tertiary: Gregory, Irene. 09263

Paleontology

Fossilization, jellyfish: Richards, Horace G. 08107

Relict and legendary animals: Ley, Willy. 11200

Pennsylvania

Petroleum and natural gas: Wagner, W. R. 09006

Popular and elementary geology—Continued

Petrology

Identification, quick-key guide: Bowser, Carl J. 06188

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Geology and geomorphology: Pearl, Richard M. 08986

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Areal geology, sketch: Aubert de la Rue, E. 01697

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General: Kraske, Robert. 08133

Salt domes

Development, Gulf of Mexico: Stafford, Charles F. 00567

Sedimentary structures

Colorado, Denver area: MacKenzie, D. B. 00193

Texas

Big Bend National Park: Maxwell, Ross A. 01499

Tracks and trails

Climactichnites, Cambrian, Potsdam Sandstone, cf. *Mystichnis pacificus*: Farquhar, O. C. 11153

United States

National parks, guide: Matthews, William H., 3d. 02903

Vermont

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Volcanoes

Pacific Ocean, circumferential belt: Heintze, Carl. 06017

Washington

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Dolomitization: Bubbs, J. N. 01459

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Sediments

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Porosity—Continued

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Theoretical studies

Primitive cell, systematic packing: McGaw, Richard. 09802

Potash*Appalachians*

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Exploration, Devonian possibilities: Mitterer, Adolph V. 09112

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Genesis

Evaporite basin, metasomatic concentration: Goldsmith, Louis H. 01227

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Isotopes

Ratios, ultramafic minerals, North Carolina: Stueber, Alan M. 09709

Potassium—Continued

Isotopes—Continued

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Precambrian*Absolute age*

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Alaska Range, Birch Creek Schist, Keevy Peak Formation, age(?): Wahrhaftig, Clyde. 01659

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General: Stelck, Charles R. 10924

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Northeastern, cataclastic rocks: Watanabe, R. Y. 04092

Purcell System, argillites, geochemistry: Leask, D. M. 04086

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Inyo County, fossils, problematic, Reed Dolomite: Taylor, Michael E. 09166

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Precambrian—Continued*Canada—Continued*

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Eldora-Jamestown area, absolute age, discordance: Davis, G. L. 04522

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Front Range, central, geochronology: Hedge, Carl E. 10231

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Penokean and Hudsonian orogenies, ages: Church, William R. 07819

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Western, stratigraphy, absolute age: Pulvertaft, T. C. R. 09454

Idaho

Saint Joe area, Beltian rocks, deformation: Reid, Rolland R. 05074

Snow and Mallard Peaks area, Belt Series: Hietanen, Anna. 09396

Precambrian—Continued*Idaho—Continued*

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Wallace Formation and equivalents, sedimentation: McKelvey, Gregory E. 03856

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Piedmont, Glenarm Series: Hopson, Clifford A. 08181

Mexico

Sonora, stratified rocks, absolute age: Livingston, Donald E. 07460

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Marquette and Sands quadrangles, stratigraphy: Gair, Jacob E. 04113

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Missoula area, stratigraphy: Dobell, Joseph P. 10223

Precambrian—Continued*Montana—Continued*

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Wallace Formation and equivalents, sedimentation: McKelvey, Gregory E. 03856
Western, Belt Series, gradational boundary with Cambrian: Illich, Harold A. 07902

Nevada

- Pilot Range, stratigraphy, correlation: Woodward, Lee A. 08353

New Mexico

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Pajarito Mountain, alkaline intrusive rocks, age: Kelley, Vincent C. 04296
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New York

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Newfoundland

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Northwest Territories

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Baffin Island, Phillips Creek area, stratigraphy: Blackadar, R. G. 01527
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Franklin, Berlinguet Inlet-Bourassa Bay area: Blackadar, R. G. 02460
Franklin, Erichsen Lake area, stratigraphy: Blackadar, R. G. 02441
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Hopewell and Nasatopoka Islands off New Quebec: Stevenson, I. M. 09117
Keewatin, Tavani and Kaminak Lake areas, Hurwitz Group: Bell, R. T. 04071
Mackenzie, Christie Bay area, Great Slave Lake, stratigraphy: Stockwell, C. H. 05653
Mackenzie, Goulburn Group: Tremblay, L. P. 07898
Mackenzie, Great Slave Supergroup, revision, East Arm synclinorium: Hoffman, P. F. 06306
Mackenzie, Reliance area, stratigraphy: Stockwell, C. H. 05654
Nomenclature, Great Slave Supergroup, new formations: Hoffman, P. F. 06306
Yellowknife area, absolute age: Green, D. C. 07481
Yellowknife area, volcanic rocks, absolute age: Folinsbee, R. E. 09381

Ontario

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Big Trout Lake area: Hudc, P. P. 09515

Precambrian—Continued*Ontario—Continued*

- Cashel Township, metavolcanics, metasediments: Lumbers, S. B. 03193
Crescent Lake area: Pye, E. G. 00972
Denison-Waters area, metamorphic units: Card, K. D. 01007
Elk Lake area, stratigraphy: MacKean, B. E. 04315
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Elliot Lake, fossils, problematic, Cobalt Group: Hofmann, H. J. 09789
Espanola-Sudbury area, Huronian Series: Young, Grant M. 05273
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Lac des Iles area, metavolcanics, metasediments: Pye, E. G. 01043
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Nomenclature, Huronian Supergroup, groups and formations: Robertson, J. A. 07799
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Tisdale township, stratigraphy: Ferguson, Stewart A. 01820
Whitefish Falls area, Gowganda Formation: Lindsey, David Allen. 03032

Paleoclimatology

- Marine, life origin: Weyl, Peter K. 01921

Paleomagnetism

- Field intensity, North America: Kobayashi, Kazuo. 06333

Pennsylvania

- Caledonia Park area, Catocin Formation: Fauth, John L. 06754
Northwestern, basement complex, petrography, cf. Ohio and West Virginia: Saylor, Timothy E. 09077

Quebec

- Castignon-Romanet lake region, Sokoman Formation, ironstones: Dimroth, Erich. 06662

Precambrian — Continued

Quebec — Continued

Grand Detour-Village Lakes area: Eakins, P. R. 07689

Hart-Juane River map-area, petrology: Kish, Leslie. 07857

Leaf River area: Stevenson, I. M. 09117

Louvencourt Township, petrology: Sharpe, John I. 07858

Matagami area, stratigraphy: Sharpe, John I. 07859

McKenzie Township, northwest quarter, stratigraphy, petrology: Duquette, Gilles. 08159

Mount Wright area, granulite facies, charnockitic: Roach, R. A. 05663

Mount Wright-Mount Reed area, Grenville metamorphism: Clarke, P. J. 09364

Noranda volcanic belt, Blake River Group: Baragar, W. R. A. 02723

Schefferville area, lithostratigraphic table, iron-formation: Seguin, Maurice. 05669

Rocky Mountains

Correlation, facies changes, Belt-Purcell Supergroup: Harrison, Jack E. 02692

Saskatchewan

Beaverlodge area, uranium mineralization, absolute age: Koeppl, V. 02056

Beaverlodge mining area, stratigraphy: Tremblay, L. P. 01688

Beaverlodge-Lake Athabasca region, uranium deposits: Trigg, Charles Murray. 09567

Hanson Lake area: Gaskarth, Joseph William. 01745

Needle Falls area, general: Money, P. L. 05526

Wapawekka Lake area, north half: Padgham, W. A. 10674

Wollaston Lake fold-belt system: Money, P. L. 07209

South Carolina

Central, Piedmont, metamorphic belts: Secor, D. T. 04728

South Dakota

Beadle County, granitic basement, Sioux Quartzite: Hedges, Lynn S. 06026

Black Hills, Berne quadrangle, stratigraphy: Redden, Jack A. 01701

Tennessee

Great Smoky Mountains National Park: King, Philip B. 00263

Texas

Franklin Mountains, Fusselman Canyon area: McAnulty, W. N., Jr. 10171

Time scale

Index fossil possibilities: Glaessner, M. F. 07416

United States

Great Basin, sedimentation: Stewart, John H. 09164

Southeastern, Mount Rogers Volcanic Group: Rankin, D. W. 10336

Western, northern, basal Sauk clastics, sedimentation: Seeland, David Arthur. 09463

Utah

Beaver Mountains, stratigraphy, correlation: Woodward, Lee A. 03778

Huntsville area, stratigraphy: Crittenden, Max D., Jr. 10221

Northern, absolute age: Damon, Paul E. 10883

Pilot Range, stratigraphy, correlation: Woodward, Lee A. 08353

Uinta Mountain Group, sedimentation: Crittenden, Max D., Jr. 09984

Virginia

Botetourt-Rockbridge Counties, boundary area: Spencer, Edgar W. 00950

Precambrian — Continued

Virginia — Continued

Buckingham quadrangle, Evington Group and associated formations: Ern, Ernest H. 03194

Fossils, problematic, Mount Rogers Group: Kopp, Otto C. 09080

Lincoln and Bluemont quadrangles, stratigraphy: Parker, Pierre E. 02951

Wisconsin

North Shore Volcanic Group: Green, John C. 07793

Northeastern, Penokean rocks, absolute age: Banks, Philip O. 08608

Northern, Keweenawan rocks, sedimentation: Hite, David Marcel. 02633

Northern, Keweenawan stratigraphy: Hubbard, Harold A. 10955

Wyoming

Centennial Ridge gold-platinum district: McCallum, M. E. 07982

Front Range, paleomagnetic pole position, reversals: Eggler, D. H. 00369

Grand Teton National Park and vicinity: Reed, John C., Jr. 07514

Grand Teton National Park, stratigraphy: Love, J. D. 11319

Medicine Bow Mountains, absolute age, correlation: Hills, F. Allan. 05055

Medicine Bow Mountains, Nash Fm., stromatolites: Knight, S. H. 07578

New Rambler district: McCallum, M. E. 07983

Prince Edward Island

Economic geology

Petroleum, exploration: Williams, E. P. 01593

Glacial geology

Late history: Prest, V. K. 09817

Hydrogeology

Eliot River estuary area and Georgetown Peninsula, salt-water intrusion: Carr, P. A. 01604

Protista

Acritarchs

Devonian, Oklahoma, Haragan Formation, new: Loeblich, Alfred R., Jr. 06347

Silurian, distribution: Cramer, Fritz H. 10949

Silurian, New York, Rochester, Maplewood Shale: Cramer, Fritz H. 07292

Calcareous nannoplankton

Cenozoic, worldwide, stratigraphic markers: Bukry, David. 06348

Carminella maplewoodensis, n.gen., n.sp.

Silurian, New York, Rochester, Maplewood Shale: Cramer, Fritz H. 07292

Cenozoic

Caribbean Sea, Plio-Pleistocene boundary, nannoplankton, zonation: Hay, W. W. 10985

Ceratolithus, n.sp., emend. spp.

Miocene-Holocene, worldwide, stratigraphic markers: Bukry, David. 06348

Classification

Calciopheres, variables: Stanton, Robert J., Jr. 08004

Coccolithophores

Cretaceous, Arkansas-Texas, descriptions, zonation: Gartner, Stefan, Jr. 09385

Pleistocene, Caribbean deep-sea core CP-28: Cohen, C. L. D. 05624

Pleistocene, submarine, paleoclimatic indicators: Burkholder, Paul R. 07970

Cretaceous

California, Moreno Formation: Drugg, Warren S. 07704

California, Sacramento Valley: Warren, John Stanley. 09862

Protista—Continued

Cretaceous—Continued

Colorado, Canon City area, biostratigraphy:

Trexler, David W. 10879

Texas, coccolithophores: Bukry, John David. 03024

Texas, Navarro Group, dinoflagellates, acritarchs: Zaitzeff, James Boris. 01753

Deftlandria

Mesozoic-Tertiary, homology with cysts of living: Evitt, William R. 04788

Devonian

North America, calcispheres, paleoecologic, stratigraphic value: Stanton, Robert J., Jr. 08004

Dinoflagellates

Index to genera, bibliography: Loeblich, Alfred R., Jr. 00557

Morphology, Peridinales, modern cf. fossils: Wall, David. 05013

Quaternary, Atlantic, Caribbean, calciodinellids, peridinoid cysts: Wall, David. 06029

Discoasterids

Pleistocene, Caribbean deep-sea core CP-28: Cohen, C. L. D. 05624

Ebriata

Cenozoic, review: Mandra, York T. 08790

Ebridians

Catalog, annotated index: Loeblich, Alfred R., 3d. 05666

Fimbriaglomerella divisa, n.gen., n.sp.

Devonian, Oklahoma, Haragan Formation, acritarch: Loeblich, Alfred R., Jr. 06347

General

Stratigraphic applications, paleoecology, indicators: Loeblich, Alfred R., Jr. 07944

Geographic distribution

Atlantic Ocean, coccolithophores, climatic assemblages: McIntyre, Andrew. 07877

Jurassic

California, Sacramento Valley: Warren, John Stanley. 09862

Morphology

Tunispheeridium, Silurian, quantitative analysis of species: Deunff, Jean. 06923

Nomenclature

Pyrrhophyta (dinoflagellates), index to genera: Loeblich, Alfred R., Jr. 00557

Ophiobolus lapidaris

Cretaceous, New Jersey, Red Bank Formation, morphology, egg case: Evitt, William R. 10983

Ozotobranchion, n.gen., n.spp.

Devonian, Oklahoma, Haragan Formation, acritarchs: Loeblich, Alfred R., Jr. 06347

Peridinium limbatum

Holocene, Massachusetts, cysts, homology with fossil: Evitt, William R. 04788

Peritrichelina joidesa, n.sp.

Eocene-Oligocene, worldwide, stratigraphic markers: Bukry, David. 06348

Permian

Kansas, Fort Riley Limestone, chitinozoans: Gafford, Edward L., Jr. 09284

Pyrrhophyta

Index to genera, bibliography: Loeblich, Alfred R., Jr. 00557

Riculusphaera fissa, n.gen., n.sp.

Devonian, Oklahoma, Haragan Formation, acritarch: Loeblich, Alfred R., Jr. 06347

Silicoflagellates

Catalog, annotated index: Loeblich, Alfred R., 3d. 05666

Protista—Continued

Silicoflagellates—Continued

Cretaceous-Miocene, California, catalog, biostratigraphy: Mandra, York T. 04790

Morphology, cysts, living and fossil, homology: Evitt, William R. 04788

Tertiary

California, Moreno Formation: Drugg, Warren S. 07704

Florida, coccoliths, Eocene-Oligocene: Wilson, James. 00881

Trinidad, Cipero section, calcareous nannoplankton, zonation: Bramlette, M. N. 09129

Tunispheeridium n.gen.

Silurian, New York, western, Maplewood Shale, n.spp.: Deunff, Jean. 06923

Protozoa

Quaternary

Temperature and chronology indicators, Pleistocene: Burkholder, Paul R. 07970

Tinninida

Eocene, Mississippi, Moodys Branch Formation, new: Tappan, Helen. 06032

Jurassic-Holocene, taxonomy, morphology, lorica composition: Tappan, Helen. 06032

Pteridophytes

Actinoxylon banksii, n.gen., n.sp.

Devonian, New York, Cairo area, progymnosperm: Matten, Lawrence C. 02429

Arnoldella minuta

Pennsylvanian, Kentucky, synonymy with *Kalymma*: Seaby, W. S. 02344

Astralopteris

Cretaceous, Arizona, Wyoming, soral morphology: Rushforth, Samuel R. 06140

Azolla (Filifera) circinata, n.sec., n.sp.

Cretaceous, Montana, eastern, Judith River Formation: Hall, John W. 03146

Azolla montana, n.sp.

Cretaceous, Montana, Hell Creek Formation: Hall, John W. 04527

Azollopsis, n.gen.

Cretaceous, Montana, eastern, n. spp.: Hall, John W. 03146

Biscaliptera musata

Pennsylvanian, Illinois, Calhoun coal: Phillips, Tom L. 00622

Cretaceous

Minnesota, Windrow Formation, south-central: Hall, John W. 05021

Devonian

New York, Hamilton Group, Cairo area: Matten, L. C. 02345

New York, Upper, lycopod, Greene County: Banks, H. P. 05114

Drepanophycus gaspianus

Devonian, New Brunswick, morphology: Grier, J. D. 02880

Drepanophycus spinaeformis

Devonian, Upper, New York, Greene County: Banks, H. P. 05114

Equisetales

Tertiary, Washington, Chuckanut Formation: Pabst, Marie B. 02582

Filicales

Tertiary, Washington, Chuckanut Formation: Pabst, Marie B. 02582

Jurassic

Mexico, Oaxaca area, glossopterid: Delevoryas, T. 02304

Lepidophloios kansanus

Carboniferous, Illinois, coal beds: Delevoryas, Theodore. 07920

Pteridophytes—Continued

Lepidostrobohyllum, n. comb.
Pennsylvanian, Missouri, Drywood Fm.: Basson,
Philip W. 08065

Lepidostrobus fayettevillense, n.sp.
Mississippian, Arkansas, Fayetteville Shale:
Taylor, Thomas N. 00584

Lycopsidea
Devonian, New Brunswick: Grierson, J. D.
02880
Pennsylvanian, Ohio, Kimberly area, Upper
Freeport coal: Abbott, Maxine L. 04380

Morphology
Glossopterid sporophyll: Schopf, J. M. 02305
Lycopods, underground parts, Pennsylvanian:
Frankenberg, Julian Myron. 04450
Rhacophyton ceratangium, West Virginia,
Devonian: Andrews, Henry N. 09348

Paleozoic
Carbohydrates, components, possible biochemi-
cal evolution: Swain, F. M. 06304

Pennsylvanian
Kansas, coal balls, Cherokee County: Otto,
David Arthur. 01704

Psilophyton
Devonian, Maine, morphology: Andrews, Hen-
ry. 02346
Devonian, redescribed: Hueber, Francis M.
09405

Psilophyton forbesii, n.sp.
Devonian, Maine, northern, Trout Valley For-
mation: Andrews, Henry N. 00362

Rhabdoxylon americanum, n.sp.
Pennsylvanian, Illinois, Mattoon Formation:
Dennis, Robert L. 04495

Rhacophyton ceratangium, n. sp.
Devonian, West Virginia, Hampshire shale: An-
drews, Henry N. 09348

Russellites taeniata, n.gen., n.comb.
Permian, Texas, Belle Plains Formation, noeg-
gerathialean: Mamay, Sergius H. 10957

Selaginella fraiponti, n.comb.
Pennsylvanian, Kansas, southeastern: Schlanker,
C. M. 02351

Sigillaria
Pennsylvanian, Illinois, Upper, coal balls: Fran-
kenberg, J. M. 02314

Sphenophyllum multirame, n.sp.
Pennsylvanian, Illinois, Kewanee Group: Dar-
rah, Elsie Louise. 02552

Sphenopsida
Pennsylvanian, Ohio, Kimberly area, Upper
Freeport coal: Abbott, Maxine L. 04380

Stigmaria
Morphology, lateral appendages: Frankenberg,
J. M. 09383
Morphology, lateral appendages: Frankenberg,
J. M. 09383

Pennsylvanian, North America, morphology:
Frankenberg, Julian Myron. 04450

Stigmariopus
Pennsylvanian, North America, morphology:
Frankenberg, Julian Myron. 04450

Taxonomy
Psilophytes, Devonian, review: Andrews, Henry
N. 00362

Tingia taeniata Darrah
Permian, Texas, assigned to *Russellites*, n.gen.:
Mamay, Sergius H. 10957

Pteropoda

Quaternary
Biostratigraphy, Pleistocene, method: Chen,
Chin. 03129

Pteropoda—Continued

Quaternary—Continued

Deep-sea sediments, vertical, horizontal dis-
tribution: Herman, Yvonne. 08727

Puerto Rico

Absolute age

North-central, zircon, lead-alpha: Nelson,
Arthur E. 00799

Areal geology

Adjuntas quadrangle: Mattson, Peter H. 04243
Agua Buenas quadrangle: Pease, Maurice H.,
Jr. 01804
Bayaney quadrangle: Nelson, Arthur E. 01807
Coamo area: Glover, Lynn, 3d. 01730
Jayuya quadrangle: Mattson, Peter H. 04244
Naranjito quadrangle: Pease, Maurice H., Jr.
09447

Geomorphology

Airphotos, geographic zones and subzones,
vegetation: Dansereau, Pierre. 08912
Arecibo quadrangle, karst topography: Briggs,
Reginald P. 04762
Karst evolution, haystack-doline: Birot, P.
07984
Karst, solution rate: Birot, Pierre. 10917
Northern, karst in Tertiary limestone: Monroe,
Watson H. 11329
Northwestern, changes in level, beach deposits,
high-level: Monroe, Watson H. 02706
Rio de la Plata area: Williams, Richard S., Jr.
09952
Tors, genesis, evidence: Cunningham, Frank F.
07333

Geophysical surveys

Radioactivity, airborne, correlation with areal
geology: Pitkin, James A. 05866
Soils, properties, radioactivity, gamma-ray: Wil-
liamson, A. N. 06385

Maps, geologic

Adjuntas quadrangle: Mattson, Peter H. 04243
Agua Buenas quadrangle: Pease, Maurice H.,
Jr. 01804
Arecibo quadrangle: Briggs, Reginald P. 04762
Bayaney quadrangle: Nelson, Arthur E. 01807
Jayuya quadrangle: Mattson, Peter H. 04244
Naranjito quadrangle: Pease, Maurice H., Jr.
09447

Maps, structure

Las Palmas area, gneissic amphibolite body:
Tobisch, Othmar T. 01657

Marine geology

Crustal features, Puerto Rico Trench, north
slope: Chase, R. L. 09502

Mineralogy

Clay minerals, river sediments, relation to
watershed climate: Ehlmann, Arthur J. 03528

Paleontology

Foraminifera, Quaternary, reefs, assemblages,
correlation: Seiglie, George A. 06349
Mammalia, Holocene, cave deposits, insecti-
vores, bats: Choate, Jerry R. 09033
Mollusca, Cretaceous, San German Formation,
chitons: Smith, Allyn G. 02900

Petrology

Bermeja complex, gneissic amphibolite,
metamorphism: Tobisch, Othmar T. 08034
Las Palmas area, basal complex, significance in
island arc history: Tobisch, Othmar T. 01657
North-central, intrusive rocks, composition:
Nelson, Arthur E. 00799

Sedimentary petrology

Northwestern, beach deposits, eolianite: Mon-
roe, Watson H. 02706

Puerto Rico—Continued

Stratigraphy

- Cretaceous-Quaternary, Adjuntas quadrangle, sections: Mattson, Peter H. 04243
 Cretaceous-Quaternary, Jayuya quadrangle, nomenclature: Mattson, Peter H. 04244
 Cretaceous-Tertiary, Arecibo quadrangle: Briggs, Reginald P. 04762
 Cretaceous-Tertiary, Naranjito-Aguas Buenas area: Pease, Maurice H., Jr. 01109
 Oligocene-Miocene, limestone complex: Monroe, Watson H. 08812
 Tectonic sequences: Mattson, Peter H. 08216
 Tertiary, Aguada Limestone, northwestern: Monroe, Watson H. 04775

Structural geology

- Cretaceous-Tertiary terrain, strike-slip faulting: Briggs, Reginald P. 08623
 Puerto Rico Trench, age: Monroe, Watson H. 01071
 Serpentinite emplacement: Mattson, P. H. 11025

Weathering

- Cordillera Central, volcanics: Ehlmann, Arthur J. 10070
 Uplands, saprolite on andesite flow breccia: Flach, K. W. 07418
 Volcanics, clay minerals, relation to climate: Ehlmann, Arthur J. 03528

Quaternary*Absolute age*

- Altithermal, Wyoming, Montana: Husted, Wilfred M. 02328
 C-14 and K-Ar methods, limitations: Damon, P. E. 03948
 Methods, K-Ar: Dalrymple, G. B. 03993
 Pleistocene, magnetic reversals, deep-sea sediments: Ericson, David B. 05167

Alabama

- Conecuh County, stratigraphy: Reed, Philip C. 07050
 Covington County, stratigraphy: Turner, J. D. 06084
 Crenshaw County, stratigraphy: McWilliams, R. G. 06085
 Dale County, stratigraphy: Newton, John G. 06083
 Henry County, stratigraphy: Newton, John G. 06086
 Pike County, stratigraphy: Shamburger, Victor M., Jr. 06087

Alaska

- Alaska Range, glacier advances, recent: Reger, Richard D. 01130
 Cook Inlet area, correlation, radiometric dates: Karlstrom, T. N. V. 03991
 Fairbanks area, Mammalia, Pleistocene, late, ecology: Guthrie, R. D. 00812
 Fairbanks area, silt section, Wisconsin: Sellmann, Paul V. 08072
 Glaciation and Bering land bridge: Cohen, Gaston. 03132

Alberta

- Banff area, glacial advances, Pleistocene: Rutter, Nathaniel W. 08063
 Banff area, stratigraphy: Rutter, N. W. 04091
 Edmonton-Cadomin area, Highways 16 and 47, surficial geology: Williams, G. D. 09683
 Foremost-Cypress Hills area, Pleistocene stratigraphy: Westgate, J. A. 06698

Quaternary—Continued

Alberta—Continued

- Foremost-Cypress Hills area, prairie mounds, morphoclimatic observations: Bik, M. J. J. 07342

- Southwestern, moraines, correlation: Wagner, W. Philip. 07967

American Samoa

- Manu'a Islands, stratigraphy: Stice, Gary D. 11380

Arctic

- Holarctic tundra ecosystems, history, vertebrate faunas: Hoffman, R. S. 02080
 Polar wandering, continental drift, relation to glaciation: Cox, Allan. 04168

Arizona

- Coconino County, palynomorphs, lake sediments: Whiteside, Melbourne C. 11426
 Flagstaff area, basalts, magnetic paleointensity: Strangway, David W. 04285
 Mohave County, Pleistocene, Aves: Phillips, Allan R. 03090
 San Francisco Peaks, glacial deposits: Updike, Randall G. 04391
 San Pedro River valley, stratigraphy: Haynes, C. Vance. 02666
 Southeastern, Mammalia: Cantwell, R. J. 04389
 Southern, Lake Cochise deposits, palynology, Pleistocene: Hevly, Richard H. 11381
 Winona area, Mollusca, lake sediments: Batchelder, George L. 04388

Atlantic Coastal Plain

- Sedimentary sequences, lithofacies: Owens, James P. 08964
 Submarine canyons, Ostracoda, Pleistocene distribution: Hazel, Joseph E. 05693

Atlantic Ocean

- Evolution of bottom water mass, effect on sediments: Worthington, L. V. 04163
 Northern, biogeography, late land connections: Lindroth, Carl H. 11398
 Protista, dinoflagellates: Wall, David. 06029
 Salinity and temperature changes, role in glaciation: Weyl, Peter K. 04162

Bahamas

- New Providence Platform, Pleistocene bedrock, Holocene carbonates: Taft, William H. 06319

Barbados

- Coastal terraces, Pleistocene changes in level: Broecker, Wallace S. 00211

Bermuda

- Gastropoda: Gould, Stephen Jay. 01746
 Gastropoda, ontogenetic allometry, pedomorphic subsp.: Gould, Stephen Jay. 05739

British Columbia

- Dease Lake, Mammalia, muskox, Pleistocene: Harington, C. R. 05478
 Douglas Channel, glacial deposits, correlation: Armstrong, John E. 08228
 Juan de Fuca Strait, Vashon ice terminus: Anderson, Franz E. 07649
 Purcell Trench, Olympia Interglaciation, absolute age: Fulton, R. J. 02691
 Vancouver Island, Cowichan ice tongue, stages: Halstead, E. Carl. 07208

California

- Anza-Borrego Desert, Mammalia, Palm Springs Formation: White, John A. 04335
 Colorado Desert, Vertebrata, Plio-Pleistocene succession: Downs, Theodore. 05061
 Continental borderland, Tanner Basin, sedimentation history: Gorsline, Donn S. 01904

Quaternary—Continued

California—Continued

- Fremont Peak and Opal Mtn. quadrangles, stratigraphy: Dibblee, T. W., Jr. 01841
- La Jolla submarine canyon, Ostracoda, Holocene: Holden, John C. 08063
- McKittrick tar pits, Mammalia, Aves, Pleistocene: Church, C. C. 02857
- Palos Verdes area, Mammalia, Pleistocene: Miller, Wade E. 08303
- Paso Robles Formation, paleocurrents: Galehouse, Jon S. 01078
- Rancho La Brea, Mammalia, bison, camel: Miller, Wade E. 06900
- Saline Valley, Holocene nonmarine evaporites: Hardie, Lawrence A. 06675
- San Joaquin Valley, lacustrine deposits, C-14 dates: Croft, M. G. 00785
- San Pedro, Pisces, Timms Point silt, Pleistocene: Fitch, John Edgar. 06804
- Santa Barbara Island, biostratigraphy: Lipps, Jere H. 02202
- Santa Cruz area, marine terrace, absolute age: Bradley, William C. 03004
- Searles Lake, Wisconsinan sedimentation, climate: Smith, G. I. 03975
- Sierra Nevada, Big Pine drainage area, glacial deposits: Fleisher, P. Jay. 07723
- Sierra Nevada, Big Pine drainage, glaciation episodes: Fleisher, Penrod Jay. 01342
- Sierra Nevada, glacial-climatic events, Pleistocene: Curry, Robert Rodney. 07188
- Sierra Nevada, gymnosperms: Morey, P. R. 02309
- Sierra Nevada, Pleistocene till, three-million year old icecap: Curry, Robert R. 04246
- Sierra Nevada, Sherwin till-Bishop tuff relations: Sharp, Robert P. 01077
- Sierra Nevada, West Walker River, glacial deposits: Clark, Malcolm Mallory. 11232
- Southern, Invertebrata: Frazier, Kenneth. 00019
- Southern, paleoecology, Santa Barbara fauna: Meade, Robert F. 07879
- Tanner Basin, marine sedimentation, late Pleistocene: Gorsline, D. S. 08706
- Tomales Bay, Pisces: Follett, W. I. 01777
- Truckee River valley, correlation: Birkeland, P. W. 03976

Canada

- Arctic mainland, western, palynology, problems: Terasmae, J. 02583
- Eastern seaboard, Pleistocene glaciation, maximum extent: Ives, J. D. 11399
- Western Interior, palynology, Holocene: Lichti-Federovich, S. 11421

Caribbean region

- Climatic changes: Zonneveld, J. I. S. 07296
- Foraminifera, Holocene, benthonic, bibliography: Seiglie, George A. 06024

Caribbean Sea

- Base of Pleistocene, foraminiferal stratigraphy: Beard, John H. 09326
- Protista, dinoflagellates: Wall, David. 06029

Colorado

- Boulder County, Front Range, glacial deposits: Wallace, Ronald Gary. 02623
- Rocky Mountain Arsenal area, history: DeVoto, Richard H. 03819
- Sangre de Cristo Mts. area, volcanics: Johnson, Ross B. 11070

Quaternary—Continued

Connecticut

- Coastal marshes, sediments, environments: Bloom, Arthur L. 09356
- Hamden-Wallingford area, stratigraphy: LaSala, A. M., Jr. 00935

Continental margin

- Florida-Hatteras slope, stratigraphy: Zarudzki, E. F. K. 05050

Correlation

- North America, techniques, symposium: Morrison, Roger B. 03988
- Paleomagnetic method: Cox, Allan. 03986
- Principles, glacial deposits: Ray, L. L. 03990
- Pteropods in pelagic sediments: Chen, Chin. 03129

Costa Rica

- Turrialba zone, stratigraphy: Malavassi V., Enrique. 10673

Cuba

- Habana province, Pleistocene owl: Brodkorb, Pierce. 08052

Delaware

- Coastal area, Pleistocene-Recent unconformity: Kraft, John C. 09415

Florida

- Apalachicola coast, Pleistocene-Holocene stratigraphy: Schnable, Jon E. 06659
- Flagler County, Pelecypoda, Pamlico Formation: Lewis, Jackson E. 03012
- Florida Keys, Key Largo Limestone, paleogeography: Hoffmeister, J. E. 04292
- Reddick area, Aves, first Pleistocene records: Brewer, Richard. 06702
- Southern, Miami Oolite: Hoffmeister, J. Edward. 08953

Foraminifera

- Pelagic, Pleistocene depth habitats, temperatures: Lidz, Barbara. 00115

General

- Arctic and alpine environments, analysis, symposium: Wright, H. E., Jr. 02079
- Climate change, C-14, cosmogenic, variations: Damon, Paul E. 04140
- Climate change, C-14, cosmogenic, variations: Suess, Hans E. 04173
- Climatic change, astronomical theory, insolation variations: Broecker, Wallace S. 04172
- Climatic change, astronomical theory, thermal Rossby number: Kutzbach, John E. 04171
- Correlation, Pleistocene glacial cycles, climates, evolution of man: Emiliani, Cesare. 10951
- Glaciation onset, increasing altitudes of continents: Hamilton, Warren. 04170

Georgia

- Atlantic coast, barrier island-lagoonal complex, evolution: Hails, John R. 07319
- Bartow County, Mammalia, Pleistocene: Ray, Clayton E. 00891
- Coastal area, shelf and paralic sediments: Henry, Vernon J., Jr. 05435
- Shoreline deposits, correlation: Hoyt, J. H. 03977
- Southeastern, stratigraphy, Pleistocene: Hoyt, John H. 10310

Great Lakes region

- Lake Huron, diatoms, core assemblage, distribution: Stoermer, E. F. 07085
- Paleoclimatology, indicator, postglacial: Stuiver, Minze. 04062
- Paleoecology: Cleland, Charles Edward. 10126

Quaternary — Continued

Greenland

Holsteinsborg area, changes in level: Weidick, Anker. 02067

Guam

Storm-rubble ramparts, carbon-14, Holocene: Curray, J. R. 08652

Gulf Coastal Plain

Central, depositional history, summary: Rainwater, E. H. 09324

Northern, Holocene, stratigraphy, environments cf. Eocene: New Orleans Geological Society. 08128

Western, Deweyville Formation: Aronow, Saul. 10280

Gulf of Mexico

Base of Pleistocene, foraminiferal stratigraphy: Beard, John H. 09326

Gulf of St. Lawrence

Northumberland Strait, cores, Foraminifera and stratigraphy: McRoberts, Jill H. E. 07979

Hawaii

Oahu, boreholes, micropaleontology, Pleistocene: Resig, Johanna M. 08851

Idaho

Cascadia Cave, artifacts, Holocene: Newman, Thomas M. 09198

Eastern, Owl Cave, sediment fill: Dort, Wakefield, Jr. 02539

Malad Hill, correlation: Swanson, Earl H., Jr. 06169

Mammalia, Birch Creek valley, Jaguar Cave, large dog: Lawrence, Barbara. 06168

Snake River Plain, Melon Gravel, Lake Bonnevill flood: Malde, Harold E. 05449

Soda Springs area, Mammalia, Gastropoda: Jones, Robert W. 00383

Illinois

Barry area, Pleistocene glacial and fluvial deposits, guidebook: Illinois State Geological Survey. 05855

Iowan drift, stratigraphy: Leighton, Morris M. 03449

Loess, age: Frye, John C. 02533

Mammalia, Pleistocene, musk oxen: Ray, Clayton E. 04379

Nomenclature, Pleistocene, Wisconsin Stage: Frye, John C. 04839

Northern, late-Altonian sequence, C-14 ages: Kempton, J. P. 03979

Princeton area, Pleistocene deposits: Illinois State Geological Survey. 05758

Iowa

Iowan drift, stratigraphy: Leighton, Morris M. 03449

Northeastern, Iowan drift: Ruhe, R. V. 03518

Kansas

Meade County, Gastropoda, Pleistocene: Miller, Barry B. 02599

Northeastern, Nebraskan, Kansan glaciofluvial deposits: Bayne, Charles K. 07643

Kentucky

Boone County, northwestern, glacial drift, relation to Holocene forests: Keith, John R. 07988

Henderson County, Mollusca, Peoria loess: Browne, Ruth G. 01681

Vertebrata, Pleistocene: Jillson, Willard Rouse. 09411

Louisiana

Continental shelf, stratigraphy, Pleistocene: Fails, Thomas G. 10898

Quaternary — Continued

Louisiana — Continued

Mississippi River, South Pass mouth, mudlumps, core study: Morgan, James P. 09199

Manitoba

Tiger Hills area, palynology, Holocene: Ritchie, J. C. 02736

Maryland

Cranesville Swamp, palynology: Cox, Donald D. 04346

Massachusetts

Cape Cod, Pleistocene stratigraphy: Oldale, Robert N. 09812

Plum Island, marshes, stratigraphy, Holocene: McCormick, Charles Larry. 07194

Mexico

Baja California, Mollusca, northwestern: Perrilliat Montoya, Maria del Carmen. 09131

Baja California, shoreline deposits, facies: Walker, Theodore R. 03890

Sierra del Tunal, northeastern, stratigraphy: Humara Gomez, Gilberto. 07363

Sonora area, Aves, Pleistocene, turkey: Cracraft, Joel. 02811

Minnesota

"Big Woods" area, palynology, Holocene: McAndrews, John H. 11172

Palynology, late-glacial and postglacial forest: Wright, H. E., Jr. 06124

Mississippi

Pleistocene loess, correlation: Snowden, J. O., Jr. 05668

Mississippi Valley

Lower, alluvial deposits, history: Saucier, Roger T. 02505

Missouri

Independence quadrangle, Pleistocene stratigraphy: Parizek, Eldon J. 02917

Northwestern, Ferrellview Formation: Howe, W. B. 02313

Saint Joseph area, Pleistocene stratigraphy: Association of Missouri Geologists. 08126

Western Ozarks, palynology, Pleistocene boreal forest: Mehringer, Peter J., Jr. 03104

Montana

Deer Lodge Valley, stratigraphy: Konizeski, R. L. 04376

Nevada

Gabbs area, diatoms, mine-tailings assemblage: VanLandingham, S. L. 06080

Lake Lahontan area, correlation: Birkeland, P. W. 03976

Mohave Desert, palynology, Pleistocene: Mehringer, Peter J. 11386

Tule Springs site, palynology, paleoecology: Mehringer, Peter J. 07195

New Brunswick

Ben Lomond area, Pleistocene drift, deltaic and marine deposits: Melvin, R. L. 05532

New Jersey

Northern, paleoecology, Pleistocene: Harmon, Kathryn Parker. 06533

Trenton area, sediments, provenance: Owens, James P. 08207

New Mexico

Rio Grande valley, Caballo Dam area, Mollusca: Metcalf, Artie L. 11047

Sangre de Cristo Mts. area, volcanics: Johnson, Ross B. 11070

New York

Buffalo area, Lake Erie basin, history: Calkin, Parker E. 01138

Quaternary—Continued

New York—Continued

Erie-Niagara basin, lithologic units, ground-water resources: LaSala, A. M., Jr. 09113
Long Island, Gardiners Clay: Upson, Joseph E. 08198

Long Island Sound, Late-Wisconsin lacustrine, marine episodes: Newman, Walter S. 09808

Massena area, Pleistocene diatoms, paleoecology: O'Brien, Neal R. 04401

Montauk Peninsula, Pleistocene stratigraphy: Newman, Walter S. 01815

Paleogeography, Massena area, Pleistocene: O'Brien, Neal R. 04401

Western, Kent glaciation, correlation: Muller, Ernest H. 08205

Nomenclature

Holocene for Recent: Woodring, W. P. 05637

North America

Artifacts, early man sites, prehistory concepts:

Jennings, Jesse D. 09000

Correlation, glacial sequence, with southern hemisphere: Suggate, R. P. 03992

Correlation, soil horizons: Morrison, R. B. 03989

Eastern, Cary-Port Huron Interstade, correlatives: Dreimanis, Aleksis. 09768

Eastern, mastodon extinction, late Pleistocene climate: Dreimanis, A. 10976

Glaciation, meteorological-isostatic model: Tanner, William F. 04169

Juan de Fuca Strait, sedimentation, Pleistocene: Anderson, Franz E. 08601

Mammalia, lemmings, species divergence: Guilday, John E. 08061

Mammalia, short-faced bears: Firby, Jean B. 08271

Man, fossil: Hibben, Frank C. 06186

Midcontinent, Vertebrata, stratigraphic distribution: Schultz, C. Bertrand. 02329

Northwest Territories

Banks Island, Mammalia, Wisconsin age: Maher, William J. 05658

Nova Scotia

Continental shelf, terraces, Pleistocene shorelines: Stanley, Daniel J. 07340

Ohio

Angiosperms, Pleistocene: Morey, P. R. 02309

Cincinnati area, Pleistocene deposits, drainage changes: Durrell, Richard H. 06669

Garfield Heights area, Pleistocene deposits, age, correlation: White, George W. 01887

Gastropoda, fresh-water, Pleistocene: LaRocque, Aurele. 05642

Oklahoma

Caddo County, diatoms, Fisher Canyon deposit: Bond, T. A. 05020

McCurtain, Beaver, Harper Counties, Porifera, Pleistocene: Branson, Carl C. 05141

Ontario

Etobicoke Township, Pleistocene stratigraphy: Watt, A. K. 01791

Guelph area, stratigraphy: Karrow, P. F. 02964

Manitoulin Island, history: Lewis, C. F. M. 05304

Ottawa area, marine algal bed, absolute age: Mott, R. J. 01962

Scarborough area, Pleistocene deposits: Karrow, P. F. 09516

Woodbridge area, Mammalia, mammoth, Pleistocene: Churcher, C. S. 09026

Quaternary—Continued

Oregon

Coos Bay area, stratigraphy, revisions: Baldwin, Ewart M. 09589

Pacific Ocean

Cascadia basin, Blanco Fracture zone, sedimentation: Duncan, John Russell, Jr. 07153

Panama

Gulf of Panama, Holocene sedimentation: Golik, Abraham. 04429

Pennsylvania

Northwestern, pre-late Wisconsinan tills, correlation: White, George W. 10797

Principles

Soil-stratigraphic units, application: Morrison, R. B. 03989

Pteropoda

Deep-sea sediments, vertical, horizontal distribution: Herman, Yvonne. 08727

Puerto Rico

Mammals, Holocene cave deposits, insectivores, bats: Choate, Jerry R. 09033

Northwestern, beach deposits, high-level: Monroe, Watson H. 02706

Pleistocene-Holocene reefs, Foraminifera, correlation: Seiglie, George A. 06349

Quebec

Invertebrata, marine, check list: Wagner, Frances J. E. 06905

Lake No. 2, Gastropoda, Pleistocene paleoecology: Warner, David J. 03757

Lake Saint Jean area, Invertebrata, post-glacial submergence: Dionne, Jean-Claude. 06904

Little Whale River area, Wisconsin ice dispersal center, isostasy: Archer, David R. 05035

Montmorency forest, palynology, type spectrum: Richard, Pierre. 02050

Saint Hilaire area, absolute age, Pleistocene-Holocene sediments: Terasmae, J. 01971

Southeastern, deglaciation effects, postglacial rebound: McDonald, Barrie C. 05677

Southeastern, Wisconsin deposits: McDonald, Barrie C. 09801

Saskatchewan

Saskatoon area, Sutherland and Saskatoon Groups: Christiansen, E. A. 05479

West-central, Battleford Formation, Woodfordian age: Christiansen, E. A. 01965

South Carolina

Wicomico Formation, fauna: Colquhoun, D. J. 03005

South Dakota

Beadle County, Pleistocene deposits: Hedges, Lynn S. 06026

Bennett, Walworth, Lincoln Counties, Mammalia, Pleistocene, muskrats: Harksen, J. C. 06895

Pickrel Lake, paleolimnology: Watts, W. A. 01999

Southwestern, Red Dog Loess: Harksen, J. C. 10521

Tennessee

Cave deposits, Mollusca, Pleistocene: Bickel, David. 03649

Texas

Comstock-Indian Wells area, stratigraphy: Freeman, Val L. 05865

Friesenhahn Cave, Mammalia, mice, species analysis: Martin, Robert A. 05566

Houston area, Reptilia, Pleistocene, box turtle: McClure, William L. 11186

Quaternary—Continued

Texas—Continued

Lake Lomax basin, sedimentation: Frye, J. C. 03978

Rio Grande valley, El Paso area, Mollusca: Metcalf, Artie L. 11047

United States

Allegheny Plateau, northwestern, till sheets: White, G. W. 05655

Central, paleosols in loess: Ruhe, Robert V. 02326

Continental margin, northeastern, stratigraphy: Gibson, Thomas G. 05234

Great Basin, Pleistocene periglacial climate: Major, Jack. 02089

Northeastern, Mollusca, faunas: Richards, Horace G. 08202

Southern, Mammalia, Pleistocene, rodent distribution, climate: Martin, Robert A. 09032

Southwestern, stratigraphy, alluvial material: Haynes, C. V., Jr. 03980

Utah

Lake Bonneville, sediments, stratigraphy: Bisell, Harold J. 11442

Virginia

Norfolk area, Pleistocene Vertebrata, Kempville Formation: Ray, Clayton E. 03172

Princess Anne County, Nansemond Formation, Pleistocene: Rogers, W. S. 02526

Virginia Beach area, Mears Corner pit, late Pleistocene section: Luebke, William C. 06159

Washington

Island County, Pleistocene stratigraphy: Easterbrook, Don J. 05044

Juan de Fuca Strait, Vashon ice terminus: Anderson, Franz E. 07649

Leavenworth area, glacial sequence, revision: Long, William A. 10017

Three Springs Bar archeological site, stratigraphy: Daugherty, Richard D. 09889

West Indies

Barbados Ridge, cores, stratigraphy, Foraminifera: Ramsay, A. T. S. 07978

Bonaire, limestone cap, coral reefs: Zonneveld, J. I. S. 07046

Navassa, Reptilia, Pleistocene(?), list: Patton, Thomas H. 00805

West Virginia

Cranesville Swamp, palynology: Cox, Donald D. 04346

Wisconsin

Nomenclature, Pleistocene, Wisconsinan Stage: Frye, John C. 04839

Wisconsinan Stage, chronology: Black, Robert F. 02282

Wisconsinan Stage chronology, C-14 dates: Black, Robert F. 02282

Worldwide

Wisconsin Stage, climatic changes, review: Horie, Shoji. 10192

Wyoming

Converse County, Mammalia, Little Box Elder cave: Anderson, Elaine. 08060

Yukon

Porcupine River, Ostracoda, Pleistocene, freshwater fauna: Delorme, L. D. 09027

Quebec*Absolute age*

Kenogami area, wood, C-14: LaSalle, Pierre. 01976

Manicouagan River valley, barnacle in clay, C-14: Sauve, Pierre. 06931

Quebec—Continued*Absolute age*—Continued

Saint Hilaire area, Pleistocene sediments: Terasmae, J. 01971

Saint Lawrence graben, alkaline rocks: Doig, Ronald. 07240

Southeastern, interstadial sediments, carbon-14: McDonald, Barrie C. 09801

Areal geology

Baskatong Reservoir area, west half: Jacoby, R. S. 05636

Chefs Lake area: Hardy, Richard. 05635

Lac Joseph (Labrador) area: Stevenson, I. M. 04737

Leaf River area: Stevenson, I. M. 09117

Matagami area: Sharpe, John I. 07859

McKenzie Township, northwest quarter: Duquette, Gilles. 08159

Noranda area, mining properties, field guide: MacIntosh, J. A. 10146

Northwestern, mining districts, field guide: Canadian Inst. Mining and Metallurgy. 10131

Sainte Adele-Louvicourt area, Montreal-Senneterre Highway, road log: Wynne-Edwards, H. R. 10133

Sainte Adele-Senneterre area, Grenville province: Wynne-Edwards, H. R. 10132

Woburn-East Megantic-Armstrong area: Marleau, R.-A. 03173

Economic geology

Asbestos, Thetford and Black Lake areas: Salas, Guillermo P. 09531

Copper, Chibougamau area, Copper Rand mines, occurrence, grade control: Parrish, I. S. 05326

Copper, gold, Chibougamau area, Campbell mines, reserve estimation, occurrence: Krause, C. A. 05325

Copper, Murdochville area, Gaspé mines and open pits, grade control: MacIsaac, W. 05307

Gold, Abitibi County, Sigma mines: Hoyles, N. J. S. 10134

Gold, East Malartic mine, grade control, occurrence: Rancourt, C. 11345

Gold, Louvicourt Township, occurrence: Sharpe, John I. 07858

Gold, Malartic area, Camflo mines: Meikle, B. K. 10138

Gold, Malartic area, East Malartic mines: Rancourt, C. 10137

Gold, polymetallic ores, Noranda area: Spence, C. D. 10140

Gold, silver ratios, Lamaque and Sigma mines: Fitzgerald, A. C. 11413

Gold, silver, Val d'Or-Bourlamaque area, Lamaque mine: Graham, R. J. 10135

Iron, Knob Lake area, reserve estimation, grade control: Dagenais, J. E. 05309

Iron, LaBlache Lake deposit, geochemistry, genesis: Anderson, A. T. 04432

Iron, Labrador geosyncline, occurrence, resources: Gross, G. A. 11113

Iron, metallogenic patterns, Superior Province: Kalliokoski, J. 05434

Iron, other mineral resources, Leaf River area: Stevenson, I. M. 09117

Iron, Schefferville area, Precambrian, exploration: Seguin, Maurice. 05669

Metals, exploration: McDougall, David J. 09430

Molybdenum, Abitibi County: Wilson, Arnold. 11066

Molybdenum, Preissac mines: Watt, Peter D. 10139

Quebec—Continued*Economic geology—Continued*

- Petroleum, natural gas, Anticosti Island, exploration: Roliff, W. A. 04718
- Polymetallic ores, Abitibi County, Manitou Barvue mines: Ramsay, B. A. 10136
- Polymetallic ores, gold, silver, Noranda area, occurrence: Sharpe, John I. 10145
- Polymetallic ores, Matagami area, occurrence: Sharpe, John I. 07859
- Polymetallic ores, Noranda area, Delbridge mines: Boldy, J. 10144
- Polymetallic ores, Noranda area, Lake Dufault mines: Purdie, J. J. 10143
- Polymetallic ores, Noranda area, West Norbeck mine, reserve estimation: Purdie, J. J. 05317
- Polymetallic ores, Noranda district, Delbridge deposit, genesis: Boldy, J. 07758
- Polymetallic ores, Quemont mine, reserve estimation: Weeks, Ross M. 05219
- Polymetallic ores, Rouyn Township, Horne mine: Hodge, H. J. 10141
- Polymetallic ores, Rouyn Township, Quemont mines: Weeks, Ross. 10142
- Vanadium, Chibougamau area, Dore Lake complex, occurrence, exploration: Allard, Gilles O. 03609

Engineering geology

- Clays, Berthierville area, sensitive, pore pressure dissipation: Samson, L. 06060
- Clays, Lac Quevillon, foundation properties: Brzezinski, L. S. 09360
- Clays, shear strength, post-peak behavior of sensitive: Ladanyi, B. 04257
- Clays, Sorel area, Leda clay, overconsolidated: Samson, L. 06062
- Clays, Sorel area, smelter furnace foundation, Leda clay: Meyerhoff, G. G. 06061
- Foundations, Sorel area, smelter furnace, Leda clay consolidation: Golder, H. Q. 06071
- Landslides, Toulmoustou River, cause, soil properties: Quigley, R. M. 04253
- Mining property evaluation, Knob Lake area: Nichols, Lee. 07329
- Slope stability, Lac Jeannine, open-pit mine: Gagnon, J. M. Rejean. 07753
- Soils, Outardes 2 project, properties: Sainani, U. R. 04252

General

- Bibliography, periglacial studies: Dionne, Jean-Claude. 06362
- Publications, catalog, Dept. Natural Resources: Quebec Department Natural Resources. 05701

Geochemistry

- Beloeil area, ground water, analyses, evolution: Tremblay, J.-J. 04712
- Carbonatite complexes, carbon, oxygen isotopes: Deines, Peter. 03037
- Chibougamau, wall rocks, element distribution patterns: Hawkins, W. M. 08217
- Igneous rocks, associated ore deposits, thermoluminescence: McDougall, David J. 03959
- Noranda district, sulfide ores, Rb:Sr ratios: Reesman, R. H. 04523
- Noranda volcanic belt, Blake River Group, analyses: Baragar, W. R. A. 02723
- Quemont mine, sphalerite composition: Campbell, F. A. 06975

Geomorphology

- Eastern Townships, landform description: Ritchot, Gilles. 06363

Quebec—Continued*Geomorphology—Continued*

- Kamouraska County, soils, classification, genesis: Baril, Roger. 11052
- Kenogami area, north of Saguenay River, landslide: LaSalle, Pierre. 01976
- Lake Saint Jean area, post-glacial submergence: Dionne, Jean-Claude. 06904
- Landslides, mud-flow type: Chagnon, Jean-Y. 06933
- Little Whale River area, raised beach ridges, tilt: Archer, David R. 05035
- Montreal archipelago, drainage evolution, Champlain Sea stages: Macpherson, Joyce Brown. 06339
- Poste-de-la-Baleine area, morphology, analysis method: Cailleux, Andre. 07994
- Saint Lawrence Estuary, shore features, salt marshes: Dionne, Jean-Claude. 02553
- Saint Lawrence Estuary, tidal flats, shore ice action: Dionne, Jean-Claude. 07976
- Sakami Lake area, weathering, greenstone, pseudo-pillows: Anderson, Jay Earl, Jr. 00524

Geophysical surveys

- Anticosti Island, seismic, magnetic: Roliff, W. A. 04718
- Manicouagan-Wabush area, gravity, anomaly interpretation: Grant, F. S. 02738
- Monteregian plutons, magnetic, Grand Bois anomaly: Kumarapeli, P. S. 01958
- Montreal area, faults, anomaly interpretation: Sharma, Bijon. 02013
- Neilsen Island, heat flow: Jessop, Alan M. 02171
- Schefferville area, combined methods, Precambrian iron-formation: Seguin, Maurice. 05669

Glacial geology

- Chattermarks, types: Laverdiere, Camille. 07002
- Hudson Bay region, ice dispersal center: Archer, David R. 05035
- Manicouagan River valley, ice stagnation, fluvioglacial material: Sauve, Pierre. 06931
- Montreal area, recessional moraine, nomenclature: Laverdiere, Camille. 07993
- Periglacial phenomena, photogeologic mineral exploration: Avias, J. 11037
- Periglacial studies, bibliography: Dionne, Jean-Claude. 06362
- Saint-Francois-de-Sales area, moraines, crests, basal crevasse fill: Tremblay, Germain. 10767
- Southeastern, deglaciation, history: Gadd, Nelson R. 09777
- Southeastern, deglaciation, postglacial rebound: McDonald, Barrie C. 05677
- Southeastern, deglaciation, postglacial rebound: McDonald, Barrie C. 05677
- Southeastern, ice-movement directions: McDonald, Barrie C. 09801
- Trois-Pistoles area, glacial features: Dionne, Jean-Claude. 03730
- Ungava area, deglaciation, late-Wisconsin: Ives, J. D. 10128
- Ungava Peninsula, deglaciation, ice-dispersal center: Barnett, D. M. 00585

Hydrogeology

- Knob Lake mine area, ground-water problems, mining property evaluation: Nichols, Lee. 07329

Maps, aeromagnetic (See also Maps, magnetic)

- Boutet area: Canada Geological Survey. 01253
- Causapsal area: Canada Geological Survey. 01249

Quebec—Continued

Maps, aeromagnetic (See also *Maps, magnetic*)—Continued

- Collet-Laberge area: Canada Geological Survey. 01242
 Estcourt area: Canada Geological Survey. 01301
 Gaudet area: Canada Geological Survey. 02002
 Jeremie area: Canada Geological Survey. 02003
 Lac des Chasseurs area: Canada Geological Survey. 01246
 Lac Humqui area: Canada Geological Survey. 01247
 Lac Mistouac area: Canada Geological Survey. 02006
 Lac Newiska area: Canada Geological Survey. 01982
 Martigny area: Canada Geological Survey. 01245
 Milnikel area: Canada Geological Survey. 01248
 Mont Albert area: Canada Geological Survey. 01257
 Mont Logan area: Canada Geological Survey. 01254
 Monts Big Berry area: Canada Geological Survey. 01256
 Oak Bay area: Canada Geological Survey. 01251
 Perron-Rousseau area: Canada Geological Survey. 01241
 Recher-Raymond area: Canada Geological Survey. 01243
 Riviere Angers area: Canada Geological Survey. 01255
 Riviere Turgeon area: Canada Geological Survey. 01244
 Ruisseau Jerome area: Canada Geological Survey. 01252
 Saint-Jeanney area: Canada Geological Survey. 01250
 Vanier area: Canada Geological Survey. 02005

Maps, geologic

- Baskatong Reservoir area, west half: Jacoby, R. S. 05636
 Chefs Lake area: Hardy, Richard. 05635
 Daniel Township, east half: Sharpe, John I. 07859
 East Megantic-Armstrong and Woburn areas: Marleau, R.-A. 03173
 Galinee Township, north half: Sharpe, John I. 07859
 Grand Detour-Village Lakes area: Eakins, P. R. 07689
 Hart-Juane River map-area: Kish, Leslie. 07857
 Isle Dieu Township: Sharpe, John I. 07859
 Knob Lake area: Gross, G. A. 11113
 Labrador geosyncline, iron-formations: Gross, G. A. 11113
 Lac Joseph (Labrador) area: Stevenson, I. M. 04737
 Lake Memphremagog area: Boucot, Arthur J. 07861
 Leaf River area, and border islands of Northwest Territories: Stevenson, I. M. 09117
 Louvicourt Township, by quarters: Sharpe, John I. 07858
 McKenzie Township, northwest quarter: Duquette, Gilles. 08159
 Mount Wright area: Gross, G. A. 11113
 Noranda area: Spence, C. D. 10140
 Wabush Lake iron zone: Gross, G. A. 11113

Maps, geologic index

- Southeastern: Canada Geological Survey. 02957

Quebec—Continued

Maps, magnetic (See also *Maps, aeromagnetic*)

- Baie-Comeau area, airborne: Canada Geological Survey. 03286
 Baie-Trinite area, airborne: Canada Geological Survey. 03298
 Betsiamites area, airborne: Canada Geological Survey. 03339
 Cap D'espoir area, airborne: Canada Geological Survey. 03346
 Cap-Chat area, airborne: Canada Geological Survey. 03301
 Chandler area, airborne: Canada Geological Survey. 03371
 Cloridorme area, airborne: Canada Geological Survey. 03374
 Deville area, airborne: Canada Geological Survey. 03313
 Escuminac area, airborne: Canada Geological Survey. 03305
 Gaspé area, airborne: Canada Geological Survey. 03347
 Godbout area, airborne: Canada Geological Survey. 03293
 Grand Lac au Sable area, airborne: Canada Geological Survey. 06275
 Grand Lac du Nord area, airborne: Canada Geological Survey. 05849
 Grande-Vallee area, airborne: Canada Geological Survey. 03365
 Honorat area, airborne: Canada Geological Survey. 03362
 Ile de Mingan area, airborne: Canada Geological Survey. 06294
 Lac a l'Aigle area, airborne: Canada Geological Survey. 06282
 Lac a l'Eau-Doree area, airborne: Canada Geological Survey. 06273
 Lac a Renard area, airborne: Canada Geological Survey. 06288
 Lac Amariton area, airborne: Canada Geological Survey. 03289
 Lac au Loup-Marin area, airborne: Canada Geological Survey. 03281
 Lac Barbel area, airborne: Canada Geological Survey. 05840
 Lac Bardoux area, airborne: Canada Geological Survey. 06267
 Lac Beaudin area, airborne: Canada Geological Survey. 05842
 Lac Bellanca area, airborne: Canada Geological Survey. 06300
 Lac Blancy area, airborne: Canada Geological Survey. 06266
 Lac Bois-Long area, airborne: Canada Geological Survey. 05828
 Lac Bouffard area, airborne: Canada Geological Survey. 05843
 Lac Brezel area, airborne: Canada Geological Survey. 06280
 Lac Brochet area, airborne: Canada Geological Survey. 06276
 Lac Carteret area, airborne: Canada Geological Survey. 03336
 Lac Cassette area, airborne: Canada Geological Survey. 03332
 Lac Castelnau area, airborne: Canada Geological Survey. 03287
 Lac Catignan area, airborne: Canada Geological Survey. 06291
 Lac Catoua area, airborne: Canada Geological Survey. 05851

Quebec—Continued

Maps, magnetic—Continued

- Lac Clairval area, airborne: Canada Geological Survey. 05834
- Lac de la Cache area, airborne: Canada Geological Survey. 05827
- Lac de la Mine area, airborne: Canada Geological Survey. 06289
- Lac des Rapides area, airborne: Canada Geological Survey. 06271
- Lac du Chaunoy area, airborne: Canada Geological Survey. 05831
- Lac Esnault area, airborne: Canada Geological Survey. 06296
- Lac Fleur-de-May area, airborne: Canada Geological Survey. 06285
- Lac Fortin area, airborne: Canada Geological Survey. 05844
- Lac Fournier area, airborne: Canada Geological Survey. 06284
- Lac Gaillard area, airborne: Canada Geological Survey. 05825
- Lac Garend area, airborne: Canada Geological Survey. 05850
- Lac Georgette area, airborne: Canada Geological Survey. 03295
- Lac Grandmesnil area, airborne: Canada Geological Survey. 05845
- Lac Guinecourt area, airborne: Canada Geological Survey. 05820
- Lac Hermas area, airborne: Canada Geological Survey. 05819
- Lac Hulot area, airborne: Canada Geological Survey. 06265
- Lac Lacoste area, airborne: Canada Geological Survey. 05829
- Lac Landriaux area, airborne: Canada Geological Survey. 05823
- Lac le Barbier area, airborne: Canada Geological Survey. 03334
- Lac Lemay area, airborne: Canada Geological Survey. 05835
- Lac Lessard area, airborne: Canada Geological Survey. 03333
- Lac Madeleine area, airborne: Canada Geological Survey. 03314
- Lac Manicouagan area, airborne: Canada Geological Survey. 05838
- Lac Manitou area, airborne: Canada Geological Survey. 06281
- Lac Mathevet area, airborne: Canada Geological Survey. 05837
- Lac McKay area, airborne: Canada Geological Survey. 03312
- Lac Miquelon area, airborne: Canada Geological Survey. 03288
- Lac Mistachagane area, airborne: Canada Geological Survey. 05836
- Lac Mouchalagane area, airborne: Canada Geological Survey. 05822
- Lac Nipi area, airborne: Canada Geological Survey. 03340
- Lac Nipissis area, airborne: Canada Geological Survey. 06274
- Lac Okaopeo area, airborne: Canada Geological Survey. 05826
- Lac Pecaudy area, airborne: Canada Geological Survey. 05832
- Lac Poissons-Blancs area, airborne: Canada Geological Survey. 06277
- Lac Raudot area, airborne: Canada Geological Survey. 06268

Quebec—Continued

Maps, magnetic—Continued

- Lac Rond area, airborne: Canada Geological Survey. 06269
- Lac Sainte-Anne area, airborne: Canada Geological Survey. 05841
- Lac Saint-Pierre area, airborne: Canada Geological Survey. 05833
- Lac Salieres area, airborne: Canada Geological Survey. 05824
- Lac Sedillot area, airborne: Canada Geological Survey. 03335
- Lac Ternet area, airborne: Canada Geological Survey. 06297
- Lac Tetepisca area, airborne: Canada Geological Survey. 05821
- Lac Thevet area, airborne: Canada Geological Survey. 06301
- Lac Varin area, airborne: Canada Geological Survey. 03282
- Lac Vermette area, airborne: Canada Geological Survey. 05847
- Lac Verrier area, airborne: Canada Geological Survey. 06299
- Lac Vital area, airborne: Canada Geological Survey. 06283
- Lac Walker area, airborne: Canada Geological Survey. 05848
- Lac York area, airborne: Canada Geological Survey. 03364
- Les Escoumins area, airborne: Canada Geological Survey. 03330
- Maggie Lake North area, airborne: Canada Geological Survey. 06290
- Matane area, airborne: Canada Geological Survey. 03291
- Mingan area, airborne: Canada Geological Survey. 06295
- Mont Alexandre area, airborne: Canada Geological Survey. 03363
- Mont de Babel area, airborne: Canada Geological Survey. 05830
- Mont-Joli area, airborne: Canada Geological Survey. 03284
- Mont-Louis area, airborne: Canada Geological Survey. 03315
- New Carlisle area, airborne: Canada Geological Survey. 03361
- New Richmond area, airborne: Canada Geological Survey. 03311
- Perce area, airborne: Canada Geological Survey. 11012
- Petit Lac Manicouagan area, airborne: Canada Geological Survey. 05846
- Petit-Cap area, airborne: Canada Geological Survey. 03348
- Petite Riviere de la Trinite area, airborne: Canada Geological Survey. 03299
- Pointe Jambon area, airborne: Canada Geological Survey. 03304
- Pointe Jambon area, airborne: Canada Geological Survey. 05854
- Port-Daniel area, airborne: Canada Geological Survey. 03370
- Port-Menier area, airborne: Canada Geological Survey. 03351
- Rimouski area, airborne: Canada Geological Survey. 03337
- Riviere aux Bees-Scies area, airborne: Canada Geological Survey. 03350
- Riviere aux Graines area, airborne: Canada Geological Survey. 06279
- Riviere de la Montagne-Blanche area, airborne: Canada Geological Survey. 05852

Quebec—Continued

Maps, magnetic—Continued

- Riviere Godbout area, airborne: Canada Geological Survey. 03294
 Riviere Hart-Jaune area, airborne: Canada Geological Survey. 05839
 Riviere Pentecote area, airborne: Canada Geological Survey. 03300
 Riviere Poisset area, airborne: Canada Geological Survey. 06298
 Riviere Vallant area, airborne: Canada Geological Survey. 03283
 Riviere Vallee area, airborne: Canada Geological Survey. 06272
 Sainte-Anne-des Monts area, airborne: Canada Geological Survey. 03306
 Sainte-Felicitie area, airborne: Canada Geological Survey. 03296
 Sainte-Gabriel-De-Gaspe area, airborne: Canada Geological Survey. 03372
 Saint-Modeste area, airborne: Canada Geological Survey. 03328
 Saint-Paul-du-Nord area, airborne: Canada Geological Survey. 03331
 Sayabec area, airborne: Canada Geological Survey. 03290
 Sept-Iles area, airborne: Canada Geological Survey. 06270
 Sheet 22 C/16, airborne: Canada Geological Survey. 03285
 Sheet 22 C/10, airborne: Canada Geological Survey. 03338
 Sheet 22 G/4, airborne: Canada Geological Survey. 03292
 Sheet 22 G/3, airborne: Canada Geological Survey. 03297
 Sheet 22 G/7, airborne: Canada Geological Survey. 03302
 Sheet 22 G/10, airborne: Canada Geological Survey. 03303
 Sheet 22 G/8, airborne: Canada Geological Survey. 03307
 Sheet 22 G/9, airborne: Canada Geological Survey. 03308
 Sheet 22 G/16, airborne: Canada Geological Survey. 03309
 Sheet 22 H/7, airborne: Canada Geological Survey. 03341
 Sheet 22 H/10, airborne: Canada Geological Survey. 03342
 Sheet 22 H/15, airborne: Canada Geological Survey. 03343
 Sheet 22 H/8, airborne: Canada Geological Survey. 03349
 Sheet 22 H/12, airborne: Canada Geological Survey. 03358
 Sheet 22 H/13, airborne: Canada Geological Survey. 03359
 Sheet 22 H/6, airborne: Canada Geological Survey. 03366
 Sheet 22 H/11, airborne: Canada Geological Survey. 03367
 Sheet 22 H/14, airborne: Canada Geological Survey. 03368
 Sheet 22 H/5 area, airborne: Canada Geological Survey. 03316
 Sheet 22 I:3, airborne: Canada Geological Survey. 06278
 Sheet 22 I:2, airborne: Canada Geological Survey. 06286
 Sheet 22 P:10, airborne: Canada Geological Survey. 06292
 Shelldrake area, airborne: Canada Geological Survey. 06287

Quebec—Continued

Maps, magnetic—Continued

- Sunny Bank area, airborne: Canada Geological Survey. 03373
 Trois-Pistoles area, airborne: Canada Geological Survey. 03329
Maps, mineral resources
 Noranda area: Sharpe, John I. 10145
 Preissac-Lacorne area, beryllium, geologic distribution: Mulligan, Robert. 06082
 Rouyn-Noranda area: Sharpe, J. I. 04409
Maps, morpho-sedimentologic
 Trois-Pistoles area: Dionne, Jean-Claude. 03730
Mineralogy
 Andradite, Gatineau Park pegmatites, yttrian: Kasowski, M. A. 03650
 Cape Smith belt, iron-formations, assemblages, metamorphism: Hashimoto, T. 02737
 Maskelynite, meteor craters, genesis by shock pressures: Bunch, T. E. 07482
 Mica and associated minerals, Val d'Or pegmatites, lithium-bearing: Rimsaite, J. 03601
 Montreal-Lac St-Jean region, collecting sites, guidebook: Sabina, Ann P. 02677
 Phlogopite, Grenville area, in marble, growth steps: Kretz, Ralph. 07424
 Pyrochlore, Oka area, composition and structure: Perrault, Guy. 03459
 Weloganite, Montreal Island, alkalic sill, new: Sabina, Ann P. 03655
Paleoclimatology
 Pleistocene, late glacial, St. Lawrence Lowland: Terasmae, J. 01971
Paleomagnetism
 Cretaceous, intrusives, Montereian Hills: Laroche, A. 00957
 Montereian Hills, measurements, statistical analysis: Laroche, A. 07383
Paleontology
 Cephalopoda, Ordovician, Black River Group, St. Raymond area: Flower, Rousseau H. 11055
 Fauna, Silurian-Devonian, Lake Memphremagog map-area, correlation: Boucot, Arthur J. 07861
 Gastropoda, Quaternary, Lake No. 2, paleoecology: Warner, David J. 03757
 Graptolithina, Ordovician, Middle, Gaspé north shore: Riva, John. 06937
 Invertebrata, Quaternary, check list, marine: Wagner, Frances J. E. 06905
 Invertebrata, Quaternary, marine beds, Lake St. Jean area: Dionne, Jean-Claude. 06904
 Palynology, Holocene, Montmorency forest, type spectrum: Richard, Pierre. 02050
 Palynomorphs, Quaternary, St. Lawrence Lowland, geochronology: Terasmae, J. 01971
 Pisces, Devonian, Battery Point Formation, Gaspé Bay: Pageau, Yvon. 06906
 Pisces, Devonian, Escuminac Formation: Dineley, D. L. 03433
 Trilobita, Ordovician, White Head Formation, Perce region: Lesperance, Pierre J. 05060
 Trilobita, Ordovician-Silurian, White Head Formation, Perce region: Lesperance, Pierre J. 03790
Petrology
 Brome Mountain, Brome igneous complex: Valiquette, Guy. 06929
 Cape Smith belt, iron-formations, metamorphism: Hashimoto, T. 02737
 Castignon-Romanet lake region, Sokoman Formation, ironstones: Dimroth, Erich. 06662

Quebec — Continued*Petrology — Continued*

Grand Detour-Village Lakes area, Precambrian rocks: Eakins, P. R. 07689

Hart-Jaune River map-area, Precambrian rocks: Kish, Leslie. 07857

Ile Cadieux, monticellite alnoite, pyroxene-bearing: Tilley, C. E. 01567

Louvicourt Township, Precambrian rocks: Sharpe, John I. 07858

Matagami area, Precambrian rocks: Sharpe, John I. 07859

McKenzie Township, northwest quarter, igneous rocks: Duquette, Gilles. 08159

Mont Tremblant Park, granulite facies, retrograde metamorphism: Katz, Michael B. 04444

Mont Tremblant Park, granulites, fabric, evolution: Katz, Michael. 02725

Monteregian Hills, Mount Johnson intrusion, zoning: Philpotts, A. R. 05481

Mount Wright area, Precambrian pyroxene granulites: Roach, R. A. 05663

Mount Wright-Mount Reed area, Precambrian gneiss: Clarke, P. J. 09364

Noranda area, Horne mine, massive sulfide-dike relations: Mookherjee, Asoke. 01986

Noranda volcanic belt, Blake River Group, Duparquet and Aiguebelle sections: Baragar, W. R. A. 02723

Shawinigan Complex, anorthosite, genesis: Martignole, Jacques. 06927

Sedimentary petrology

Appalachians, Silurian sandstones, sand fraction, provenance: Lajoie, Jean. 03556

Eastern, Ordovician reefs, evolution: Pitcher, Max Grow. 02608

Escuminac Bay, Devonian continental strata: Dineley, D. L. 03433

Escuminac Bay, Escuminac Formation, sedimentation: Williams, B. P. J. 10794

Kamouraska County, soils, classification, genesis: Baril, Roger. 11052

Rimouski area, Ordovician flysch, sandstones, diagenetic effects: Lajoie, Jean. 06928

Saint-Francois-de-Sales area, moraine sediments, crest origin: Tremblay, Germain. 10767

Toulustouc soil, composition and fabric, cf. Leda clay: Quigley, R. M. 04253

Stratigraphy

Cambrian-Ordovician, Sutton area: Clark, T. H. 07135

Devonian, continental, Restigouche River area, lower: Dineley, D. L. 02731

Devonian, Escuminac Formation, related strata, Escuminac Bay: Dineley, D. L. 03433

Devonian, Gaspé Sandstones, Gaspé Peninsula: Pageau, Yvon. 06906

Ordovician, Middle, biostratigraphy: Riva, John. 06937

Ordovician, Middle, "shale with blocks", southwestern: Saint-Julien, Pierre. 06934

Paleozoic, mio- and eugeosyncline, lateral transition: Cady, Wallace M. 07134

Quaternary, southeastern, Wisconsin deposits: McDonald, Barrie C. 09801

Silurian, Matapedia-Temisouata region, paleogeography: Lajoie, J. 01468

Silurian, Val Brillant and Robitaille sandstones: Lajoie, Jean. 03556

Quebec — Continued*Stratigraphy — Continued*

Silurian-Devonian, Lake Memphremagog map-area, re-mapping, correlation: Boucot, Arthur J. 07861

Silurian-Devonian, paleogeography: Boucot, A. J. 07139

Structural geology

Little Whale River area, postglacial tilt: Archer, David R. 05035

Mecatina Basin, interference-fold depression: Gold, D. P. 09782

Mount Johnson intrusion, emplacement mechanism: Philpotts, A. R. 05481

Paleozoic mio- and eugeosyncline, lateral transition: Cady, Wallace M. 07134

Quebec City area, Charlevoix structure, genesis: Rondot, Jehan. 05477

Quebec City area, Logan's line: Osborne, F. Fitz. 09813

Restigouche River area, lower, Acadian orogeny, phases: Dineley, D. L. 02731

Saint Lawrence graben, duration of activity: Doig, Ronald. 07240

Schefferville area, joints, stress determination, open-pit mine: Bullock, W. D. 11151

Southern, Sutton area: Clark, T. H. 07135

Southwestern, overthrusts, Sillyer klippe: Saint-Julien, Pierre. 06934

Superior Province, Quticzo metasedimentary belt: Kalliokoski, J. 05434

Taconic orogeny, stratigraphic evidence: Pavlides, Louis. 07138

Weathering

Saint Hyacinthe County, St. Jude soil, minerals: Ledoux, Robert. 06932

Radar methods*Airborne*

Polar icecaps, Greenland: Walker, J. W. 04284

Sidelooking, dual-polarization, geologic exploration: Dellwig, Louis Field. 09374

Sidelooking, interpretation, cf. photography: Innes, Richard B. 06399

Applications

Aerial photography, geologic interpretation: Fischer, W. A. 09665

Engineering geology, potential, remote imagery: Leighty, R. D. 06663

Remote-sensor, reconnaissance mapping, potential: Simonett, David S. 07692

Terrain analysis, remote: Simonett, David S. 08887

Interpretation

Drainage basin analysis, evaluation: McCoy, Roger Michael. 02025

Scatterometer data analysis, terrain studies: Moore, R. K. 06387

Techniques

Synthetic aperture radar, terrain imagery: Ellersmeier, R. D. 11139

Radar surveys*Arkansas*

Ozark region, lineaments: Kirk, J. Norman. 09288

California

Pisgah Crater, scatterometer data analysis: Moore, R. K. 06387

Greenland

North-central, icecap thickness, bedrock elevation: Walker, J. W. 04284

Missouri

Ozark region, lineaments: Kirk, J. Norman. 09288

Radar surveys—Continued*North Carolina*

Hot Springs-Asheville-Hendersonville area: Williams, Lyman O. 10357

United States

Sidelooking imagery, coverage, summary: Kover, Allan N. 09414

Radioactivity*Atmosphere*

Rn-222, measurement, alpha-pulse spectroscopy: Lindeken, C. L. 00659

Biotite

Halos, fossil alpha-recoil analysis: Gentry, Robert V. 01927

Granite

Texas, Buchanan massif: Cook, Beverly Gatlin. 07462

Granitic rocks

California, Sierra Nevada batholith: Wollenberg, Harold A. 00271

Meteorites

Norton County, Peace River, cosmic-ray produced: Matsuda, Hideki. 07925

Minerals

Crystal defects, radiation effects, measurement methods: Levy, Paul W. 03983

Rare earths

Greenland, Ilimaussaq area, veins: Hansen, John. 05024

Rocks

California, Ludlow area, gamma-ray spectrometry: Bunker, C. M. 02707

Sediments

Oregon, Washington, continental shelf, distribution: Gross, M. Grant. 07741

Soils

California, Ludlow area, gamma-ray spectrometry: Bunker, C. M. 02707

Colorado, Adams County, Th, U, K concentrations: Bunker, Carl M. 00789

Neutron production rate, due to natural reactions: Feige, Y. 00967

Water

Rivers, transport, mathematical model: Shull, Roger Don. 06542

Rn-222, use as natural tracer: Broecker, W. S. 05100

Tritium production, behavior in environment, fission hazards: Jacobs, D. G. 11201

Wyoming, bog: Sturges, David L. 00140

Radioactivity methods*Airborne*

Gamma-ray spectrometry, helicopter tests: Darnley, A. G. 01082

Soils, U-Th-K distribution: Foote, R. S. 06381

Applications

Airborne, correlation with areal geology: Pitkin, James A. 05866

Sedimentation rate determinations, ocean bottom cores: Pollard, Lin Davis. 00860

Instruments

Gamma-ray spectrometer, integral and differential, prospecting: Pemberton, Roger. 05343

Techniques

Alpha-pulse spectroscopy, Rn-222 in atmosphere: Lindeken, C. L. 00659

Deep-sea sedimentation rates, gamma-ray spectrometry: Pollard, Lin D. 10334

Gamma-ray spectrometry: Adams, J. A. S. 06826

Radon in soil, uranium, Ontario: Dyck, Willy. 01882

Radioactivity surveys*California*

Coast Ranges, graywackes: Wollenberg, Harold A. 07996

Ontario

Bancroft area, uranium, radon emanation method: Dyck, Willy. 01882

Bancroft, Elliot Lake areas, gamma-ray spectra, evaluation: Darnley, A. G. 06380

Puerto Rico

Airborne, correlation with areal geology: Pitkin, James A. 05866

Soils, gamma-ray measurements: Williamson, A. N. 06385

Texas

Atascosa County, airborne, soils mapping: Foote, R. S. 06381

Gulf Coast, sand: Adams, John A. S. 08594

United States

Selected areas, airborne, correlation with areal geology: Pitkin, James A. 05866

Soils, gamma-ray measurements: Williamson, A. N. 06385

Radiolaria*Cretaceous*

California, Moreno Formation, Fresno County: Foreman, Helen P. 06670

Dendrosphyris, emend.

Cenozoic, Pacific Ocean, West Indies, species descriptions: Goll, R. M. 06006

Depth distribution

Skeletal solution, rates: Berger, Wolfgang H. 00309

Geochemistry

Skeletons, solution, rate, variation with depth: Berger, Wolfgang H. 00309

Liriosphyris, emend.

Cenozoic, Pacific Ocean, West Indies, species descriptions: Goll, R. M. 06006

Mississippian

Arkansas, Fayetteville Shale, Washington County: Nigrini, Catherine. 01787

Quaternary

Pacific Ocean, surface sediments, paleoecology, northeastern: Ling, Hsin-Yi. 01175

Trissocyclidae, emend.

Cenozoic, Pacific Ocean, West Indies, taxonomy, morphology, evolution: Goll, R. M. 06006

Radiowave methods*General*

Remote conductivity sensing, mineral and water resources: Barringer, A. R. 06400

Microwave

Soil moisture content: Kennedy, J. M. 07484

Radium*Isotopes*

Ra-228, sea water: Moore, Willard S. 00020

Radon*Analysis*

Field method: Dyck, Willy. 01882

Isotopes

Sea water, Rn-222, natural tracer: Broecker, W. S. 05100

Rare earths*Abundance*

Basalt, diabase, gabbro: Frey, Fred A. 04359

Diabase, New Jersey, Palisade sill: Philpotts, John A. 07841

Diabase, tholeiite: Philpotts, J. A. 08019

Meteoritic chondrules: Schmitt, R. A. 08041

Pattern, mechanism, igneous differentiation: Goles, Gordon G. 06056

Rare earths — Continued*Abundance* — Continued

- Plutonium, X-ray fluorescence spectrometry: Hakkila, E. A. 03485
- Precambrian sediments: Wildeman, Thomas R. 10715
- Sea water, Atlantic Ocean, variations: Hogdahl, Ove T. 03666

Appalachians

- Resources, review: Adams, John W. 01364

Geochemistry

- Igneous and sedimentary rocks, cf. Sc and Fe: Norman, Jack C. 00293
- Meteorite-eclogite-basalt, genetic sequence: Philpotts, John A. 08844
- Partition coefficients between igneous matrix and phenocrysts: Schnetzler, C. C. 08900
- Partition coefficients, diabase, tholeiite: Philpotts, J. A. 08019
- Partition coefficients, theoretical calculation: Skibo, Donald N. 10716
- Precambrian plutonic rocks: Goles, Gordon G. 06056
- Terrestrial abundances: Haskin, Larry A. 08027
- X-ray fluorescence spectroscopy, complex minerals: Rose, Harry J., Jr. 04275

Greenland

- Skaergaard intrusion, abundance: Haskin, Larry A. 01977

Hawaii

- Basalt, abundance patterns: Schilling, Jean-Guy. 10801

North Carolina

- Resources, review: Adams, John W. 01364

Occurrence

- Mohole basalt: Masuda, Akimasa. 03218

Oregon

- Sedimentary rocks, concentrations, mineral phases: Collins, Kenneth Alan. 02029

Quebec

- Gatineau Park, andradite in pegmatites, yttrium: Kasowski, M. A. 03650

Wisconsin

- Sedimentary rocks, concentrations, mineral phases: Collins, Kenneth Alan. 02029

Reefs*Alberta*

- Devonian, Beaverhill Lake Formation, Swan Hills Member: Jenik, A. J. 00063
- Devonian, Frasnian limestone: Grieve, R. O. 01228
- Devonian, Keg River Formation, Rainbow Member: Langton, J. Roger. 11314
- Devonian, Keg River Formation, upper member: McCamis, John G. 04507
- Devonian, marginal carbonate debris flows, Rocky Mountains: Pray, L. C. 01185
- Devonian, Middle, Rainbow Member: Barss, D. L. 01324
- Devonian, Miette and Ancient Wall complexes, development: Mountjoy, Eric W. 09435
- Devonian, morphology: Martin, Rudolf. 02890
- Devonian, Swan Hills Fm.: Fischbuch, N. R. 07343
- Devonian, Swan Hills Formation, Carson Creek North complex: Leavitt, E. M. 05506
- Devonian, Swan Hills Formation, geometry, lithofacies: Hemphill, Charles R. 01216
- Devonian, Swan Hills Reef, Beaverhill Lake Formation, geochemistry: Cameron, E. M. 01961
- Devonian, Woodbend Group, exploration: Weaver, Charles E. 05723
- Petroleum exploration, paleoecology as tool: Loranger, D. M. 05443

Reefs — Continued*Bahamas*

- Hogsty Reef, carbonate sediments: Milliman, John D. 07870
- Holocene, Hogsty Reef, sediments: Milliman, John Douglas. 00854

Barbados

- Plio-Pleistocene, geometry, relations to tectonics: Mesolella, Kenneth J. 07869
- Quaternary, off west coast, erosional terrace: Macintyre, Ian G. 04886

Bermuda

- Holocene, submarine cementation, internal sedimentation: Ginsburg, Robert N. 08705

Caribbean Sea

- Miocene, dwarf atolls off Jamaica: Burke, Kevin. 00267

Colorado

- Pennsylvanian, Molas Pass area: Girdley, W. Arch. 01226

Continental margin

- Quaternary, Carolina-Florida: Zarudzki, E. F. K. 05050

Florida

- Holocene, annelid building: Kirtley, David W. 08538
- Holocene, sabellariid worms: Kirtley, David W. 01476
- Pleistocene, Key Largo Limestone, outer and back reefs: Hoffmeister, J. E. 04292
- Recent, algal contribution: Klement, Karl W. 08902

General

- Exploration, gravity methods, effectiveness: Haye, Edward F. 02573

Hawaii

- Midway, Kure atolls, sediments: Gross, M. Grant. 10901

Iowa

- Silurian, Gower Dolomite, Cedar County: Hinman, Eugene E. 03641

Kansas

- Pennsylvanian, Dennis Limestone: Frost, Jack Glenn. 06549
- Pennsylvanian, Stanton Limestone, lithofacies: Heckel, Philip H. 07881

Lake Erie

- Western, south shore, bedrock topography: Herdendorf, Charles E. 07088

Mexico

- Cretaceous-Jurassic, Veracruz, Golden Lane oil fields: Viniegra, Francisco. 01205

Michigan

- Silurian, Niagaran-Salinan, St. Clair County: Jodry, R. L. 01168

Montana

- Mississippian, Sappington Formation, paleoecology: Gutschick, Raymond C. 07950

New Mexico

- Abo trend, petroleum reservoirs: Sax, N. A. 00099
- Mississippian, Lake Valley Formation: Ruedisili, Lon Chester. 02042
- Pennsylvanian, Strawn Group: Thornton, Dewey E. 00069
- Permian, Guadalupe Mountains, algal contribution: Klement, Karl W. 08902
- Permian, Guadalupian complex: Motts, Ward S. 01074

North America

- Ordovician, Chazyan rocks, eastern: Pitcher, Max Grow. 02608

Reefs—Continued

North Carolina

Pleistocene, continental shelf: Menzies, R. J. 11083

Ohio

Silurian, Salina Formation: Kahle, Charles F. 01169

Oklahoma

Ordovician, Kindblade Limestone: Ham, William E. 07954

Pennsylvanian, Senora Formation, Breezy Hill Limestone Member: Cassidy, Martin M. 05762

Pennsylvanian, Senora Formation, Breezy Hill Limestone Member: Triplehorn, Don M. 05745

Ontario

Silurian, Niagaran Series, Manitoulin Island: Shelden, Frank D. 05276

Silurian, Payne reef, facies analysis, southwestern: Hill, J. V. 00149

Pacific Islands

Holocene, low-water platforms, evolution: Newell, Norman D. 08824

Submarine terraces, evolution: Newman, W. A. 11000

Puerto Rico

Pleistocene-Holocene, Foraminifera, faunas, correlation: Seiglie, George A. 06349

Quebec

Ordovician, Chazy rocks, eastern: Pitcher, Max Grow. 02608

Texas

Holocene, serpulid, ecology and structure: Behrens, E. William. 06308

Ordovician, El Paso Group: Ham, William E. 07954

Pennsylvanian-Permian, Horseshoe atoll: Vest, E. L., Jr. 01204

Permian, Glass Mountains, paleoecology: Bain, Roger J. 09177

Permian, Guadalupe Mountains, algal contribution: Klement, Karl W. 08902

United States

Mississippian, Stromatactis structures, burrows: Shinn, Eugene A. 05767

Ordovician, Chazy rocks, eastern: Pitcher, Max Grow. 02608

Utah

Ordovician, Pogonip Group: Roberts, Harry H. 10256

West Indies

Holocene, Saint Vincent, leeward reefs: Adams, R. D. 04436

Pleistocene, C-14 dates: Richards, Horace G. 08554

Wyoming

Precambrian, Nash Fm., Medicine Bow Mts.: Knight, S. H. 07578

Remote-sensing methods*Applications*

Aerial photography, geologic interpretation: Fischer, W. A. 09665

Arctic environments, exploration, possibilities: Simonett, David S. 02092

Conservation resource planning: Peplies, Robert W. 08965

Electromagnetic radiation, earth materials, hydrology: Reeves, Robert G. 09119

Engineering geology: Feder, Allen M. 09579

Engineering geology, soils and rocks: Parker, Dana C. 00163

Remote-sensing methods—Continued*Applications—Continued*

Engineering studies, highways: Rib, Harold T. 11244

Geographic, thematic mapping: Gerlach, Arch C. 06401

Geologic parameters: Lintz, Joseph, Jr. 10833

Hydrogeology, basic-data acquisition: Robinove, Charles J. 05591

Hydrogeology, research, status: Robinove, Charles J. 06358

Mineral detection, infrared: Hovis, W. A., Jr. 11401

Mineral exploration: Reeves, R. G. 06883

Mineral exploration, advantages: Pecora, W. T. 05638

Mineral exploration, Canada: Slaney, V. R. 11148

Mineral exploration, supplement to photography: Wobber, Frank J. 08172

Oceanography: Zaitzeff, James B. 06405

Oceanography, new concepts: Hill, Mason L. 05245

Reconnaissance mapping, potential: Simonett, David S. 07692

Terrain analysis: Simonett, David S. 08887

Terrain interpretation, radar imagery: Ellermeier, R. D. 11139

Urban environments: Alexander, Robert H. 06382

General

Current trends: Miller, V. C. 04503

Data collection, economic analysis of problems: Gensurowsky, Walter. 06403

Earth resources research, current, future: Newell, H. E. 06396

Economic analysis, technical feasibility: Muir, Allan H. 06383

National Research Council activities: Risley, Edward. 06384

Orbital surveying for mineral resources: Fischer, William A. 07310

Photography, engineering studies, terrain, soils: Mintzer, O. W. 06392

Instruments

Emissivity box, infrared emission measurements, land surfaces: Cronin, John F. 11143

Radiometric sensors, microwave, millimeter wave, sensitivity: Ewen, H. I. 11400

Interpretation

Satellite TV photography: Taggart, C. I. 09674

Photography

Application, geographic studies: Colwell, Robert N. 06402

Electromagnetic radiation, earth materials, hydrology: Reeves, Robert G. 09119

Spectroscopy

Electromagnetic radiation, earth materials, hydrology: Reeves, Robert G. 09119

Techniques

Electromagnetic, from satellites, symposium, Coral Gables, Florida, 1965: Zirkind, Ralph (editor). 11142

Infrared emission, interferometric measurements, land surfaces: Cronin, John F. 11143

Infrared, environmental engineering: Matalucci, Rudolph V. 04860

Orbital photogrammetry: McEwen, Robert Barlow. 06536

Satellite photography, multi-spectral imagery, geologic applications: Cronin, John F. 11141

Terrain analysis, imagery, waveform analysis: Witmer, Richard Everett. 07161

Remote-sensing methods—Continued*Terrain analysis*

Desert sands, spectral luminance: Romanova, Mariya A. 08886

Remote-sensing surveys*Alaska*

Point Barrow area, multispectral, calibrated data: Horvath, R. 06404

California

Irrigated fields, soil moisture: Mason, Curtis C. 10419

Reptilia*Alzadasaurus*

Cretaceous, Montana, Bearpaw Shale: Rich, T. Hewitt. 08317

Aneides aeneus

Geographic distribution, Pliocene-Holocene, Blue Ridge embayment role: Bruce, Richard C. 11187

Bothremys

Cretaceous, taxonomy, skull morphology: Gaffney, Eugene S. 01145

Bothremys barberi, n.comb., n.subsp.

Cretaceous, Upper, eastern U.S. coastal provinces: Gaffney, Eugene S. 01145

Camarasaurus

Jurassic, Colorado, Morrison Formation, new species: Jensen, James A. 00089

Caseidae

Permian, Texas-Oklahoma, Upper: Olson, Everett C. 00809

Ceraunosaurus brownorum, n.gen., n.sp.

Cretaceous, Texas, Lake Waco Formation, McLennan County: Thurmond, John T. 05695

Cynodontia

Evolution, jaw musculature: Barghusen, Herbert R. 03708

Dinosaurs

Alberta, general: Stelck, Charles R. 10924

Cretaceous, extinction, causes: Axelrod, Daniel I. 03742

General: Kurten, Bjorn. 06166

Jurassic, Utah, Dinosaur Natl. Monument: White, Theodore E. 04796

Mesozoic, Arizona, northern, evolution, popular account: Breed, William J. 04337

Mesozoic, evolution, paleoecology, popular account: deCamp, L. Sprague. 11236

Popular account: Shuttlesworth, Dorothy E. 09183

Search, history, men involved: Colbert, Edwin H. 01830

Utah, Vermilion Cliffs, tracks: Spendlove, Earl. 03713

Eosuchia

Permian, Oklahoma, Fort Sill, right parietal: Carroll, Robert L. 03739

Hassiacosuchus

Eocene, cf. fossil and modern forms: Wassersug, Richard J. 11185

Mesozoic

Dinosaur bones, amino acids: Miller, Mahlon F., 2d. 09135

Morphology

Caseidae, Permian: Olson, Everett C. 00809

Stegomomochidae, Triassic: Walker, A. D. 00828

Myopterygius petersoni

Cretaceous, Wyoming, Mowry Shale, ichthyosaur skull: Romer, Alfred Sherwood. 01484

Reptilia—Continued*Pachyrhinosaurus canadensis*

Cretaceous, Alberta, Edmonton Formation, skull reinterpretation: Langston, Wann, Jr. 05696

Podocnemis alabamiae

Cretaceous, Alabama, Selma Formation: Gaffney, Eugene S. 01145

Procaimanoidea

Eocene, cf. fossil and modern forms: Wassersug, Richard J. 11185

Quaternary

West Indies, Navassa, Pleistocene(?), list: Patton, Thomas H. 00805

Stegomomochus

Triassic, Connecticut, morphology: Walker, A. D. 00828

Stegosaurus

Jurassic, history of restorations, popular account: Dunkle, David H. 01799

Taxonomy

Caseidae, Permian: Olson, Everett C. 00809

Terrapene carolina triunguis

Pleistocene, Texas, Houston area: McClure, William L. 11186

Tertiary

Florida, Pliocene, Bone Valley Formation, Manatee County: Webb, S. David. 05212

Kansas, Trego County, WaKeeney local fauna: Wilson, Richard Leland. 06938

South Dakota, Turtle Butte: Skinner, Morris F. 11351

Theriodontia

Evolution, jaw musculature: Barghusen, Herbert R. 03708

Thescelosaurus(?), sp.

Cretaceous(?), Montana, Willow Creek beds, east of Alberta syncline: Russell, Lorin S. 01964

Triassic

Connecticut, East Berlin Formation, dinosaur tracks: Ostrom, John H. 05925

North Carolina, Pekin Formation: Baird, Donald. 10888

Rhode Island*Earthquakes*

December 7, 1965, Narragansett Bay, structural implications: Fisher, John J. 09774

Geochemistry

Narragansett Bay, fresh, brackish waters, trace metals: Hallett, David W. 10788

Hydrogeology

Potowomut-Wickford area, ground-water reservoirs: Rosenshein, J. S. 01489

Maps, geologic

Ashaway quadrangle, surficial: Schafer, J. P. 00994

Maps, ground water

Potowomut-Wickford area: Rosenshein, J. S. 01489

Maps, magnetic

Thompson (Conn.) quadrangle, airborne: U.S. Geological Survey. 00030

Petrology

Westerly and Narragansett Pier Granites, relations: Feininger, Tomas. 05192

Sedimentary petrology

Narragansett Basin, Pennsylvanian nonmarine sediments: Mutch, Thomas A. 10939

Southern, Bridgehampton soils: Bell, R. S. 11402

Rhode Island—Continued

Stratigraphy

Paleozoic, Narragansett basin: Quinn, Alonzo W. 07247

Pennsylvanian, Narragansett Basin, nonmarine sediments: Mutch, Thomas A. 10939

Structural geology

Narragansett basin: Quinn, Alonzo W. 07247

Rhodium*Analysis*

Emission spectroscopy, after fire assay, rocks: Haffty, Joseph. 02278

Sequential method, chemical and spectrophotometric: Schnepfe, Marian M. 05197

Rivers*Alaska*

Colville River, bank erosion: Walker, H. J. 07968

Alberta

Descriptions: Green, Robert. 10925

Freeman River, hydrographic network, Horton analysis: Saint-Onge, D.-A. 10768

Arizona

Colorado River, rate of downcutting: McKee, Edwin D. 00523

Bars

Washington-Oregon, Columbia River, lower, stream-flow variables: Norgaard, Richard B. 01850

Baseflow

Factors affecting: Singh, Krishan P. 04592

Recessions, research, review: Hall, Francis R. 04591

Bed forms

Alluvial channels, nomenclature: Am. Soc. Civil Engineers. 04575

Relation to friction: Vanoni, Vito A. 04581

Sand waves, spectral analysis: Nordin, Carl F., Jr. 04576

Canada

Columbia River, clay mineralogy: Knebel, H. J. 03564

Networks, original aspects: Hamelin, Louis-Edmond. 08129

Channel geometry

Bed forms, analysis, lag-deviation method: Willis, Joe C. 05562

Colorado, Big Sandy Creek, relation to vertical permeability: Coffin, Donald L. 00732

Experimental, effect on flow: Cobb, Ernest D. 04580

Experimental studies, bed forms, relation to friction: Squarer, David. 00055

Prediction, erodible channels: Athaullah, Muhammad. 07149

Quasi-equilibrium state, pools and riffles: Dolling, Ray. 03725

Drainage basins

Quantitative analysis, Horton's laws, rational explanation: Scheidegger, Adrian E. 04568

Quantitative analysis, stream lengths: Smart, J. S. 04567

River network, patterns, graph theory: Scheidegger, Adrian E. 07630

Drainage network

Stream order numbers, temperature-analog: Scheidegger, A. E. 00155

Erosion

Arid regions, sedimentation: Wertz, Jacques B. 11382

Degradation below dams, prediction: deVries, M. 00303

Rivers—Continued*Erosion—Continued*

Degradation below dams, prediction: Egiazaroff, Ivan. 00304

Degradation below dams, prediction: Gill, Mohammad Akram. 00302

Degradation, below dams, prediction: Hasan, Saied M. 01053

Degradation below dams, prediction: Herbertson, John G. 00300

Degradation, below dams, prediction: Moss, Marshall E. 01054

Degradation below dams, prediction: Peters, John C. 00301

Degradation of bed below dams, prediction methods: Ackermann, Norbert L. 00107

Placers, gold: Krook, Leendert. 06980

Placers, gold: Tuck, Ralph. 01899

Virginia, Scott Run basin, during highway construction: Vice, Raymond B. 00056

Floodplains

Mississippi, delineation, use of soils maps: Cain, John M. 00154

Floods

Frequency analysis, Markov model: McGilchrist, C. A. 00138

General

Dynamics, morphology, elementary text: Morisawa, Marie. 04175

Geochemistry

Ag, Sb, Cr, Co, Rb, Cs, Se, Mo, supply to oceans: Kharkar, D. P. 01956

Li, K, Rb, and Cs concentrations, North America, western: Sreekumaran, C. 05345

Illinois

Wabash River system, topological structure, model test: Ranalli, G. 02989

Indiana

Wabash River system, topological structure, model test: Ranalli, G. 02989

Massachusetts

Connecticut River, preglacial course, Amherst area: Foose, Richard M. 03853

Meanders

Development in artificially straightened channels, Iowa: Noble, Calvin A. 07690

Development in straight channel, experimental studies: Shen, Hsieh W. 01788

Formation, statistical theory, tests: Thakur, T. R. 00385

Mississippi Valley

Ancient Mississippi River, duration, Jurassic to Quaternary: Mann, C. John. 09327

Networks

Labeling methods, topological significance: Ranalli, G. 07317

Microcanonical ensembles, temperature analog: Scheidegger, A. E. 09462

Topologically random, mean stream numbers and branching ratios: Smart, J. S. 07316

New York

Hudson River estuary, flow and water quality: Busby, Mark W. 06364

Hudson River estuary, U.S. Geological Survey studies: Heath, Ralph C. 06368

Hudson River, flow characteristics, shoaling, model study: Panuzio, Frank L. 06367

Hudson River, geology, mineral resources: Johnson, John H. 06365

Hudson River, sediments, geochemistry: McCrone, Alistair W. 06366

North Dakota

Little Missouri River, floodplain history: Everitt, Ben L. 02445

Rivers—Continued*Oklahoma*

Red River, capture of Salt Fork, evidence: Cannon, P. Jan. 06342

Ontario

Bronte Creek, pools and riffles, occurrence, analysis: Dolling, Ray. 03725

Oregon

Columbia River, glacial floods, Willamette Valley impondments: Howell, Paul. 09587

Columbia River, Lake Oswego gap, Tualatin River changes: Nafziger, Ralph H. 09586

Willamette Valley, Columbia River floods, glacial erratics: Howell, Paul. 09587

Profiles

Length and elevation, quantitative formulation, Leopold-Langbein model: Dacey, Michael F. 00139

Quebec

Saint Lawrence and Ottawa Rivers, drainage pattern evolution: Macpherson, Joyce Brown. 06339

Radioactivity

Transport, mathematical model: Shull, Roger Don. 06542

Sediment transport

Bed material, coarse, uniform, initial movement, experimental study: Neill, C. R. 03114

Bed-load sampler: Cashman, C. Z. 01794

California, Merced River, granitic pebbles, shape analysis: Pittman, Edward D. 04991

California, Rubicon River, Hell Hole damsite, flood: Scott, Kevin M. 07531

Columbia River, estuary and entrance, diffusion: Lockett, John B. 09541

Concentration profiles, prediction, turbulent diffusion theory: Barfield, B. J. 08431

Degradation below dams, prediction: Peters, John C. 00301

Experimental studies, model: Graf, Walter H. 02979

Experimental study, conveyance system: Acaroglu, Ertan Riza. 03017

Experimental study, sand dispersion, laboratory flume: Yang, Tsung. 07184

Louisiana, Mississippi Valley and Delta: Gagliano, Sherwood M. 01225

Modeling, laws: Bruun, Per. 01080

Modeling, laws: Hooke, Roger LeB. 01079

New Mexico, Santa Fe area, wave bed forms: Langbein, Walter B. 07530

Sand waves, statistical properties: Nordin, Carl F., Jr. 07401

Silt, deposition in a gravel bed, experimental study: Einstein, H. A. 04578

Straight, curved channels, friction factors, rates, relations: Squarer, David. 06540

Streambed gravel, suspended particles: Vaux, Walter Gregson. 07162

Susquehanna River, lower, suspended load: Schubel, J. R. 03201

Thermodynamic analogy, processes involving nonpositive quantity: Chung, C. L. 05102

Total bed-material discharge: Chang, Feng-Ming. 09539

Tracers, fluorescent sand, Colorado: Kennedy, Vance C. 10703

Virginia, Rappahannock Estuary: Nichols, Maynard M. 08963

Washington, King County: Williams, R. C. 00076

Rivers—Continued*South Dakota*

Box Elder Creek, water losses and gains, limestone sinks: Crooks, Thomas J. 06889

Tennessee

Tennessee River, lower course, history: Milici, Robert C. 03897

Time-of-travel

Fluorescent dye measurement: Wilson, James F., Jr. 07629

United States

Columbia River, clay mineralogy: Knebel, H. J. 03564

Columbia River, graywacke-type sediments: Whetten, John T. 08348

Gradient changes, lithology differences, relations: Ganser, Robert W. 09301

Susquehanna, trace-element transport: Kharkar, D. P. 10907

Washington

Columbia River, glacial floods, channelled scablands, gorges: Howell, Paul. 09587

Rocky Mountains*Absolute age*

Montana-Wyoming, Precambrian chronology, interpretation: Giletti, Bruno J. 04710

Areal geology

Northern, mineral resources framework: Hobbs, S. Warren. 05350

Popular account: Pearl, Richard M. 08986

Economic geology

Metals, northern, geologic setting: Hobbs, S. Warren. 05350

Petroleum, Colorado-Utah, Paradox and Eagle basins: Peterson, James A. 01183

Geochemistry

Pb, Sr isotopes, Cenozoic volcanics: Doe, Bruce R. 05115

Geomorphology

Northern, eastern, pediments: Bullard, Reuben G. 08629

Popular account: Pearl, Richard M. 08986

Geophysical surveys

Magnetic deep sounding studies, preliminary: Reitzel, J. S. 08412

Paleontology

Palynology, Cretaceous-Tertiary boundary, cf. Mississippi embayment: Tschudy, Robert H. 10796

Petrology

Cenozoic, volcanics, eruptive centers: Epis, Rudy C. 05127

Cenozoic volcanics, magma source, isotope data: Doe, Bruce R. 05115

Stratigraphy

Precambrian, Belt-Purcell Supergroup, U.S.-Canada: Harrison, Jack E. 02692

Precambrian, Golden area: Lickus, R. J. 03820

Structural geology

Colorado, Golden area, folds, faults: Lickus, R. J. 03820

Northern, evolution model, east of Idaho batholith: Scholten, R. 07389

Rubidium*Abundance*

Earth: Hurley, P. M. 03927

Earth, absolute and distribution: Hurley, Patrick M. 11308

Terrestrial, crustal evolution models, effects: Hurley, P. M. 10756

Ultramafic rocks: Griffin, W. L. 02986

Rubidium—Continued*Analysis*

- Ion-exchange and X-ray fluorescence technique: Hayden, John A. 03484
- X-ray fluorescence, silicate rocks: Doering, Willis P. 02697

Geochemistry

- Covariance with K, igneous rocks: Shaw, D. M. 02355
- Evaporites, Saskatchewan: Wardlaw, Norman C. 03864
- Melting curves to 80 kb: Luedemann, H. D. 00570
- River water, United States, cf. marine sediments: Sreekumaran, C. 05345
- Sulfide ores, Quebec, Rb:Sr ratios: Reesman, R. H. 04523
- Sylvite, temperature effect on partition coefficient: McIntire, W. L. 01106

Isotopes

- Granite, post-crystallization movement, feldspar alteration: Brooks, C. 02365
- Ratios, ultramafic minerals, North Carolina: Stueber, Alan M. 09709
- Sr-K-Rb relations, ultramafic rocks, Alaska: Lanphere, Marvin A. 02813

Ruthenium*Analysis*

- Activation, sulfide ores, submicrogram amounts: Chung, K. S. 06743

Saint Pierre and Miquelon*Areal geology*

- General, sketch: Aubert de la Rue, E. 01697

Salt*Appalachians*

- Resources, review: Cox, Dennis P. 01370

Canada

- Maritime Provinces, Mississippian, occurrence: Shaw, William S. 01020

General

- Popular account: Kraske, Robert. 08133

Genesis

- Marine evaporites, halite facies, potash deposits: Hite, Robert J. 09111

Geochemistry

- New Mexico, precipitation: Smith, Joe P. 01022
- Soils, transport, convective diffusion, experimental study: Overman, Allen R. 04818
- Ternary systems, molten, phase diagrams: Blander, Milton. 02558

Gulf Coastal Plain

- Occurrence, Louann Salt formation: Hardin, George C., Jr. 07453
- Reserves, economics: Hawkins, M. E. 07448

Gulf of Mexico

- Jurassic basin, dome tectonics: Stafford, Charles F. 00567

Mexico

- Southern, Cretaceous, occurrence: Benavides G., Luis. 01014

Mississippi

- Tatum dome, mineralogy and petrology: Schlocker, J. 01027

New Mexico

- Southeastern, Permian basin: Adams, John Emery. 01013

Pennsylvania

- Northwestern, central, Salina Group, occurrence: Fergusson, William B. 06505

Petrofabrics

- Dome and undeformed bedded: Muehlberger, William R. 11332

Salt—Continued*Properties*

- Crystal defects, geological applications: Shlichta, Paul J. 01115
- Mechanical, related to dome genesis: Ode, Helmer. 11419
- Radioactive waste disposal: Bradshaw, R. L. 01118
- Strength, failure by explosion: Short, N. M. 01117
- Thermicity, relation to mechanical: Heroy, William B. 01116

Resources

- Marine evaporites, halite facies, potash deposits: Hite, Robert J. 09111

Saskatchewan

- Esterhazy area, barren halite bodies in sylvinite zones: McIntosh, R. A. 05473

Texas

- Western, Permian basin: Adams, John Emery. 01013

Utah

- Great Salt Lake, brine composition, production: Straesser, Manfred. 06993

Salt tectonics*Colorado*

- Paradox Basin, Pennsylvanian: Hite, Robert J. 01029
- Paradox basin, salt anticline: Shoemaker, Eugene M. 01021

Experimental studies

- Accelerated deformation, effect on radioactive waste disposal: Lomenick, Thomas Fletcher. 05521

Gulf of Mexico

- Genesis: Murray, Grover E. 03382
- Transition zones, DeSoto and Campeche Canyons: Antoine, J. W. 09320

Louisiana

- Distribution of domes in sedimentary basin: Paulson, Oscar L., Jr. 09344
- Salt domes: Atwater, Gordon I. 01036
- Winn Parish, Winnfield salt dome: Hoy, Robert B. 01017
- Winnfield dome, internal structure: Muehlberger, William R. 11332

Mechanism

- Energy source, temperature role: Gussow, William Carruthers. 03378
- Gulf Coast, piercement domes, Monte Carlo simulation model: Howard, James C. 06173
- Gulf of Mexico, Jurassic basin, elementary account: Stafford, Charles F. 00567
- Gulf of Mexico, model studies: Tanner, W. F. 03377
- Igneous analogy, California, Clark Mountains, pluton: Burchfiel, B. C. 10829
- Louisiana, Texas, salt domes: Muehlberger, William R. 01104
- Relation to physical properties: Ode, Helmer. 11419
- Salt-dome evolution, mathematical model: Howard, James C. 08741
- Structural features, internal vs. external: Kupfer, Donald H. 03380
- Translation gliding: Schwerdtner, W. M. 03913

Mexico

- Caprock: Salas, Guillermo P. 04147
- Isthmus of Tehuantepec, domes: Contreras V., H. 03354
- Southeast saline basin, petroleum, sulfur origin: Salas, Guillermo P. 09227

Salt tectonics—Continued*Mississippi*

Distribution of domes in sedimentary basin:

Paulson, Oscar L., Jr. 09344

Mississippi salt basin, Smackover fields: Hughes, Dudley J. 09338

Texas

Grand Saline dome, internal structure: Muehlberger, William R. 11332

Palangana salt dome, Duval County: Hofrichter, Erich. 01103

Salt domes: Atwater, Gordon I. 01036

Utah

Paradox Basin, Pennsylvanian: Hite, Robert J. 01029

Paradox basin, salt anticline: Shoemaker, Eugene M. 01021

Paradox Basin, Upheaval Dome, genesis: Mattox, Richard B. 09428

Sand*Appalachians*

Resources, review: Carter, W. D. 01371

Exploration

Electrical methods, Manitoba, southeastern: Wyder, J. E. 00986

Kansas

Occurrence, use: Hardy, Ronald G. 06370

New Brunswick

Resources, industrial possibilities: Hamilton, J. B. 07417

Ontario

Frazer Bay area, orthoquartzite: Card, K. D. 05467

Tennessee

Beech Bluff quadrangle, occurrence: Sykes, C. Ronald. 07611

Campaign quadrangle, occurrence: Wilson, Charles W., Jr. 03077

Chesterfield quadrangle, occurrence: Hershey, Robert E. 05534

Claybrook quadrangle, occurrence: Sykes, C. Ronald. 03070

Henderson quadrangle, occurrence: Sykes, C. Ronald. 07605

Juno quadrangle, occurrence: Sykes, C. Ronald. 03069

Medon quadrangle, occurrence: Sykes, C. Ronald. 07610

Monterey quadrangle, occurrence: Garman, R. Keith. 09509

Silerton quadrangle, occurrence: Sykes, C. Ronald. 05539

Texas

West-central, occurrence: Mattis, Lynn. 11428

Sandstone*Kentucky*

Jamboree quadrangle, occurrence: Outerbridge, William F. 07384

Tennessee

Cassville quadrangle, occurrence: Wilson, Charles W., Jr. 03082

Hilham quadrangle, occurrence: Taylor, Landon C. 03584

Livingston quadrangle, occurrence: Taylor, Landon C. 05538

Monterey quadrangle, occurrence: Garman, R. Keith. 09509

Short Mountain quadrangle, occurrence: Wilson, Charles W., Jr. 07609

Saskatchewan*Absolute age*

Beaverlodge area, uranium mineralization: Koepfel, V. 02056

Areal geology

Beaverlodge mining area: Tremblay, L. P. 01688

Lake Athabasca region, Precambrian formations: Trigg, Charles Murray. 09567

Needle Falls area, Precambrian geology: Money, P. L. 05526

Economic geology

Copper, Coronation mine, reserve estimation: Cairns, R. B. 05329

Copper-gold, Anglo-Rouyn deposit, reserve calculation: Skopos, M. J. 05318

Copper-nickel, Kipahigan Lake deposit: Netolitzky, R. K. 04087

Evaporites, Elk Point Group, occurrence: Gorrill, H. A. 01028

Evaporites, general: DeMille, George. 01016

Evaporites, Watrous-Kandahar area, occurrence, genesis: Wardlaw, Norman C. 03864

Helium, occurrence: Jodry, R. L. 03443

Natural gas, Medicine Hat-Hatton field, occurrence: Hancock, W. P. 02139

Natural gas, occurrence: Edmonton Geological Society. 02132

Natural gas, occurrence, Paleozoic rocks: Beach, Floyd K. 03251

Oil sands, Lloydminster field, occurrence, genesis: Vigrass, Laurence W. 04511

Petroleum, Quill Lake area, possibilities, reef: Jordan, Stuart P. 00942

Petroleum, western, possible traps, Wymark Member, Duperow Formation: Kent, D. M. 04785

Potash, Esterhazy area, barren halite bodies: McIntosh, R. A. 05473

Potash, southern, Devonian, exploration, production: Mitterer, Adolph V. 09112

Sodium sulfate, Ingebrigt deposit: Rueffel, P. G. 07887

Uranium, Beaverlodge area, mineralization, absolute age: Koepfel, V. 02056

Uranium, Beaverlodge district, Eldorado mine, reserve estimation, grade control: Peebles, G. A. 05313

Uranium, Beaverlodge district, exploration: Trigg, Charles Murray. 09567

Uranium, Beaverlodge district, production history: Stephens, Fred H. 09566

Uranium, lake water, exploration: Macdonald, J. A. 01084

Engineering geology

Highways, design problems, southern: Sauer, Emil Karl. 00842

Highways, southern, glacial till subgrade, moisture, soil suction: Sauer, E. K. 09097

Materials, properties, glacial till subgrade, soil suction: Sauer, E. K. 09097

Rock mechanics, time-dependent behavior, potash mines, design: Serata, S. 03092

Slope stability, South Saskatchewan River landslide areas: Scott, J. S. 02057

Geochemistry

East-central, Cretaceous shale, trace elements: Williams, G. D. 01411

Geochemical prospecting, lake water, uranium: Macdonald, J. A. 01084

Saskatchewan—Continued

Geophysical surveys

Flin Flon area, greenstone belt, gravity: Gendzwill, D. 07818

Kisbey area, gravity: Soukoreff, W. W. 05442

Northeastern, gravity, Churchill-Superior boundary: Gibb, R. A. 02241

Seismic, application of Dinoseis system: Godfrey, L. M. 00183

Southeastern, well logging, interpretation: Heslop, A. 05946

Stenena area, bedrock depression fill, seismic: Burke, K. B. S. 06572

Hydrogeology

Good Spirit Lake drainage basin, ground-water flow patterns: Freeze, R. Allan. 07974

South Saskatchewan reservoir, ground-water regime, prognosis: vanEverdingen, R. O. 00976

Maps, geologic

Wapawekka Lake area, north half: Padgham, W. A. 10674

Maps, gravity

Northeastern, Bouger anomaly: Gibb, R. A. 02241

Maps, isopach

South half, Devonian: Kent, D. M. 03181

Paleontology

Foraminifera, Cretaceous, white-speckled shales, eastern, zones: Caldwell, W. G. E. 07780

Petrology

Carswell circular structure, shock metamorphism: Currie, K. L. 07506

Hanson Lake area, Precambrian rocks, petrogenesis: Gaskarth, Joseph William. 01745

Wapawekka Lake area, Precambrian rocks: Padgham, W. A. 10674

Sedimentary petrology

Cypress Hills Plateau, Frenchman Formation, sandstones: Chi, B. L. 04063

Eastend and Whitemud Formations, mineralogy, provenance: Byers, P. R. 04082

Western, Wymark Member of Duperow Formation, dolomites: Kent, D. M. 04785

Stratigraphy

Cretaceous, Whitemud and Eastend Formations: Byers, P. R. 04082

Devonian, Prairie Evaporites, subsurface: DeMille, George. 01016

Devonian, south half: Kent, D. M. 03181

Devonian, Wymark Member of Duperow Formation, western: Kent, D. M. 04785

Pleistocene, Sutherland and Saskatoon Groups, Saskatoon area: Christiansen, E. A. 05479

Precambrian, Wollaston Lake fold-belt system: Money, P. L. 07209

Quaternary, Battleford Formation, west-central, Woodfordian age: Christiansen, E. A. 01965

Structural geology

Hanson Lake area, Precambrian rocks, deformation: Gaskarth, Joseph William. 01745

Northeastern, Wollaston Lake fold-belt system: Money, P. L. 07209

Wapawekka Lake area: Padgham, W. A. 10674

Scandium

Geochemistry

Aluminum phosphate minerals, Utah, Fairfield area: Frondel, Clifford. 06773

Diadochy with iron, aluminum: Ito, Jun. 06783

Igneous and sedimentary rocks, cf. rare earths and Fe: Norman, Jack C. 00293

Trace element, diadochic relation to 6-coordinated (Fe, Al): Frondel, Clifford. 09649

Scaphopoda

Dentalium neohexagonum

Quaternary, Mexico, Baja California, northwestern, alluvium: Perrillat Montoya, Maria del Carmen. 09131

Sea mounts

Atlantic Ocean

New England chain, geophysical study: Taylor, P. 10428

New England Seamount Chain, Georges' Bank to Bermuda: Uchupi, E. 05144

Pacific Ocean

Eickelberg Ridge, petrology, morphology: Nayudu, Y. R. 10028

Sea water

Composition

Ag, Sb, Cr, Co, Rb, Cs, Se, Mo, from rivers: Kharakar, D. P. 01956

Ba, Sr, determination, flame photometry: Andersen, Neil R. 11009

Be-7 concentration, Atlantic and Pacific Oceans: Silker, W. B. 03066

Calcium isotopes, metabolic fractionation: Corless, James T. 09367

Cesium content, analysis, flame photometry: Folsom, T. R. 01152

Chlorine content, mantle source: Iwasaki, I. 04659

Elements, recoverable compounds: McIlhenny, W. F. 07450

Mineral resources, world production and potential: Shigley, C. M. 06105

Noble gases: Bieri, Rudolf H. 02841

Oxygen isotope, variations through geologic time: Longinelli, A. 04525

Primitive ocean, ammonium ion concentration, aspartic acid production: Bada, Jeffrey L. 00120

Radon content, mixing: Broecker, W. S. 05100

Rare earths, concentrations, variations: Hogdahl, Ove T. 03666

Strontium, barium, concentrations, variations: Andersen, Neil R. 03665

Strontium isotopes: Murthy, V. Rama. 04869

Strontium, isotopic, Phanerozoic time: Peterman, Zell E. 08841

Evolution

Ocean-atmosphere steady state: Siever, Raymond. 08981

Quaternary, main water masses, temperature, salinity: Worthington, L. V. 04163

Salinity and temperature changes, cyclic, glaciation theory: Weyl, Peter K. 04162

Geochemistry

Ca:Mg content, limestone deposition, paleoclimatic indicator: Fairbridge, R. W. 04685

Carbon isotope, plankton-sea water relationship: Deuser, W. G. 02341

Carbon, organic, cycle: Ryther, John H. 08864

Equilibrium with clay minerals: Siever, Raymond. 05101

Sea water—Continued

Geochemistry—Continued

- Fluorine abundance, radiochemical studies: Wilkniss, Peter E. 10436
- Hydrocarbons, low-molecular-weight: Linnembom, Victor J. 08781
- Ion activity coefficients, glass electrodes: Garrels, Robert M. 09897
- Lipids, content, zones: Jeffrey, Lela Mae. 08746
- Magnesium sulfate speciation, synthetic: Kester, Dana R. 06119
- Mn, Co, Ni solids, stability conditions: Carvajal, Marta Campa. 07784
- New Jersey, New York, continental shelf: McKinney, Thomas F. 08183
- Oxygen-pH relations: Park, Kilho. 08835
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- Paleosalinity, boron in illite as indicator: Walker, C. T. 03859
- Paleosalinity, determination, K-Rb ratio, illite, Kansas: Gafford, Edward L. 09300
- Paleosalinity, Permian, reduction, faunal crisis: Fischer, A. G. 04675
- Paleosalinity, sedimentary phosphate method: Nelson, Bruce W. 08823
- pH-temperature profiles, in-place probe, California: Ben-Yaakov, S. 06049
- Silica, biogenic, isotope fractionation: Mopper, Kenneth. 10708
- Silica flux, sea-floor interface, Atlantic Ocean: Schink, David R. 10706
- Silver, cobalt, uranium, concentrations cf. corals: Veeh, H. Herbert. 02537
- Solid-state electrochemical measuring system: Wilde, P. 10784
- Sulfur isotopes, ancient abundances: Sangster, D. F. 04714
- Textbook, analytical methods: Martin, Dean F. 03516
- Thorium-234 disequilibrium: Bhat, Suman. 10785
- Trace elements, Atlantic Ocean, Gulf Stream: Brewer, Peter G. 08470
- Trace metals, anodic stripping voltammetry: Zirino, A. 10437

Sedimentary rocks*Alteration*

- Tennessee, Hawkins County, silicified beds above bentonite: Hergenroder, John D. 08534

Aragonite

- Stability, sea water, fabrics: Bathurst, R. G. C. 09605

Argillaceous rocks

- Clay flake orientation: O'Brien, Neal R. 09810
- Physical properties, West Virginia, Randolph County: Englund, Kenneth J. 02612

Argillites

- Geochemistry, Purcell System, British Columbia-Alberta: Leask, D. M. 04086

Bentonite

- Geochemistry, Kansas, Carlile Shale: Hostetler, James M. 09285
- Mineral composition, genesis, Texas, Gonzales County: Chen, Pei-Yuan. 06544
- Petrology, United States, northeastern: Dennison, John M. 07759

Sedimentary rocks—Continued

Carbonate rocks

- Alteration, Bahamas, Great Inagua Island, dolomitization: Bubb, John N. 01230
- Alteration, fabric, Wyoming: Tucker, M. M. Riddler. 03630
- Alteration, Wisconsin, Temperly-Thompson district: Cahoon, Bobby G. 08636
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- Deterioration, ice, ordered water, thermodynamic study: Dunn, James R. 08176
- Diagenesis, environmental factors: Purdy, Edward G. 07912
- Dolomitization, Alberta, Leduc reefs: Stanton, Robert J., Jr. 09697
- Fabric, cementation, Barbados: Matthews, R. K. 07873
- Fabric, determined by sample studies: Harris, John F. 03782
- General description, Pennsylvania, Lancaster quadrangle: Meisler, Harold. 01644
- Genesis, Alberta, Siyeh Formation, detrital silt: Adshead, John D. 08596
- Geochemistry, analyses, Michigan, Niagaran samples: Sanford, John T. 01194
- Geochemistry, Michigan, Silurian, correlation: Sanford, John T. 04719
- Geochemistry, Oklahoma, Foraker Formation, trace elements: Mogharabi, Ataollah. 00158
- Lithification, marine and fresh-water environments: Friedman, Gerald M. 09606
- Lithofacies, Idaho-Montana, Belt Supergroup: McKelvey, Gregory E. 03856
- Methods, acetate peels: Ali, Syed A. 05612
- Petroleum, habitat: Malek-Aslani, M. 09311
- Petrology and mineralogy, related to SO₂ absorption: Harvey, Richard D. 00737
- Petrology, Black River Group, New York: Textoris, Daniel A. 05631
- Petrology, Minnesota, Iowa, Wisconsin, Plattville Formation: Rassam, Ghassan Noel. 02624
- Petrology, Tennessee, Knox Group: Frank, William. 11081
- Physical properties, formation factor-porosity relation: Carothers, James E. 06504
- Physical properties, thermoluminescence, hydrothermal alteration, prospecting tool: MacDiarmid, Roy A. 03950
- Stylolite formation: Park, Won C. 01472
- Textures, birdseye structures, significance: Shinn, E. A. 01439
- Textures, dolomitization, experimental: Bubb, J. N. 01459
- Textures, Montana, North Dakota, Kibbey Formation: Rawson, Richard R. 04390

Chalk

- Thermoluminescence: Waite, Jerry M. 01462

Chert

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- Fabric, quartz, preferred orientation: Wenk, Hans-Rudolf. 09134
- Genesis, British Columbia, Washington, Permian: Danner, Wilbert R. 08653
- Genesis, Texas, Caballos Novaculite: McBride, Earle F. 08794
- Geochemistry, amino acids, Ontario, Gunflint Iron-Formation: Schopf, J. William. 09132
- Geochemistry, oxygen isotopes, Precambrian: Perry, Eugene C., Jr. 08840

Sedimentary rocks—Continued*Chert—Continued*

- Physical properties, application to highway use: Kneller, William A. 04151
 Structure, cell parameters, physical-chemical relations: Kneller, William A. 08766
 Textures, morphologies, aggregate solubility relations: Kneller, William A. 08765

Classification

- Petrogenetic relations, statistical methods: Griffiths, John C. 09562
 Sandstone: Chen, Pei-Yuan. 01479

Clastics

- General description, Dominican Republic, gravity slide sediments: Nagle, Frederick, Jr. 09807
 General description, Massachusetts-Rhode Island, Narragansett Basin: Mutch, Thomas A. 10939
 General description, Mexico, Baja California, Tertiary: Minch, John A. 08305
 General description, Utah, Duchesne River Formation: Warner, Mont M. 09168
 Mineral composition, Colorado, Slick Rock district, Mesozoic: Shawe, Daniel R. 02899
 Petrology, Mannville Group, Alberta, lithofacies: Clack, W. J. F. 04083
 Petrology, mineral composition, Oklahoma, Cloud Chief Formation: Nalewaik, Gerald Guy. 02039
 Petrology, North Dakota, Tongue River, Sentinel Butte Formations: Royse, Chester Franklin, Jr. 02041
 Petrology, provenance, North Carolina, Triassic: Thayer, Paul Arthur. 02044
 Petrology, Wisconsin, Michigan, Keweenawan rocks: Hite, David Marcel. 02633
 Provenance, California, Mexico, San Diego-Tijuana area: Peterson, G. L. 08843
 Provenance, composition, California, Domingine Formation: Todd, Thomas W. 06737
 Provenance, determination: Blatt, Harvey. 09179
 Provenance, general description, Ontario, Gowganda Formation: Lindsey, David Allen. 03032
 Provenance, Northwest Territories, Somerset Island, Idlorak Formation: Dineley, D. L. 02724
 Provenance, Tennessee, Chilhowee Group: Whisonant, Robert Clyde. 09864
 Provenance, United States, Black Warrior basin, Pennsylvanian: Ehrlich, Robert. 08672

Coal

- Alteration, thermal, Colorado: Crelling, John C. 03828

Coal-bearing strata

- Geochemistry, trace elements, depositional environment: Nicholls, G. D. 05872

Composition

- Rare earths, abundances: Haskin, Larry A. 08027
 Standard rocks, worldwide, chemical analyses: Pendas, Henryk. 06746

Conglomerate

- General description, California, San Diego County, Cretaceous: Nordstrom, Charles E. 10029
 General description, limestone, Maryland and Virginia: Dennis, John V. 00819
 Petrology, Michigan, Mott Island Conglomerate: Larson, Robert J. 09293

Sedimentary rocks—Continued*Conglomerate—Continued*

- Provenance, California, southern, Paleogene beds: Woodford, A. O. 04291
 Provenance, igneous pebbles, Montana, Sun River area: Mudge, Melville R. 05186
 Provenance, Massachusetts-Rhode Island, Narragansett Basin: Mutch, Thomas A. 10939
 Structural features, inverse grading, California: Fisher, Richard V. 06688

Coquina

- Petrology, Virginia, Chuckatuck area, Yorktown Formation, bar genesis: Bowman, John R. 06158

Dolomite

- Composition, Michigan, Ordovician carbonates: Bubb, J. N. 10098
 Dolomitization, California, Monterey Shale: Murata, K. J. 10025
 Dolomitization, sedimentation-reflux cycle: Lucia, F. Jerry. 08786
 Dolomitization, Texas, Edwards Formation, models: Rodda, Peter U. 08857
 Genesis, diagenetic: Usdowski, Hans-Eberhard. 09607
 Genesis, norsethite synthesis: Lippmann, Friedrich. 09608
 Geochemistry, aragonite replacement: Thrailkill, John. 02083
 Geochemistry, isotope studies, lake sediments, California: Clayton, Robert N. 01524
 Geochemistry, Texas: Atwood, D. K. 10063
 Petrology, environment, Beck Spring Dolomite, California: Gutstadt, Allan M. 06603
 Petrology, Missouri, Mississippian: Frey, Richard Paul. 01728
 Physical properties, strength, failure, experimental: Cherry, J. T. 11414

Evaporite

- Computer model: Briggs, Louis I. 07803
 General description, New Mexico, Carlsbad district: Jones, Charles L. 05984
 General description, United States: Briggs, Louis I. 01015
 Geochemistry, carnallite-sylvite relations, bromide, Rb: Wardlaw, Norman C. 03864
 Geochemistry, marine deposits: Stewart, F. H. 01652
 Geochemistry, Texas, Castile anhydrite: Dean, Walter E., Jr. 08657
 Incidence in geologic time: Kozary, Myron T. 01037
 Paleoclimatic significance: McKee, E. D. 04682
 Petrology, California, Saline Valley: Hardie, Lawrence A. 06675
 Petrology, geochemistry, Castile Anhydrite, Texas, New Mexico: Dean, Walter Edward, Jr. 01726
 Petrology, Kansas, Hutchinson Salt: Dellwig, Louis F. 01123
 Petrology, Mississippi embayment, Jurassic: Dickinson, Kendall A. 03524
 Petrology, New Mexico: Jones, C. L. 01026
 Petrology, Paradox basin, Colorado-Utah: Jones, C. L. 01025
 Petrology, physical properties, New Mexico, GNOME shaft: Gard, Leonard M., Jr. 04059
 Textures, penemosaic, Indiana, Detroit Formation: Rooney, Lawrence F. 03548

Flint clay

- Petrology, geochemistry, provenance: Keller, W. D. 11239

Sedimentary rocks—Continued

General

- General description, Arkansas, Scranton-New Blaine quadrangles: Haley, Boyd R. 05972
- General description, British Columbia, Taseko Lakes map-area: Jeletzky, J. A. 09409
- General description, California, Cretaceous slump deposit: Lowe, Donald R. 08784
- General description, Colorado, North-Middle Parks area: Hail, William J., Jr. 05982
- General description, Connecticut, Triassic lacustrine deposits: Sanders, John E. 08200
- General description, Nova Scotia, Baddeck and Whyocomaugh areas: Kelley, Danford G. 08154
- General description, Utah, Wasatch Mts., Spanish Fork Canyon: Rigby, J. Keith. 06153
- General description, Washington, Lake Tapps quadrangle: Gard, Leonard M., Jr. 00313
- Geochemistry, Rb-Sr analyses, Kansas, Permian: Chaudhuri, S. 08642
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- Mineral composition, Utah: Whelan, J. A. 11371
- Paleoclimatic indicators, paleolatitude spectra: Briden, J. C. 04696
- Petrology, Colorado, Slick Rock district, Mesozoic: Shawe, Daniel R. 02899
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- Oregon, Wisconsin, rare-earth elements, mineral phases: Collins, Kenneth Alan. 02029
- Organic materials, kerogen, oxidation to fatty acids: Hoering, T. C. 07892
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Graywacke

- Alteration, Kittery Formation, Maine, Cape Neddick: Woodard, H. H. 00461
- Geochemistry, Utah, northern, Precambrian: Condie, Kent C. 08582
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Iron formation

- General description, Minnesota, cf. Australia, South Africa: Trendall, A. F. 04294
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- Textures, diagenesis, deposition, Proterozoic ironstones, Quebec: Dimroth, Erich. 06662

Itacolumite

- Deformation properties, loose-grain model: DeVries, R. C. 09251

Sedimentary rocks—Continued

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- Fabric, fluorescent dye technique: Ali, Syed A. 03555
- Fabric, New York, Devonian: Anderson, Edwin Joseph. 01339
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- General description, phylloid algal, Paleozoic, U.S.: Wray, John L. 05628
- Geochemistry, Ca:Mg content, paleoclimatic indicator: Fairbridge, R. W. 04685
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- Lithofacies, Virginia, Rockbridge County, central, Middle Ordovician: Carson, Robert J., 3d. 05059
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- Petrology, Colorado, San Juan Mts., coralline: Girdley, W. Arch. 09308
- Petrology, electron microscopy, California, Franciscan rocks: Garrison, Robert E. 07734
- Petrology, Kentucky, Salem Limestone: Taylor, Ronald S. 09309
- Petrology, Louisiana, Upper Smackover Formation: Bishop, William F. 00065
- Petrology, New York, Onondaga Limestone: Lindholm, Roy Charles. 02036
- Petrology, oolitic, autoclithonous, alloclithonous: Lacey, James Edward. 01347
- Physical properties, deformational characteristics: Byerlee, James D. 02364
- Physical properties, elastic, Solenhofen: Peselnick, Louis. 00971
- Physical properties, permeability, Georgia, buried karst, effects: Herrick, S. M. 08728
- Physical properties, shear strength, jacket-cell tests: Ladanyi, B. 09417
- Physical properties, thermoluminescence, use in dating: Medlin, W. L. 05292
- Textures, micro-, electron microscopy: Harvey, Richard D. 07959

Lithofacies

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- Alberta, Jasper region, Sulphur Mtn. and Whitehorse Formations: Gibson, D. W. 02851
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- Alberta, Swan Hills reef complexes: Fischbuch, N. R. 07343
- Appalachians, central, Helderberg Group, Devonian: Head, James W., 3d. 09787
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- Arizona, northwestern, Hindu Canyon, Cenozoic: Gray, Robert. 11383
- Arkansas, Winslow Formation, faunal cycles: Henbest, Lloyd G. 02496
- Atlantic Coastal Plain, Cretaceous-Quaternary: Owens, James P. 08964
- Atlantic Ocean, Florida shelf to Blake Plateau, Tertiary: Weaver, Charles E. 02540
- British Columbia, Taseko Lakes map-area, Jurassic-Cretaceous: Jeletzky, J. A. 09409

Sedimentary rocks — Continued*Lithofacies — Continued*

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- Canada, eastern, Carboniferous, continental deposits: Belt, Edward S. 03439
- Canada, Potsdam Formation, subsurface: Roliff, W. A. 08185
- Carbonate rocks, micro-seismogram log interpretation: Spalding, Joe S. 06522
- Colorado, Elk Mountains, Pennsylvanian-Permian: Bartleson, Bruce L. 02714
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- Florida, southern, Miami Oolite: Hoffmeister, J. Edward. 08953
- Georgia, Jackson Group: Carver, Robert E. 08516
- Idaho-Montana, Mississippian carbonates: Huh, Oscar K. 01223
- Illinois, Chester microfacies: Carozzi, Albert V. 03136
- Iowa, east-central, Bertram Member of Wapipinicon Formation: Church, Norman K. 06645
- Iowa, Pella Beds: Johnson, Gary D. 08750
- Kansas, Bern Limestone, Pennsylvanian: Myers, Dennis. 09286
- Kansas, Decatur County, Pennsylvanian basal clastics: Miesner, James F. 09287
- Kansas, Dennis Limestone, algal banks: Frost, Jack Glenn. 06549
- Kansas, Mississippian, western: Goebel, Edwin D. 03768
- Kansas, Stanton Limestone, algal-mound complex: Heckel, Philip H. 07881
- Kentucky, Maysville to Stanford, Upper Ordovician: Weir, Gordon W. 05189
- Louisiana, Frio Formation, Hackberry wedge: Paine, William R. 00305
- Maryland, Glenarm Series: Hopson, Clifford A. 08181
- Mississippi, Jurassic formations: Dinkins, Theo H., Jr. 05272
- Mississippi-Alabama, Smackover, Haynesville, Cotton Valley Formations: Oxley, Marvin L. 05424
- Missouri, Bates County, Pennsylvanian, Desmoinesian units: Gentile, Richard J. 08064
- Missouri, Blackjack Creek Fm.: Neal, William Joseph. 07155
- Montana, North Dakota, Hell Creek Formation: Frye, Charles Isaac. 02034
- Montana, Precambrian, Piegan Group-Missoula Group: O'Connor, Michael P. 08831
- Montana-North Dakota, Kibbey Formation, Ray Member: Rawson, Richard R. 06973
- Nevada, Diamond Peak Fm.-Chainman Shale, Mississippian: Brew, David A. 10882
- Nevada, Las Vegas area, Lower Triassic: Bissell, H. J. 01317
- Nevada, Las Vegas hinge-line, Pennsylvanian-Permian: Welsh, John Elliott. 09172
- Nevada, Permian shelf-to-basin: Bissell, H. J. 05629
- New Brunswick, Moncton map-area, Carboniferous rocks: Carr, P. A. 00977
- New Mexico, Mockingbird Gap quadrangle, Paleozoic: Bachman, George O. 05470
- New York, Devonian, Sonyea Group: Sutton, Robert G. 08037
- New York, east-central, Devonian, Catskill complex: Johnson, Kenneth G. 08751

Sedimentary rocks — Continued*Lithofacies — Continued*

- New York, east-central, Tully Limestone: Johnson, Kenneth G. 08209
- New York, Fuyk Member of Rondout Formation: Harper, John D. 01214
- New York, Herkimer Formation, Silurian: Zenger, Donald H. 09958
- New York, Onondaga Limestone: Lindholm, Roy Charles. 02036
- New York, Sonyea Formation, Cashaqua Shale Member: Kirchgasser, William Thomas. 01748
- New York, southeastern, Devonian: Wolff, Manfred P. 09955
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- Northwest Territories, Alberta, Devonian: Richmond, William Oliver. 00862
- Northwest Territories, Ellesmere Island, Ordovician formations: Kerr, J. William. 06311
- Northwest Territories, Mackenzie, Great Slave Supergroup: Hoffman, P. F. 06306
- Northwest Territories, Prince Gustaf Adolf Sea area: Marlowe, J. I. 02054
- Northwest Territories, Prince of Wales Island area, Peel Sound Formation: Broad, D. S. 03134
- Nova Scotia, Cape Breton Island, Mississippian: Kelley, Danford G. 08154
- Ohio, Hamilton County, Cincinnati Group: Ford, J. P. 08525
- Ohio, Hamilton County, Cincinnati strata: Osborne, Robert H. 05722
- Oklahoma, Pennsylvanian, Bluejacket Formation, deltaic complex: Saitta B., Sandro. 09068
- Oklahoma, Pennsylvanian, Cherokee-Marmaton Groups: Cole, Joseph Glenn. 04533
- Oklahoma, Pennsylvanian sandstones: Khaiwka, Moayad Hamid. 04539
- Oklahoma, Permian, Blaine Formation: Johnson, Kenneth Sutherland. 02634
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- Ontario, Gowganda Formation: Lindsey, David Allen. 03032
- Ontario, Lakefield area, Trenton Group: Winder, C. Gordon. 05011
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- Paleohydrologic controls, plant cover effect: Schumm, S. A. 04283
- Pennsylvania, central, Ordovician: Thompson, Allan M. 09941
- Quebec, Escuminac Formation, Devonian: Williams, B. P. J. 10794
- Rocky Mountains, Pennsylvanian evaporite cycles, Colorado-Utah: Peterson, James A. 01183
- South Dakota, Cretaceous, transectional environments, faunal assemblages: Waage, Karl M. 10881
- South Dakota, Fox Hills Formation, type area: Waage, Karl M. 09882
- South Dakota, Wyoming, Deadwood Formation: Kulik, Joseph W. 10110
- Stratigraphic components, functional classification: Zigic-Toshich, Darinka. 01413

Sedimentary rocks—Continued*Lithofacies—Continued*

- Texas, Franklin Mountains, El Paso Group: Lucia, F. J. 010172
- Texas, Franklin Mountains, Ordovician highlands: LeMone, David V. 11015
- Texas, Marathon Formation, Ordovician: Young, Leonard Maurice. 06561
- Texas, Paluxy Valley, Glen Rose Formation: Nagle, J. Stewart. 03175
- Texas, west-central, Pennsylvanian-Permian boundary: Rezaie-Moayed, Yadi. 11209
- United States, Great Basin, Precambrian-Cambrian: Stewart, John H. 09164
- United States, western, Cretaceous, paleoecology: Kauffman, Erle G. 10877
- United States, western, midcontinent, Permian System: Rascoe, Bailey, Jr. 07264
- Utah, central, Green River Formation: Baer, J. L. 10887
- Utah, Gunnison Plateau, Colton Formation, fluviatile: Mercantel, Emily L. 11040
- Utah, Straight Cliffs Sandstone, Cretaceous: Or-lansky, Ralph. 00858
- Utah, Tertiary, lower sequence: Catacosinos, Paul A. 00266
- Utah, Uinta Mountain Group, Precambrian: Crittenden, Max D., Jr. 09984
- Virginia, Princess Anne County, Nansemond Formation: Rogers, W. S. 02526
- Washington, western, Paleogene: Vine, James D. 08022
- West Virginia, Allegheny Formation: Ferm, John C. 03440

Manganese-rich

- Mineral composition: Roy, Supriya. 06986

Methods

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- Carbonate rocks, stained peel techniques: Davies, Peter J. 01454
- Computer program, principal components, computation: Wahlstedt, Warren C. 05661
- Conglomerates, pebble counts: Hunter, Ralph E. 01465
- Darkfield illumination, algal structures in Animikie chert: Moorhouse, W. W. 07803
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- Petrofabrics from dip-meter log: Rodriguez, A. R. 07272
- Provenance by K-Ar dating, New Jersey: Abdel-Monem, Abdalla A. 02977

Sedimentary rocks—Continued*Methods—Continued*

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- Size analysis, thin section vs. grain mount: Smith, Richard E. 01467
- Thermoluminescence, effect of grinding, carbonates, salt: Lewis, D. R. 03963
- Thermoluminescence, limestone-dolomite systems, geologic applications: Lewis, D. R. 03968
- Thin section photography: Heron, S. Duncan, Jr. 03617
- Thin-section criteria for fluvial environment: Paine, William R. 01436
- Variance analysis, graywacke, sedimentation processes, effects: Dahlberg, Eric C. 08946
- Mudflow deposits*
- Fabric, development, computer modeling: Lindsay, John F. 06592
- Ore deposits*
- Montana, Castle Mountain mining district: Winters, Allen S. 02560
- Orthoquartzite*
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- General description, depositional environment, central Florida: Freas, D. H. 07442
- General description, Tennessee, Ocoee Series: Wedow, Helmuth, Jr. 08567
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- Genesis, Iowa, Maquoketa Formation: Bromberger, S. H. 10097
- Mineral composition, lithology, Atlantic and Gulf Coastal Plains: Cathcart, J. B. 10982
- Petrology, genesis, Iowa, Maquoketa Formation: Bromberger, Samuel H. 11264
- Physical properties*
- Alabama, Cahaba coal field, elastic: Cox, Robert M., Jr. 09893
- California, Paso Robles Formation, magnetic susceptibility: Galehouse, Jon S. 01078
- Canada, western sedimentary basin: Hitchon, Brian. 05750
- Drillability: Bruce, William E. 07776
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- Hardness, pelecypod-burrow indicators: Evans, John W. 02465
- Pennsylvania, Gatesburg Formation, porosity, genesis: Smith, Richard E. 08042
- Permeability, poikilotopic dolostones, history: Freeman, Tom. 08695
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- Thermoluminescence, limestone, effect of pressure: Morency, Maurice. 03966
- Thermoluminescence, trapping and emission processes: Medlin, W. L. 03965
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Sedimentary rocks—Continued*Red beds—Continued*

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 Mineral composition, hematite genesis: Walker, Theodore R. 00550

Salt

- Physical properties, strength, failure, experimental: Cherry, J. T. 11414

Sandstone

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 Classification, modification: Chen, Pei-Yuan. 01479
 Diagenesis, turbidites, effect on matrix, Quebec: Lajoie, Jean. 06928
 Experimental study, diagenesis: Larese, Richard E. 05583
 Fabric, Sylvania Sandstone, Ohio, Michigan: Hatfield, Craig B. 01469
 General description, Louisiana, Catahoula Formation, tuffaceous: Paine, William R. 01436
 General description, Oklahoma, Pennsylvanian: Khaiwka, Moayad Hamid. 04539
 General description, turbidites, Illinois, Borden Siltstone: Lineback, Jerry A. 02532
 Genesis, Alabama, Tallahatta Fm., lussatic quartzite: Reynolds, William R. 08552
 Geochemistry, mercury content, Colorado Plateau, Navajo Sandstone: Cadigan, Robert A. 08635
 Heavy minerals, Tennessee, Ocoee Series: Carpenter, Robert H. 08515
 Mississippi, Mallalieu oil field, petrography: Berg, Robert R. 09331
 Petrology, Arkansas, Jackfork section, provenance and dispersal: Morris, Robert C. 00417
 Petrology, Frenchman and Edmonton Formations, Saskatchewan, Alberta: Chi, B. L. 04063
 Petrology, luminescence petrography method: Sippel, R. F. 03562
 Petrology, Montana, Muddy Sandstone: Berg, Robert R. 04506
 Petrology, Morrison Formation, New Mexico: Nash, J. Thomas. 06991
 Petrology, Tennessee, Pottsville sandstone: Freeman, Timothy F. 08526
 Physical properties, elasticity: Desai, Kantilal Panachand. 06563
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 Physical properties, magnetic logging: Timur, A. 09474
 Physical properties, Michigan, Jacobsville Sandstone: Bacon, L. O. 07817
 Physical properties, permeability, Bethel-Sample Formations, Indiana: Hrabar, Stephanie V. 01220
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 Provenance, Alabama, Georgia, Frog Mtn. Sandstone: Kiefer, John D. 10852
 Provenance, Alberta, Gulf Spring Point, Cretaceous-Paleocene: Nelson, H. W. 07321

Sedimentary rocks—Continued*Sandstone—Continued*

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 Provenance, Pennsylvania, Mauch Chunk Formation: Haq, Mominul. 08178
 Provenance, Stanley Group, Oklahoma: Hill, John Gilmore. 01346
 Size analysis, provenance, bimodal-superimature: Folk, Robert L. 05626
 Size analysis, Saskatchewan, South Saskatchewan reservoir, aquifers: vanEverdingen, R. O. 00976
 Structural features, dikes, California, Sacramento Valley: Peterson, Gary L. 05554
 Structural features, marine-bar, valley-fill, Nebraska: Exum, F. A. 04504
 Structural features, multiple parallel-truncation bedding planes: Stokes, William Lee. 03574
 Textures, sand grain surfaces, electron microscopy: Krinsley, David H. 01888
 Textures, Texas, caliche profiles: Amsbury, David L. 08599

Shale

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 Fabric, flow cleavage, New Jersey, Martinsburg Shale: Carson, William P. 03915
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 Physical properties, elasticity, experimental: Kaarsberg, Ernest A. 06764
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 Provenance, mineral composition, Morrison, Kootenai Fms., Montana: Suttner, Lee J. 06947

Textures

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Tillite

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Travertine

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Turbidites

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 General description, California, Sacramento Valley, Cretaceous: Ojakangas, Richard W. 02696

Sedimentary rocks—Continued*Turbidites*—Continued

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Textures, fabric, Pennsylvania, Martinsburg Formation: Rukavina, Norman A. 08060

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Ball-and-pillow

Utah, east-central, Panther Sandstone, Cretaceous: Howard, James D. 10309

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Biogenic

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Crossbedding

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Sedimentary structures—Continued*Crossbedding*—Continued

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United States, basal Sauk clastics, paleocurrents: Seeland, David Arthur. 09463

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Wyoming, Sundance Formation: Stone, Randolph. 09706

Crystal casts

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Current markings

Model study, classification of types: Selley, Richard C. 00531

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Oklahoma, Stanley Group: Johnson, Kent E. 03549

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Dendritic surge marks

New term for *Dendrophycus*: High, Lee R., Jr. 01333

Desiccation

Florida, Keys, nodules, dolomitization: Shinn, Eugene A. 03523

Directional features

Application, hydrocarbon exploration: McDaniel, Gary A. 03765

Fossil orientation

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General

Alberta, Sulphur Mtn. and Whitehorse Formations: Gibson, D. W. 02678

Appalachians, Catskill Formation: Allen, J. R. L. 03441

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Sedimentary structures—Continued

General—Continued

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 Minnesota, Thomson Fm.: Morey, G. B. 07795
 North Carolina, Triassic, paleocurrent indicators: Leith, C. J. 10319
 North Dakota, Tongue River and Sentinel Butte Formations: Royse, Chester F., Jr. 01192
 Nova Scotia, Goldenville Formation: Harris, I. McK. 04399
 Oklahoma, eastern, Bluejacket Sandstone, road log: Visser, Glenn S. 09066
 Oklahoma, Hartshorne Formation: McDaniel, Gary A. 01159
 Ontario, Gowanda Formation: Lindsey, David Allen. 03032
 Ontario, Huronian rocks: Young, Grant M. 00361
 Ontario, Huronian strata, Espanola-Willisville area: Casshyap, S. M. 05531
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 Submarine slopes, morphology and origin: Hulsemann, Jobst. 01919
 Utah-Colorado, Uinta Mtn. area, Gartra Formation: McCormick, C. D. 02487

Graded bedding

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Interpretation

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 Appalachians, north-central, Silurian clastics: Smith, Norman D. 09935
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 Burrows, depth, nearshore-offshore relations: Rhoads, Donald C. 08052
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 Colorado, Greenhorn Formation, paleoslope water depths: Eicher, Don L. 10878
 Colorado, Leadville Limestone: Conley, C. D. 07792
 Dipmeter data, statistical analysis: Campbell, R. L., Jr. 03784
 Idaho, Owl Cave, lava-tube fill, paleoclimatic indicators: Dort, Wakefield, Jr. 02539
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 North Carolina, Triassic clastics: Thayer, Paul Arthur. 02044
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 Stromatactis or reef tufa, Mississippian, U.S., burrows: Shinn, Eugene A. 05767
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Lineation

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Sedimentary structures—Continued

Methods

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 Statistical analysis, orientation data: Jones, Thomas A. 01480

Microstructures

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Minor

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Molar-tooth structure

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Mudlumps

- Louisiana, Mississippi delta, genesis: Morgan, James P. 03244
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Pipes

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Point bars

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Ripple marks

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 Kentucky, Kope and Fairview Formations, megaripples, paleocurrents: Rife, David L. 00013
 New Mexico, Jurassic, Morrison Formation: Tanner, William F. 01201
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 Nova Scotia, Minas Basin, intertidal zone: Barr, Jim L. 06626
 Nova Scotia, Minas Basin, second-order ripples: Badal, Julian C. 06625
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Sedimentary structures—Continued

Salt casts

Mtana, Shields Formation, Lewis and Clark Range: O'Brien, Dennis C. 03535

Scour markings

Erosion indicators, turbidites: Allen, J. R. L. 06610

Slump structures

Alabama, Birmingham anticlinorium: Thomas, William A. 08561

Newfoundland, Exploits Group, tectonic implications: Helwig, James. 09788

Virginia, Edinburg Limestone, Ordovician: Lowry, W. D. 11082

Sole markings

Alberta, Pleistocene till deposits: Westgate, J. A. 06729

Marine siltstone and shale, nonturbidite origin: Pryor, Wayne A. 01187

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Stromatolites

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Classification and origin: Park, Won C. 01472

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Sedimentation

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Sedimentation—Continued

Environment—Continued

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Sedimentation—Continued*Environment*—Continued

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Sedimentation—Continued*Experimental studies*—Continued

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Sedimentation—Continued*Ocean currents*—Continued

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- Estuaries, shore erosion, Chesapeake Bay, Maryland-Virginia: Schubel, J. R. 10966
- Evaporites, deep-water basin, model: Schmalz, Robert F. 01195
- Gamma-ray spectrometry, deep-sea cores: Osmond, J. K. 00208
- Gulf of Mexico, Sigsbee knolls: Pyle, Thomas E. 08094
- Gulf of Mexico, Sigsbee Knolls area: Pyle, Thomas E. 11048
- Holocene, Arctic Ocean, Chukchi Sea shelf: Holmes, Mark L. 08452
- Lake, calcite, New York: Brunskill, Gregg John. 06566
- Loess, Alaska: Pewe, Troy L. 05634
- Marine, clay mineral distribution: Griffin, John J. 05986
- New Mexico, Dead Man Lake: Wright, H. E., Jr. 03089
- Ocean basins, use of paleomagnetic data: Opdyke, N. D. 05898
- Oceanic sediments, ionium/thorium determinations, accuracy: Goldberg, Edward D. 01532
- Pacific Ocean, Astoria submarine canyon: Carlson, Paul Roland. 00873
- Pacific Ocean, Juan de Fuca ridge, C-14: Lister, C. R. B. 08454
- Paleohydrologic controls, plant cover effect: Schumm, S. A. 04283
- Paleomagnetic and ionium methods compared: Ku, Teh-Lung. 01606
- Quaternary lake deposits, North Carolina: Wolf, Frederick A. 00726
- Tidal sandbars, Nova Scotia, Minas Basin, bedform migration: Dinkelman, Menno G. 06587

Sedimentation—Continued*Rates*—Continued

- Variable, models, computer simulation: Schwarzer, Walther. 06172
- Washington, Oregon, continental shelf, radioactive sediments: Gross, M. Grant. 07741

Research

- 1967, review: Gross, M. Grant. 00006

Sea fans

- California borderland, cf. Permian, Texas-New Mexico: Jacka, Alonzo D. 08004

Statistical methods

- Adjustment coefficients, quality control: Guy, Harold P. 00739

Stream transport

- Arid regions: Wertz, Jacques B. 11382
- Bed forms, relation to friction: Vanoni, Vito A. 04581
- Bed forms, relation to friction, experiments: Squarer, David. 00055
- Bed material, coarse, uniform, initial movement, experimental study: Neill, C. R. 03114
- Bed particle motion, initiation, California: Helley, Edward J. 10373
- Bed profiles, dune waves, statistical description: Nordin, Carl F. 05164
- Bed-material discharge: Chang, Feng-Ming. 09539
- Boulders, Truckee River, flood velocities, California-Nevada: Birkeland, Peter W. 00538
- California, Piru Creek, reservoirs: Scott, Kevin M. 05551
- California, Rubicon River, Hell Hole damsite, flood: Scott, Kevin M. 07531
- California, Sierra Nevada, gravel: Janda, Richard J. 10010
- Canada, sediment surveys: Stichling, W. 08925
- Colorado, Kiowa Creek, K-79 reservoir, trap efficiency: Mundorff, James C. 00588
- Columbia River, lower, stream-flow variables, bar conditions: Norgaard, Richard B. 01850
- Degradation of bed below dams, prediction methods: Ackermann, Norbert L. 00107
- Estuaries, shore erosion, Chesapeake Bay, Maryland-Virginia: Schubel, J. R. 10966
- Estuary sorting, Virginia, James River, fecal pellets: Haven, Dexter S. 04990
- Flume experiments, data correlation, similitude theory: Barr, D. I. H. 04589
- Flume experiments, data correlation, similitude theory: Barr, David I. H. 04588
- Flume experiments, data correlation, similitude theory: Maddock, Thomas, Jr. 09426
- Grain size, effect on sediment transport: Hooke, Roger LeB. 01068
- Maryland, Chesapeake Bay, northern, suspended sediment: Schubel, J. R. 03201
- Modes, related bed forms in conveyance systems: Acaroglu, Ertan R. 11226
- New York, Erie-Niagara basin, suspended-sediment variation, discharge: Archer, R. J. 09115
- Oregon, Coast Range foothills, Woods Creek Canyon: Balster, Clifford A. 01691
- Patterns, Virginia, Rappahannock Estuary: Nichols, Maynard M. 08963
- River channel bars, dunes, kinematic waves, experimental: Langbein, Walter B. 07530
- Sampling, bed-load sediments: Cashman, C. Z. 01794
- Sand waves, ripples, Arkansas River deposits, Oklahoma: Tillman, Roderick W. 01202

Sedimentation—Continued*Stream transport*—Continued

- Sand waves, statistical properties: Nordin, Carl F., Jr. 07401
- Settling characteristics, measurement, field method: Fitzpatrick, G. L. 05182
- Streambed gravel, suspended particles: Vaux, Walter Gregson. 07162
- Suspended silt, deposition in a gravel bed, experimental study: Einstein, H. A. 04578
- Texas, Trinity River, suspension load, variation, statistical study: Wang, Kung Teh. 09861
- Thermodynamic analogy, processes involving nonpositive quantity: Chung, C. L. 05102
- United States, Columbia River, estuary and entrance, diffusion: Lockett, John B. 09541
- Utah, basic data, 1905-65: Mundorff, J. C. 02605
- Virginia, Scott Run basin, rate during highway construction: Vice, Raymond B. 00056
- Washington, King County: Williams, R. C. 00076

Theoretical studies

- High-Froude phenomena: Tanner, William F. 09712

Tidal currents

- Crossbedding, Nova Scotia, Minas Basin: Bedi, V. K. 06627

Turbidity currents

- Atlantic Ocean, Bahama Canyon system: Andrews, James Einar. 00871
- Carbonate turbidites, Gulf of Mexico, abyssal plain: Davies, David K. 06735
- Nova Scotia, Bedford Basin, foraminiferal tests, sediment trap: Schafer, C. T. 07981
- Pacific Ocean, Cascadia Channel: Kulm, L. D. 07924

Wave transport

- Sand, dark-mineral accumulations, Massachusetts, Cape Cod: Trumbull, James V. A. 00741

Wind transport

- Lag gravel accumulation: Galvin, Cyril J., Jr. 08702
- Sand, dark-mineral accumulations, Massachusetts, Cape Cod: Trumbull, James V. A. 00741
- Soil, erosion, mechanics: Woodruff, N. P. 11056
- Trans-Atlantic: Folger, D. W. 08691

Sediments*Alluvium*

- General description, Nevada, Yucca Flats area, Cenozoic: Fernald, Arthur T. 06825
- Mineral composition, Utah: Whelan, J. A. 11371
- Volume, Arizona, Tombstone area, Walnut Gulch watershed: Spangler, Daniel P. 05746
- Weathering, semiarid climate, soil genesis: Smith, B. R. 01839

Caliche

- Genesis, absolute age, C-14 method: Rightmire, Craig T. 08853

Carbonate

- Absolute age, Texas, pluvial lake dolomite: Reeves, C. C., Jr. 10082
- Cementation, Barbados, pelecypod role: Macintyre, I. G. 03559
- Deposition, environments, dynamic interaction, Bahamas: Ginsburg, Robert N. 07352
- Diagenesis, Bahamas, New Providence Platform: Taft, William H. 06319
- Diagenesis by burrowing organisms: Winder, C. Gordon. 05630

Sediments—Continued*Carbonate*—Continued

- Diagenesis, environmental factors: Purdy, Edward G. 07912
- Diagenesis, subaerial, Barbados: Harris, William H. 08722
- Dolomite, origin, diagenetic: Usdowski, Hans-Eberhard. 09607
- Dolomitization, norsethite synthesis: Lippmann, Friedrich. 09608
- Florida, hurricane deposition, erosion: Pray, Lloyd C. 08092
- General description, Atlantic Ocean, lithified: Thompson, Geoffrey. 06600
- General description, Bahamas, Hogsty Reef: Milliman, John D. 07870
- General description, United States, southeastern, shelf: Pilkey, Orrin H. 11039
- Geochemistry, isotope studies, California, Deep Springs Lake: Clayton, Robert N. 01524
- Geochemistry, micrite envelopes, role of high Mg calcite: Winland, H. D. 06598
- Geochemistry, Texas, western, lakes: Parry, W. T. 10078
- Geochemistry, trace-element analyses, Gulf of Mexico: Hoskin, Charles M. 05724
- Mineral composition, Bahamas, possible sea-level relations: Pilkey, Orrin H. 10853
- Mineral composition, calcite, primary rhombohedrons: Perkins, R. D. 06613
- Mineral composition, phosphate diagenesis, in situ: d'Anglejan, Bruno F. 02173
- Mineral composition, quartz significance: Earley, Charles F. 06689
- Mineral composition, relation to sea-level, Bahamas: Rucker, James B. 02082
- Petrology, United States, beach, dune sands: Morton, Robert W. 08547
- Shape analysis, United States, shelf sediments: Estes, E. L. 10299
- Size analysis, volumetric histogram for field use: Hattin, Donald E. 01464

Classification

- Florida, Perdido Bay and adjacent shelf, bottom sediments: Parker, Neal M. 08992
- Northwest Territories, Cornwallis Island, Resolute area: Hannell, F. G. 01517
- Petrogenetic relations, statistical methods: Griffiths, John C. 09562
- Quebec, Kamouraska County, surface deposits, soils: Baril, Roger. 11052
- Soils, significance of lithologic discontinuities, and age: Arnold, R. W. 07436

Clastic

- Heavy minerals, Louisiana, Citronelle Formation: Rosen, Norman Charles. 04543

Clay

- Geochemistry, Hawaiian Islands, authigenic marine: Moberly, Ralph, Jr. 09433
- Physical properties, dynamic shearing tests: Olson, R. E. 07707
- Physical properties, flow law in dynamic compression: Yong, R. N. 07722
- Physical properties, Gulf of Maine: Richards, Adrian F. 08478
- Physical properties, stress-strain under stress-wave loading: Vey, Eben. 07709
- Provenance, Indiana-Ohio, Great Miami River basin: Huff, Warren D. 01222

Compaction

- California, controlling factors: Meade, Robert H. 00811

Sediments—Continued

Composition

- Caribbean Sea, carbon, foraminiferal assemblages as indicators: Seiglie, George A. 05712
 Pacific Ocean, Gulf of Mexico, spectrographic data: Young, Edward J. 01525

Diagenesis

- Experimental studies, quartz sand, carbonate rocks: Sharma, Ghanshyam D. 04427
 Lakes Erie, Ontario, chlorophyll degradation products: Kemp, A. L. W. 07089
 Louisiana, southeastern: Coleman, James M. 08647

Dust

- Ice sheets, size-distribution change, Greenland cf. Antarctica: Hamilton, Wayne L. 10953

Ecology

- Alberta, Foremost-Cypress Hills area, prairie mounds, postglacial: Bik, M. J. J. 07342
 Bermuda, carbonate platform, quantitative analysis: Upchurch, Sam B. 01203
 Hawaii, Kauai, western, offshore: Eppert, Herbert Charles, Jr. 00850
 Northwest Territories, Queen Elizabeth Islands, arctic effects: Pelletier, B. R. 01422
 Nova Scotia, Minas Basin, Parrsboro area, grain-size cf. clam distribution: Clebnik, Sherman M. 06628

Engineering properties

- Alberta, Rocky Mountain Forest Preserve, erosion prediction: Rutter, N. W. 05334

Environment

- Arctic, relation to stone size and shape: King, Cuchlaine A. M. 01473
 Beach, Nova Scotia, grain-size vs. slope: Parkash, Barham. 06620
 Classification, statistical method, Bahama Bank: McCammon, Richard B. 05685
 Coast, modern, barrier, estuary, marsh, North Carolina: Ingram, Roy L. 05437
 Continental shelf and paralic, Georgia: Henry, Vernon J., Jr. 05435
 Deep-sea, Atlantic Ocean, North American Basin: Pratt, Richard M. 04519
 Deep-sea, paleoclimatic indicator, continental glaciation: Ewing, M. 04681
 Estuary, Virginia, James River, fecal pellets: Haven, Dexter S. 04990
 Geosynclinal, United States, northwestern: McManus, Dean A. 07878
 Glacial fiord, geochemistry: Burrell, D. C. 10790
 Indicator, clay minerals as cumulative records: Keller, W. D. 01170
 Lake, Northwest Territories, Somerset Island, Stanwell-Fletcher Lake: Coakley, J. P. 05522
 Marine, abyssal, Pacific Ocean, northeastern: Duncan, John R. 08482
 Marine, magnesium and strontium content as indicators: Hoskin, Charles M. 05724
 Marine, New Jersey, Beach Haven-Little Egg Inlet: Charlesworth, Lloyd James, Jr. 07152
 Ocean, anoxic basin, North Carolina, Lookout Bight: Menzies, Robert J. 03720
 Ocean, Arctic, Baffin Bay, cores: Blee, John J. 04400
 Ocean floor, effect on shear strength: Vey, Eben. 05207
 Ocean floor, relation to physical properties: Keller, George H. 05208
 Pelagic, vertical mixing, quantitative description: Berger, Wolfgang H. 01812

Sediments—Continued

Environment—Continued

- Reef, lagoon, British Honduras, relation to composition: Billings, Gale K. 03107
 River, recognition by particle-size analysis: Royse, Chester F., Jr. 06596
 Terrestrial, paralic, red bed genesis: VanHouten, Franklyn B. 01085

General

- Age, palynology, lutite layer, Cretaceous, Atlantic Ocean: Habib, Daniel. 05166
 Atlantic Ocean, Mid-Atlantic Ridge, Cretaceous-Tertiary: Tsunemasa, Saito. 08078
 Atlantic Ocean, northern, glacial, ice-raftered: Conolly, J. R. 11271
 Connecticut, Ansonia and Milford quadrangles, glacial and postglacial: Flint, Richard Foster. 04722
 Fabric analysis, Atlantic Ocean, piston core disturbance: Bouma, A. H. 03801
 Fabric analysis, Colorado, Grand Mesa area: Yeend, Warren E. 09173
 Fabric analysis, Gulf of Mexico, ultrathin sections: Bowles, Frederick A. 00179
 General description, Arctic, Baffin Bay, cores: Blee, John J. 04400
 General description, Arctic Ocean, cores: Tsunemasa, Saito. 08186
 General description, Atlantic Ocean, Baffin Bay: Marlowe, James I. 06736
 General description, Atlantic Ocean, North American Basin: Pratt, Richard M. 04519
 General description, Atlantic Ocean, suspended, Massachusetts to Florida: Manheim, F. T. 08961
 General description, Bahamas, Hogsty Reef: Milliman, John Douglas. 00854
 General description, British Columbia, Boundary Bay, intertidal flat: Murray, J. W. 08962
 General description, Caribbean Sea, southern basins: Lidz, Louis. 07934
 General description, Caribbean submarine escarpment: Talwani, Manik. 08013
 General description, Florida, southwestern, Charlotte Harbor area: Huang, Ter-Chien. 10311
 General description, Georgia, Sapelo Island: Henry, Vernon J., Jr. 08533
 General description, Hawaii, beach systems: Moberly, Ralph, Jr. 09823
 General description, Hawaii, marine: Belshe, John C. 09829
 General description, Hawaii, Midway, Kure atolls: Gross, M. Grant. 10901
 General description, Hawaii, Puu Hou littoral cones, volcanics: Fisher, Richard V. 10921
 General description, Indiana, Mitchell Plain: Powell, Richard L. 10116
 General description, Maryland, fall zone, saprolite, Cretaceous: Cleaves, Emery T. 09760
 General description, New Brunswick, Alma River intertidal fan: Laming, D. J. C. 09796
 General description, North America, Juan de Fuca Strait, Pleistocene: Anderson, Franz E. 08601
 General description, North Carolina, Onslow Bay: Cleary, William J. 01150
 General description, Pacific Ocean, Cascadia basin, Blanco Fracture zone: Duncan, John Russell, Jr. 07153

Sediments—Continued

Environment—Continued

- General description, statistical study, Columbia River: Kelley, James C. 08760
- General description, United States, eastern, continental shelf: Trumbull, James V. A. 08974
- General description, Utah, Lake Bonneville: Bis-sell, Harold J. 11442
- Geochemistry, deep-sea cores, NaCl content vs. depth: Handy, R. L. 09392
- Geochemistry, heavy minerals, South Carolina, continental shelf: Stone, Irving C., Jr. 11355
- Geochemistry, mineral composition, reef, lagoon, British Honduras: Billings, Gale K. 03107
- Heavy minerals, California, Monterey Bay: Sayles, Frederick L. 10685
- Heavy minerals, Oregon-California, coastal drainages: Kulm, L. D. 09265
- Mineral composition, Arizona, Roosevelt Lake, clay minerals: Pipkin, Bernard W. 11385
- Mineral composition, clay, relations, Georgia: Pevear, David R. 08966
- Mineral composition, Florida, northern, offshore: Hathaway, John C. 08951
- Mineral composition, Hawaii: Fan, Pow-Foong. 08682
- Mineral composition, quartz dispersal pattern, selectivity, Gulf of Mexico: Davies, David K. 01235
- Mineral composition, West Virginia, Pleistocene lake deposit: Clendening, John A. 10291
- Petrographic analysis, Idaho, Owl Cave, lava-tube fill: Ore, H. Thomas. 02538
- Provenance, absolute age, Colorado River delta: Muffler, L. J. Patrick. 04462
- Sedimentary structures, size analysis, heavy minerals, Lake Huron: Risk, M. J. 09855
- Silica, grass phytoliths as source: Twiss, P. C. 09721
- Size analysis, crossbedding, Nova Scotia, Minas Basin: Mrakovich, John V. 09436
- Size analysis, New Jersey, Beach Haven-Little Egg Inlets: Charlesworth, L. J., Jr. 10995
- Size analysis, South Carolina, relations to coastal landforms: Adams, R. D. 00925
- Size and shape analysis, relation to deposit type: King, Cuchlaine A. M. 01473
- Textures, New England, continental margin: Schlee, John. 09931
- Geochemistry*
- Atlantic Ocean, northern, Holocene, fatty acids: Cooper, W. J. 07059
- Bacterial synthesis of hydrocarbons: Davis, J. B. 03094
- Bound halogens: Walters, Lester J., Jr. 11026
- Chemical reduction, Fe, during diagenesis: Velde, B. 01434
- Connecticut, Linsley Pond, interstitial water, iron: Doyle, Roger W. 05229
- Continental margin, California, interstitial waters, trace elements: Brooks, R. R. 01594
- Continental margin, Florida, organic constituents: Hulsemann, Jobst. 01147
- Deep-sea, iodine abundance: Bennett, J. H. 00651
- Deep-sea, pH: Wilde, Pat. 07994
- Fatty acids: Peterson, David H. 07849
- Fatty acids, molecular distributions, modern cf. ancient: Kvenvolden, Keith A. 08771
- Florida, Choctawhatchee Bay, organic: Palacas, James G. 02718

Sediments—Continued

Geochemistry—Continued

- Gases in interstitial water, measurement technique: Reeber, William S. 00359
- Great Lakes region, mineral-water equilibrium, aluminosilicates: Sutherland, Jeffrey Clark. 07203
- Gulf of Mexico, Th, U, distribution: Carpenter, John R. 08514
- Hawaii, marine, zirconium distribution: Grunwald, Ross R. 08714
- Hydrocarbons, blue-green algae, significance, ancient sediments: Winters, Kenneth. 00037
- Indium abundances, cf. meteorites: Schmitt, R. A. 08042
- Iron fractionation: Angino, Ernest E. 07749
- Lakes, ferrous iron, analysis method, Lake Erie: Ross, Curtis. 07093
- Li, K, Rb, and Cs concentrations, rivers, North America, western: Sreekumaran, C. 05345
- Louisiana, Mississippi River valley and delta, alluvium, clays: Gagliano, Sherwood M. 01225
- Louisiana, organic, Atchafalaya basin cf. brackish Mississippi Delta: Ho, Clara. 01218
- Marine plankton, carbon isotope composition, diagenesis: Degens, E. T. 04440
- Marine, strontium isotope composition: Murthy, V. Rama. 04869
- Near-shore, interstitial water, sulfate, calcium, carbonate: Presley, B. J. 04865
- New York, continental shelf, interstitial water: Friedman, Gerald M. 06599
- New York, Hudson River, sodium uptake: McCrone, Alistair W. 03558
- Nitrogen, forms, experimental mohole: Stevenson, F. J. 08006
- North America, continental shelf, eastern, organic constituents: Hulsemann, Jobst. 09792
- Nova Scotia, continental shelf, chlorin pigments: Baker, B. L. 03106
- Ocean, oxygen, hydrogen isotopes: Savin, Samuel M. 08866
- Oceanic ridges, evidence for carbonatitic volcanism: Bostrom, Kurt. 10780
- Oregon, Washington, continental shelf: White, Stanton Moore. 03034
- Organic, acids from oxidation of Recent: Hoering, T. C. 01583
- Organic, hydrocarbons from kerogen on heating: Mitterer, R. M. 01582
- Pelagic, calcium carbonate, variation with depth: Smith, Stephen V. 07371
- Pennsylvania, fluvial, trace metals: Dahlberg, Eric C. 07756
- Porphyryns, chlorins, polycyclic aromatics: Hodgson, G. W. 02995
- River sediments, Th, U abundance, isotope ratios: Scott, Martha R. 02814
- Texas, Guadalupe River, Sr, Cs, sorption, release: Clanton, Uel S., Jr. 06545
- Texas, Louisiana, Holocene, offshore, sulfur: Laseter, J. L. 08777
- Textbook: Degens, Egon T. 08930
- Vitamin B-12, Holocene and older coastal materials: Mauer, Larry G. 06341
- Wisconsin, Lake Mendota, iron in bottom muds, distribution: Nriagu, Jerome O. 02250
- Wisconsin, Madison area, Lake Mendota sediments, sulfur: Nriagu, Jerome O. 04473
- Gravel*
- Deposition location: Russell, Richard J. 09856
- General description, Alberta, Foremost-Cypress Hills area: Westgate, J. A. 06698

Sediments—Continued*Gravel—Continued*

General description, Idaho, Snake River Plain, Melon Gravel: Malde, Harold E. 05449

General description, Washington, Wenatchee River area, high level: Long, William A. 00407

Physical properties, Mississippi, Citronelle Fm.: Gilliland, William E. 08529

Provenance, Louisiana, Mississippi delta, gastrolithic beach: Dixon, Mark A. 01239

Provenance, Saskatchewan gravels and sands, preglacial river deposits: Stalker, A. MacS. 02178

Size analyses, Texas, Colorado River: Bradley, William C. 10211

Size analysis, California-Nevada, Truckee River outwash: Birkeland, Peter W. 00538

Lithofacies

Atlantic Ocean, bottom samples, zonation: Shurko, I. I. 08071

Delaware, Lewes-Rehoboth Beach area, depositional environments: Kraft, John C. 03738

Gulf of California, Colorado River delta, tidal flat: Thompson, Robert Wayne. 07021

Hawaii, Kauai, western, offshore: Eppert, Herbert Charles, Jr. 00850

Lake Michigan, southwestern: Somers, Lee H. 07091

Mexico, Tamaulipas, Laguna Madre, composition, distribution: Yanez, Amado. 09224

Michigan, Lake Superior, post-glacial, distribution: Farrand, William R. 07801

Northwest Territories, Prince Gustaf Adolf Sea area: Marlowe, J. I. 02054

Ohio, Lake Erie, south shore reef area: Herdendorf, Charles E. 07088

Pacific Ocean, Astoria submarine canyon: Carlson, Paul Roland. 00873

Relation to depositional environment, coastal, North Carolina: Ingram, Roy L. 05437

Texas, Wilcox Group: Fisher, William L. 01674

Virginia, Suffolk area, Pleistocene formations: Coch, Nicholas K. 05573

Loess

Deposition, Washington, Palouse Hills: Ringe, Louis Don. 09854

Description, distribution, deposition, United States, World: Schultz, C. Bertrand. 02339

Effects on landform characteristics: Bariss, Nicholas. 02327

Engineering properties, Iowa-Nebraska: Benak, Joseph Vincent. 01337

Engineering properties, shear strength, slope stability: Lohnes, R. A. 03458

General description: Pewe, Troy L. 05634

General description, Louisiana, south-central: Daniels, R. B. 00923

General description, Mississippi-Louisiana: Snowden, J. O., Jr. 05668

General description, Ohio, northeastern: White, George W. 10197

Genesis, desert environment: Smalley, I. J. 03537

Iowa, physical properties: Fox, N. S. 03636

Mineral composition, carbonates, Mississippi Valley: Snowden, J. O., Jr. 08558

Mineral zonation, Illinois: Frye, John C. 02533

Nebraska, eolian origin: Reed, Eugene C. 02324

Physical properties, permeability: Rosen, Milton J. 00342

Sediments—Continued*Loess—Continued*

Physical properties, shearing strength, slope stability: Handy, R. L. 07955

Provenance, Iowa, northeastern: Ruhe, R. V. 03518

Provenance, Ohio, sponge spicules in soils, indicators: Wilding, L. P. 09083

Provenance, United States, High Plains, western: Lugn, A. L. 02330

Size analysis, Iowa, Tama County, Four-mile Creek watershed: Vreeken, W. J. 07592

Stratigraphy, correlation, United States, mid-continent: Frye, John C. 02340

Methods

Analytical balances, care: Schoen, Robert. 03552

"Bootstrap" corer, marine sediments: Isaacs, John D. 01438

Carbonate, stained peel techniques: Davies, Peter J. 01454

Clay materials, probability sizing: Stevenson, C. L. 09186

Composition, carbon content, gasometric technique: Kolpack, Ronald L. 03565

Computer program, principal components, computation: Wahlstedt, Warren C. 05661

Cores, liners, splitting instrument: Kravitz, Joseph H. 06591

Coring, core retainer valve: Kermabon, A. 03736

Coring device, sampling, influence on interpretation: Chmelik, F. B. 09332

Coring devices, effect on marine samples, comparison: Inderbitzen, A. L. 03572

Coring, hand operated apparatus, nearshore sands: Sanders, John E. 06609

Coring instrument for sand: Coffee, Clark E. 00720

Freeze-drying: Malcolm, R. L. 02693

Froth flotation, carbonate minerals: Smith, Stephen V. 03560

Gases in interstitial water, measurement technique: Reebergh, William S. 00359

Glaciofluvial, transport direction, distance, process: Ehrlich, Robert. 06734

Granulometric parameters, evaluation, variance analysis: Kelley, James C. 08479

Heavy minerals, field concentration: Gunn, Christopher B. 06616

Heavy minerals, separation: Stone, Jerome. 00370

Kurtosis and peakedness: Baker, R. A. 03554

Mineral composition, X-ray cf. optical modal analyses: Kaye, M. J. 03553

Ocean floor, surface coring apparatus, evaluation: Richards, Adrian F. 05206

Oriented thin sections, till: Sitler, Robert F. 05632

Particle size distribution, determination, apparatus: Bascomb, C. L. 03536

Physical properties, ocean floor, in-place measurement, accelerometer: Scott, Ronald F. 05235

Pore pressure measurements, marine clays: Lai, John Y. 08477

Pore water extraction, disposable syringe technique: Manheim, F. T. 03533

Provenance determination, experimental study: Boggs, Sam, Jr. 06607

Samplers, suspended detritus in sea water: Folger, D. W. 06992

Sediments—Continued*Methods—Continued*

- Sampling, large-diameter corer, Oregon, Crater Lake: Burke, John C. 06131
- Sampling, large-diameter undisturbed benthos sampler: Menzies, Robert J. 06132
- Sampling, river bed-load sampler: Cashman, C. Z. 01794
- Settling convection, grain-size analysis: Kuenen, Ph. H. 03540
- Settling velocity determination, apparatus: Modarresi, Hassan G. 06605
- Soil corer, trailer mounted, neutron probe access tube: Hipp, Billy. 05957
- Statistical analysis, orientation data: Jones, Thomas A. 01480
- Statistical, distinction between diamicton deposits: Landim, Paulo M. B. 06594
- Statistical, sand-sized particles: Clausen, Eric. 10219
- Stereoradiography, large-diameter plastic core tubes: Ayer, Nathan. 10282
- Unconsolidated sediments, slide making, mountant: Orlansky, Ralph. 06611
- Underwater portable flume, carbonate studies: Scoffin, Terence P. 01458
- Volumetric histogram for field use: Hattin, Donald E. 01464
- Water, bottom and interstitial, recovery from cores: Sanders, John E. 03534
- Wisconsin, Lake Superior shore, interdisciplinary study: Horton, J. W. 07798
- X radiography: Howard, James D. 08535
- Mineral composition*
- Arctic Ocean, Alpha Rise, sea-floor cores, clay minerals: Carroll, Dorothy. 01231
- Mackinawite, griegite, Connecticut, Linsley Pond: Doyle, Roger W. 05337
- Marine, glauconite, clay fraction, comparison: Bell, David. 10283
- Oregon, offshore, clay: Russell, Kenneth L. 08481
- Oregon, Washington, continental shelf: White, Stanton Moore. 03034

Mud

- Consolidation, experimental data: Chilingarian, George V. 03539
- General description, Connecticut, coastal swamps: Bloom, Arthur L. 09356
- General description, Massachusetts, Boston Harbor: Mencher, Ely. 01435
- Geochemistry, deposition by flocculation, turbulent flow, experimental: Etter, Robert J. 05260
- Geochemistry, Na absorption, Hudson River, New York: McCrone, Alistair W. 06366

Physical properties

- Acoustical, deep-sea cores: Horn, D. R. 00644
- Alaska, Taku Inlet, Norris Glacier outwash: Slatt, R. M. 10042
- Atlantic and Pacific basins: Keller, G. H. 05627
- California, central, subsiding areas: Johnson, A. I. 00312
- California, Rubicon River, flood effects: Scott, Kevin M. 07531
- Canada, glacial marine sediments, quartz grains, surface textures: Krinsley, D. H. 08212
- Continental margin, California, La Jolla canyon, magnetic fabric: Rees, Anthony I. 04425
- Core samples, effect of corer: Inderbitzen, A. L. 03572
- Elasticity, deep-sea, sonobuoy data: Houtz, Robert. 00514

Sediments—Continued*Physical properties—Continued*

- Elasticity, deep-sea, sonobuoy technique: LePichon, Xavier. 00513
- Electrical, Bering Sea floor, resistivity: Boyce, Robert E. 02332
- Florida, Perdido Bay and adjacent shelf, bottom sediments: Parker, Neal M. 08992
- Gulf of Maine, Wilkinson basin, clays, telemeter probe tests: Richards, Adrian F. 01190
- Gulf of Mexico, Campeche Canyon, shear strength: Morelock, Jack. 07868
- Gulf of Mexico, western: Morelock, Jack. 00874
- Hudson River, seismic study: Herron, E. M. 02336
- Iowa, Cary drift areas, trend analysis: Walker, P. H. 07438
- Kentucky, Paducah West and Metropolis quadrangles: Finch, Warren I. 04004
- Louisiana, Mississippi River valley and delta, alluvium, clays: Gagliano, Sherwood M. 01225
- New York, Erie-Niagara basin, stream-suspended variation: Archer, R. J. 09115
- North Carolina, Outer Banks, dynamic responses: Sonu, Choules J. 08437
- Ocean floor, environmental effects, measurements: Vey, Eben. 05207
- Ocean floor, measurement, coring apparatus, evaluation: Richards, Adrian F. 05206
- Ocean floor, relation to environment: Keller, George H. 05208
- Ocean floor, strength, in-place measurement, accelerometer: Scott, Ronald F. 05235
- Ocean-bottom, seismic reflection coefficients, relation: Faas, Richard W. 07378
- Ottawa sand, deformation at failure, new test method: Ko, Hon-Yim. 01836
- Pacific Ocean, northern: Hamilton, Edwin L. 08476
- Recent beaches, permeability-porosity patterns: Pryor, Wayne A. 01186
- Shear strength, Gulf of Mexico: Bryant, William R. 09340
- Shear strength, stability, continental slope, Gulf of Mexico: Morelock, Jack. 00039
- Thermal and electrical conductivities: Hutt, Jeremy R. 01504
- Thermomagnetic, Mid-Atlantic Ridge: Schwarz, E. J. 07210
- Wisconsin, esker, crevasse fillings differentiated: Suttner, Lee J. 10121
- Provenance*
- Alberta, Foremost-Cypress Hills area, prairie mounds, postglacial: Bik, M. J. J. 07342
- Bahamas, turbidites, ecological indicators: Cameron, Barry. 08639
- California, continental slope: Wright, Frederick F. 07984
- Clay minerals, cumulative geologic records: Keller, W. D. 01170
- Continental shelf, U.S., southeastern, iron-stained quartz: Judd, James B. 06034
- Glacial till, use of garnet: McDonald, Barrie C. 03761
- Gulf of California, palynomorphs: Cross, A. T. 02320
- Indicators, quartz grains: Molnia, Bruce Franklin. 06042
- Louisiana, Gulf coast, Holocene, continental shelf: Krawiec, Wesley. 01047
- Massachusetts, Cape Cod, dark-mineral accumulations: Trumbull, James V. A. 00741
- Mexico, Tamaulipas, Laguna Madre, heavy minerals: Schlaepfer, Carmen J. 09225

Sediments—Continued*Provenance—Continued*

- New Jersey, Trenton area, Quaternary: Owens, James P. 08207
- North America, eastern, continental margin: Ross, David A. 08861
- Pacific Ocean, high-heat flow areas: Bostrom, Kurt. 08615
- Pacific Ocean, northeastern, abyssal environments: Duncan, John R. 08482
- United States, southeastern, feldspar: Field, Michael E. 06035
- Wisconsin, red clay, Lake Superior shore and Michigan basin: Petersen, G. W. 02288

Sand

- Bar and barrier island, Gulf Coastal Plain, origin: Weidie, A. E. 09345
- Continental shelf deposits, resource for beach fill: Duane, David B. 07347
- Deposition location: Russell, Richard J. 09856
- Erosion features, evidence of wave energy conditions: Margolis, Stanley V. 07915
- Fabric analysis, experimental: Rees, A. I. 03895
- Fabric analysis, experimental, use of magnetic properties: Hamilton, N. 03896
- Fabric analysis, fine sands, dry-stable aggregate analysis: Volk, G. M. 06963
- General description, Hawaii, island beaches, sources, transport: Moberly, Ralph, Jr. 09883
- General description, United States, Columbia River, graywacke-type: Whetten, John T. 08348
- Heavy minerals, Arizona, Yavapai County: Gambell, Neil. 04397
- Heavy minerals, Georgia: Smith, James W. 10345
- Mineral composition, carbonates, continental shelf sediments: Pilkey, Orrin H. 03538
- Physical properties, elasticity: Gardner, G. H. F. 07277
- Physical properties, grain density, Gulf Coastal Plain: Granberry, Raymond J. 07278
- Physical properties, low-resistivity sands, Gulf Coastal Plain: Tixier, M. P. 07346
- Physical properties, pore pressure, blast over-pressure effect: True, Daniel G. 07708
- Physical properties, shear modulus, vibration amplitude effect: Drnevich, V. P. 07723
- Provenance, Nova Scotia, Debert area, eolian: Swift, Donald J. P. 11357
- Provenance, Saskatchewan gravels and sands, preglacial river deposits: Stalker, A. MacS. 02178
- Radioactivity, Texas, Gulf Coast: Adams, John A. S. 08594
- Shape analysis, Alaska, central: Cailleux, Andre. 01612
- Size analysis, aerodynamic method: Skaggs, R. W. 06899
- Size analysis, California-Nevada, Truckee River outwash: Birkeland, Peter W. 00538
- Size analysis, environmental interpretation, whole-phi parameters: Moiola, R. J. 00434
- Size analysis, statistical parameters, regression correlation: Sevon, W. D. 01455
- Textural parameters, environmental effects: Moiola, R. J. 09434

Silt

- Mineral composition, California, Santa Clara River basin: Fan, Pow-Foong. 07717

Till

- Fabric analysis, Colorado, Arapahoe Glacier: Harris, Stuart A. 02509

Sediments—Continued*Till—Continued*

- Fabric, statistical analysis, differentiation from other diamictos: Landim, Paulo M. B. 06594
- General description, Alberta, Foremost-Cypress Hills area: Westgate, J. A. 06698
- General description, British Columbia, Purcell Trench: Fulton, R. J. 02691
- General description, Michigan, Leelanau County, drumlins: Lotan, James E. 03661
- General description, Ohio, Titusville Till: Moran, Stephen R. 10112
- Mineral composition, Iowa, southeastern: Milling, Marcus Eugene. 06555
- Petrology, Connecticut, Naugatuck-Torrington area, field trip: Pessl, Fred, Jr. 05942
- Petrology, oriented thin sections: Sitler, Robert F. 05632
- Provenance, use of garnets: McDonald, Barrie C. 03761

Transport

- Nova Scotia, Bedford Basin, foraminiferal tests: Schafer, C. T. 07981

Weathering

- Northwest Territories, Cornwallis Island, Resolute area: Hannell, F. G. 01517

Seismic methods*Applications*

- Earth and planetary studies, seismic signatures: Hawkins, J. E. 07312
- Highway construction, subsurface geology: Mitchell, Robert E. 04144
- Marine engineering projects: Palmer, H. D. 06882
- Mineral exploration, vein deposits, Mexico: Price, Federico J., Jr. 09526
- Near surface materials: Murphy, V. J. 09437
- Ocean basins, stratigraphy, structure: Ewing, John I. 07986
- Overburden studies: Cooksley, James W. 06870
- Petroleum exploration, Mexico: Fraga Purata, Jorge A. 09843
- Quarry sites, problem areas detection: Lutzen, E. E. 06847

Experimental studies

- Basalt, wave velocities, Hawaii: Manghnani, Murli H. 07940
- Elastic-wave velocities, porous media, permafrost temperatures: Timur, A. 03052
- Ultrasonic absorption, dispersion, limestone: Hackett, Gary Kenneth. 00875

Instruments

- Bathymetric programmer, narrow-beam for acoustical sounding: Saunders, John M. 06717
- Interferometer, laser: Vali, V. 09241
- Laser strain seismometer: Alsop, L. E. 09961
- Prediction-error filters, design, statistical parameters: Burg, John P. 10530
- Seismic array system, portable, application: Crowley, Francis A. 05733
- Seismograph, deviatoric strain observation: Bostrom, R. C. 05438
- Seismograph, high magnification interferometric, strain recording: Bostrom, R. C. 05104
- Seismograph, multiple station, engineering applications: Schwarz, Sigmund D. 10040
- Seismometer, phase-sensitive: Rodgers, Peter W. 08319
- Shear detector, horizontal: Smith, S. W. 08330
- Sonar system, precision detector for side-lobe interference: Key, Charles R. 06718
- Tiltmeter, diamagnetic suspension: Simon, Ivan. 11436

Seismic methods—Continued

Interpretation

- Crustal transfer function, truncation effects: Leblanc, Gabriel. 08293
 Ice, velocity anisotropy, petrofabric relations: Bennett, Hugh Frederick. 10694
 Leaking modes, analytic expressions: DeBremaecker, J.-Cl. 11101
 Leaking modes, dispersion curves, excitation functions: Cochran, Michael D. 10557
 Long-period noise, LASA: Capon, Jack. 10471
 Multiple transmission paths, distances less than 1,000 km: Costain, John K. 08257
 Ocean bottom signal, noise data, low velocity: Harley, Terence W. 10470
 Refracted waves, mantle velocity, curvature correction: Mereu, R. F. 00207
 SH-point source, stratified half space: Vlaar, N. J. 08345
 Sonobuoy data, velocity of deep-sea sediments: Houtz, Robert. 00514
 S-waves, amplitude distribution, seiche data: McGarr, A. 10021
 Uphole surveys, high-resolution, source and arrival times: Carlson, R. C. 00184
 Volcanic cinder cones, aplanatic surface method: Furumoto, Augustine S. 08273

Reflection

- Application, detailed structural studies: Clowes, R. M. 01609
 Coefficients, relation to ocean-bottom sediments: Faas, Richard W. 07378
 Continuous profiles, continental shelf, structure: Emery, K. O. 07349
 Continuous profiling, marine: Moore, David G. 05237

Refraction

- Airgun shots, cf. chemical explosions: Meyer, Robert P. 02790
 Midoceanic ridge system and basins, crustal thickness: Talwani, Manik. 07997
 Velocities, uncertainties, estimation method: Borchardt, R. D. 05462
 Water-table depth, alluvium thickness: Duguid, James Otto. 01505
 Water-table depth, alluvium thickness: Duguid, James Otto. 06147
 Water-table depth, alluvium thickness: Sendlein, Lyle V. A. 06146

Techniques

- Body-wave phases, earthquakes and explosions, identification: Cook, Kenneth L. 08256
 Deep-sea, sediment velocity determination, sonobuoy: LePichon, Xavier. 00513
 Detectors, array design: Haubrich, Richard A. 02302
 Deviatoric strain observation, seismograph method: Bostrom, R. C. 05438
 Dinoseis, application in Canada: Godfrey, L. M. 00183
 Energy source, nondynamite, underwater explorer system: Giles, Ben F. 02008
 Focal depths, determination, least-squares filtering: Toksoz, M. Nafi. 08340
 Frequency-wave-number spectra, determination: Iyer, H. M. 04289
 Glacier ice, P-wave velocity calculation: Ruter, H. 10693
 PAR air gun, marine exploration: Luskin, Bernard. 01429
 Raleigh waves, signal-to-noise enhancement: Alexander, S. S. 10536

Seismic methods—Continued

Techniques—Continued

- Rayleigh waves, discrimination between earthquakes, explosions: Turnbull, Lawrence S. 10537
 Seismograms, rotational, dilatational, synthesis using LASA array: Saito, M. 10538
 Signal characters, retrieval: Huang, Y. T. 10556
 Signal enhancement, noise prediction: Huang, Y. T. 08286
 Sofar speed estimation, point and path data, synthesis: Johnson, Rockne Hart. 06564
 Sonar, sidelooking, continental shelf, Atlantic, northern: Sanders, John E. 07353
 Sonar, side-scanning, ocean bottom surveying, apparatus: Sanders, John E. 06391
 Sparker system, marine exploration: Luehrmann, W. H. 01430
 Theoretical seismograms, interpretation, recent results: Landisman, M. 06651
 Time-term method: Dorman, L. M. 10445
 Transit sonar, lake-bottom sediments: Donato, R. J. 07087
 Travel-time curve, second derivative, measurement: Chinnery, Michael A. 09976
 Vibroseis system, marine exploration: Lee, Milford R. 01431
 Weak surface waves, spectra, determination: Alexander, Shelton S. 10472

*Seismic surveys**Alabama*

- Heflin area, ground-water exploration: Joiner, T. J. 00040

Alaska

- Crustal studies, central interior: Hanson, Kenneth. 04827

Alberta

- Southern, crust, upper mantle: Kanasewich, E. R. 05063
 Southern, crustal studies, reflection: Clowes, R. M. 01609
 Southern, Precambrian rift valley, detection: Kanasewich, E. R. 03119

Arctic Ocean

- Chukchi Sea shelf: Holmes, Mark L. 08452
 Drifting station, ARLIS II, elastic constants, thickness: Kutschale, Henry. 09880
 Greenland area, subbottom profile: Ostenso, Ned A. 09876
 Greenland Sea, subbottom profiles: Ostenso, N. A. 00544

Atlantic Ocean

- Bahama Canyon system: Andrews, James Einar. 00871
 Bahama-Blake Outer Ridge: Markl, Rudi G. 10846
 Crustal studies, continental shelf: Hales, A. L. 02015
 Crustal studies, United States, continental shelf: Dowling, John J. 02017
 Florida-Hatteras slope, Blake Plateau: Zarudzki, E. F. K. 05050
 Hatteras abyssal plain: Rona, Peter Arnold. 02040
 Labrador Sea, northeast of Newfoundland: Fenwick, D. K. B. 01975
 Labrador Sea, sea-floor spreading, evidence: Mayhew, M. A. 08446
 New England Seamount Chain, Georges' Bank to Bermuda: Uchupi, E. 05144
 Northern, sedimentary layers: Ewing, John I. 07986

Seismic surveys—Continued

Atlantic Ocean—Continued

Northwestern, Labrador Sea Ridge: Johnson, G. Leonard. 00636

Outer Ridge, valleys: Chase, R. L. 07786

Puerto Rico Trench, north slope profiles: Chase, R. L. 09502

Rhode Island area, Block Island to Martha's Vineyard: McMaster, Robert L. 00927

Sediments, sequences, velocity, sonobuoy data: Houtz, Robert. 00514

Bahamas

Exuma Sound: Ball, M. M. 10844

Bering Sea

Floor, interpretation, mosaic structure: Gaynanov, A. G. 03810

North American continental margin: Gershanovich, D. E. 06120

British Columbia

1941-66, crust-mantle relations, interpretation, models: White, W. R. H. 04670

California

Bolsa Island, offshore profiling: Campbell, David G. 04849

Cholame area, San Andreas fault zone: O'Neill, M. E. 10032

Diablo and Gabilan Ranges, San Andreas fault area, crustal studies: Stewart, Samuel W. 04055

Gabilan Range, Salinas area, stress accumulation at depth: Eisler, Joseph D. 04052

Klamath River delta, structure: Moore, George W. 02719

Long Valley, Mono Basin: Pakiser, L. C. 05051

Nevada County, northern: Oliver, Howard W. 01419

Ventura Basin-Santa Barbara, offshore: Vernon, James W. 10054

Canada

Bay of Fundy, hydrosonde profiling: Swift, Donald J. P. 06123

Canadian shield, Churchill province, mantle structure: Weichert, D. H. 11439

Crustal studies, Hudson's Bay area: Weber, J. R. 05476

Gulf of Saint Lawrence, continental shelf, refraction profiles: Sheridan, Robert E. 01997

Caribbean region

Lesser Antilles, Guadeloupe region: Fink, L. Kenneth, Jr. 08686

Caribbean Sea

Caribbean submarine escarpment: Talwani, Manik. 08013

Nicaragua Rise, subsea-bottom profiles: Bolli, H. M. 01070

Venezuelan basin, Tertiary beds, fault: Ewing, John I. 07986

Colorado

Denver area, reflection, recent earthquake region: Rummerfield, Ben F. 06142

Loveland Basin landslide: Carroll, Roderick D. 00792

Straight Creek Tunnel, pilot bore: Scott, J. H. 00376

Continental margin

New England, Gulf of Maine: Ballard, J. Alan. 00930

Nova Scotia to Florida, structure: Uchupi, Elazar. 08197

Crustal studies

Ocean-continent transition: Kosminskaya, I. P. 04668

Seismic surveys—Continued

Crustal studies—Continued

Ocean-continent transition, refraction data, interpretation: Drake, Charles L. 04665

Great Lakes region

Lake Erie, subbottom reflection: Wall, Robert E. 00543

Lake Ontario, Niagara area, sediments, transit sonar: Donato, R. J. 07087

Greenland

Central icecap, reflection, upper layer properties: Brockamp, B. 10690

Gulf of California

Transform faults: Moore, David G. 08462

Gulf of Mexico

Continental margin, structure: Uchupi, Elazar. 03773

De Soto submarine canyon: Harbison, R. N. 03224

Sediments, sequences, velocity, sonobuoy data: Houtz, Robert. 00514

Sigsbee Deep, Bay of Campeche, salt diapirs: Worzel, J. Lamar. 04465

Tortugas Terrace, slump-slip origin: Uchupi, Elazar. 05199

West Florida Escarpment, basement fault: Antoine, J. W. 09336

Hawaii

Crustal studies: Jackson, E. D. 05064

Crustal studies, arch, trench, ridge: Furumoto, Augustine S. 04666

Kilauea Volcano area, crustal structure: Ryall, Alan. 02360

Maui, ground-water exploration: Adams, W. M. 07860

Mauna Kea volcano, summit cone: Furumoto, Augustine S. 04667

Idaho

Red Rock Pass, Lake Bonneville outlet: Williams, J. Stewart. 01486

Illinois-Indiana-Kentucky

Illinois basin: Dawson, Woodson H. 07960

Kentucky

Camp Breckinridge, oil and gas resources: Avila, John. 09628

Labrador

Continental margin: Grant, A. C. 05448

Lake Superior region

Crustal studies, 1963 experiment, reinterpretation: O'Brien, P. N. S. 00516

Western: Lewis, Brian T. 00956

Louisiana

Ship Shoal shale mass, detection: Musgrave, A. W. 03357

Massachusetts

Buzzards Bay, side-looking sonar, bottom features: Sanders, John E. 06391

Mexico

Baja California, continental margin, reflection profiles: Normark, William R. 04297

Mid-Oceanic Ridge

Rift, exploration, popular account: Briggs, Peter. 09495

Minnesota

Crustal studies, Keweenaw province: Farnham, Paul Rex. 02630

Missouri

Crustal studies, northern and southern: Stewart, S. W. 00480

New York

Hudson River sediments: Herron, E. M. 02336

Seismic surveys—Continued

North America

Western, crust-mantle profile: Wickens, A. J. 05455

North Carolina

Cape Hatteras, continental slope, canyons: Rona, Peter A. 08056

Continental margin: Rona, Peter Arnold. 02040

Nova Scotia

Bay of Fundy, Minas Basin, intertidal sand bodies: Swift, D. J. P. 01987

Bay of Fundy, subbottom profiles: Swift, Donald J. P. 01163

Oregon

Coast Range, refraction profile: Trembly, Lynn. 08341

Pacific Ocean

Hawaiian arch, northeast of islands: Normark, William R. 04286

Hawaiian Islands area, refraction, interpretation: Helmberger, Donald V. 00040

Juan de Fuca ridge to U.S., turbidites: Hamilton, E. L. 08455

Mason-Raff lineations area, abyssal hills: Spiess, Fred N. 08465

Mesozoic-Cenozoic boundary: Ewing, John I. 07986

Northeastern, off Oregon and California, mantle depth: Shor, G. G., Jr. 00653

Northeastern, Pioneer Fracture-Delgada Fan intersection: Winterer, E. L. 07061

Northern, pre-Tertiary sediments, profiling: Ewing, John. 09378

Quebec

Anticosti Island, oil and gas exploration: Roliff, W. A. 04718

Saskatchewan

Stenen area, reflection cf. refraction, bedrock depression fill: Burke, K. B. S. 06572

United States

Crustal studies, central: Green, R. W. E. 00476

Crustal studies, middle-Atlantic States: James, David E. 00650

Eastern, continental margin: Lewis, B. 02789

Eastern, continental shelf, structure: Knott, S. T. 08959

Gulf of Maine, side-looking sonar, bottom features: Sanders, John E. 06391

Idaho-Oregon-Tufts Abyssal Plain, subcrustal structure: Dehlinger, P. 03623

Maryland-Delaware-Virginia, submarine canyons: Uchupi, Elazar. 07060

Northeastern, buried valleys: Murphy, V. J. 09806

Southwestern, refraction profiles, crust, upper mantle: Warren, David H. 02385

Transcontinental, 35-39° N., 87-100° W., crust and mantle, profiles: Warren, David H. 02943

Transcontinental, 35-39° N., 74-87° W., refraction profiles: Warren, David H. 02370

Transcontinental, 35-39° N., 100-112° W., refraction, profiles: Warren, David H. 02386

Utah

Jordan Valley, fill thickness: Arnov, Ted. 00791

Wasatch Range canyons, refraction: Mattick, Robert E. 05203

Washington

Continental shelf, structure: Bennett, Lee C., Jr. 08457

Gray's Harbor area, continental shelf: Grim, Muriel S. 08458

Lake Washington, proposed Third bridge area: Schwarz, Sigmund D. 04848

Seismic surveys—Continued

Wisconsin

Crustal studies, Keweenaw province: Farnham, Paul Rex. 02630

Wyoming

Anchor Reservoir area, cavity and fault detection: Godson, Richard H. 05038

Water-table depth, alluvium thickness, refraction: Duguid, James Otto. 01505

Yukon

Saint Elias Mountains, Kaskawulsh Glacier: Dewart, Gilbert. 07946

Seismology

Elastic waves

Acoustic and seismic, underwater explosions, spectra: Weinstein, Marvin S. 03213

Acoustic, Lake Superior, velocity: Browning, David G. 04468

Acoustic, propagation through phase transformations: Vaisnys, J. Rimas. 05006

Amplitude variations, LASA: Mack, Harry. 10539

Attenuation in partly melted material: Walsh, J. B. 00572

Attenuation, soils: Batdorf, S. B. 07729

Body, mantle, traveltimes, observed vs. models: Walker, Daniel A. 02294

Body, spectra, effective Q, United States: Dorfman, LeRoy M. 01945

Body wave data, computer inversion: Julian, Bruce. 10462

Body waves, attenuation, Q structure: Teng, Ta-Liang. 00652

Body waves, Earth models: Julian, Bruce R. 00474

Body waves, observations, Monte Carlo inversion: Wiggins, Ralph A. 06638

Body waves, spectra, effective Q: DeBremaecker, J.-Cl. 04187

Body-wave phases, earthquakes and explosions, identification: Cook, Kenneth L. 08256

Compressional, velocity, porous media, permafrost temperatures: Timur, A. 03052

Compressional velocity, structure of Earth: Anderson, Don L. 06647

Diffraction by rigid 90° wedge: Kraut, Edgar A. 02296

Diffraction by rigid 90° wedge: Kraut, Edgar A. 02297

Equations, solution by finite difference methods: Alsop, L. E. 06649

Experimental studies, propagation in two-component system, fayalite in forsterite: Knopoff, L. 06650

Frequency-wave-number spectra, determination method: Iyer, H. M. 04289

Head, from transition layer: Nakamura, Yosio. 02301

Head, theory, mechanism studies: Chandra, Umesh. 02299

Hydroacoustic, Chase V shot, off California: Northrop, John. 01951

Hydroacoustic, propagation, bottom-sediment effect, Pacific Ocean: Northrop, John. 01950

Interpretation, crust-mantle structure, layer compositions: Manghnani, Murli. 04664

Inverse normal mode problem, approximate solutions, mantle structure: Gilbert, Freeman. 00554

Longitudinal, in granite: Simmons, Gene. 09465

Love waves, crust-upper mantle structure: Chang, Andre Chichao. 05498

Seismology — Continued

Elastic waves — Continued

- Love waves, dispersion tables: Anderson, Don L. 04824
- Love waves, sloping interfaced half-space: Nabighian, M. N. 10026
- Multiple reflection, outer core, radius: Engdahl, Eric R. 01922
- Normal modes, rotating elliptical Earth, model: Dahlen, F. A. 05859
- Overlapping events, discrimination: Anglin, F. M. 01686
- P, S waves, shallow boundaries, frequency shift: Teng, Ta-Liang. 11360
- P-, S-waves, traveltime anomalies, regional, structural effects: Hales, A. L. 02800
- P traveltime, computational methods: Engdahl, Eric R. 03111
- P, traveltimes, United States, central: Green, R. W. E. 00476
- P waves, Moho topography, effects: Mereu, R. F. 11097
- PcP, P amplitude spectrums: Buchbinder, Goetz G. R. 05450
- PcP phases, core reflections, natural and artificial sources: Carder, Dean S. 08249
- PcP phases, core-mantle boundary properties: Buchbinder, Goetz G. R. 04366
- PcP traveltimes, depth to core: Taggart, James. 03108
- PKP traveltimes, 115° to 140°: Kovach, R. L. 03908
- PKPPKP, upper mantle reflection: Engdahl, E. R. 06636
- P'P', upper mantle structure from early reflections: Adams R. D. 05453
- Propagation, earth materials, study problems: Newmark, Nathan M. 07735
- Propagation, heterogeneous media, treatment, assumptions: Ravindra, Ravi. 03732
- Propagation, layered granular media: Zaccor, J. V. 07710
- Propagation, soils, clay structure effect: Nacci, Vito A. 07739
- Propagation, stress wave in soils: Hampton, Delon. 07730
- Propagation, stress wave, response spectra: Kondner, Robert L. 07732
- P-traveltimes, Greeley nuclear event, Nevada: Cleary, John. 02839
- P-waves, absorption, 2,000-5,000 km: Sarmah, Surrya K. 08122
- P-waves, arrival times, interface dip change, effects: Greenfield, R. J. 02801
- P-waves, crustal thickness, United States: Fernandez, Luis M. 00954
- P-waves, explosion generated, source characteristics: Trembly, Lynn Dale. 02049
- P-waves, explosion-generated, source characteristics: Trembly, Lynn D. 05456
- P-waves, long-period, earthquake fault parameters: Bollinger, G. A. 00082
- P-waves, near 110°: Bolt, Bruce. 06327
- P-waves, radial propagating crack: Berg, Joseph W., Jr. 08235
- P-waves, short-period, crustal characteristics, Alberta: Ellis R. M. 04829
- P-waves, transmission, attenuation, 100-600 km: Long, Leland Timothy. 02048
- P-waves, traveltime slope curves, values, LASA: Sheppard, Robert M., Jr. 02798
- P-waves, traveltimes, 10-40°, mantle structure: Carder, D. S. 02799

Seismology — Continued

Elastic waves — Continued

- P-waves, upper mantle, west of Lake Superior: Lewis, Brian T. 00956
- P-waves, velocity distribution, lower mantle: Hales, A. L. 05461
- Radially heterogeneous Earth: Richards, Paul G. 10466
- Rayleigh and Love, data discrepancy, mantle, interpretation: Takeuchi, Hitoshi. 00968
- Rayleigh and Love, horizontal pendulum seismometer response: Rodgers, P. W. 05132
- Rayleigh, group velocities, California: Sutton, D. J. 01996
- Rayleigh, Love waves, radiation patterns, source mechanism: Lambert, D. G. 10567
- Rayleigh, Love waves, seismograms, thin-layered model: Claerbout, Jon F. 10469
- Rayleigh, Love waves, theoretical magnitudes: Harkrider, David G. 10566
- Rayleigh waves, atmospheric explosion, oceanic and continental models: Harkrider, David G. 06648
- Rayleigh waves, dispersion, North America, Arctic Ocean: Santo, Tetsuo. 03721
- Rayleigh waves, excitation, gravitating atmosphere: Harkrider, David G. 10565
- Rayleigh waves, horizontal refraction: McGarr, Arthur. 06639
- Rayleigh waves, Pacific Ocean, group velocities: Savage, J. C. 06653
- Rayleigh waves, particle motion, crustal structures: Boore, David M. 10568
- Rayleigh waves, propagation across continental margins: McGarr, Arthur. 10569
- Rayleigh waves, propagation, perturbed boundaries: Thapar, M. 10570
- S phase, properties: Filson, J. R. 08270
- Scattering, elliptical obstacles: McIvor, I. K. 10835
- Seismic signatures, application: Hawkins, J. E. 07312
- SH motion, near source, synthetic seismograms: Filson, John R. 10468
- Shear, α -quartz, anomalous variation with pressure and temperature: Soga, Naohiro. 00085
- Shear-coupled PL, synthesis: Chander, Ramesh. 11118
- Spectral analysis, nuclear explosions, Mississippi: Borchardt, Roger. 02708
- Spectrum, explosive source, effect of fault zone: Galbraith, Frank W. 05737
- S-phases, upper-mantle structure, Texas: Shurbet, D. H. 04254
- Spherical layered matrix: Teng, Ta-Liang. 11359
- Spherical wave propagation, compressible media, model: Faccioli, Ezio. 04454
- Surface, phase velocities, determination techniques: Bloch, S. 02244
- Surface waves, analysis, computer system: Landisman, M. 02796
- Surface waves, propagation characteristics near large explosions: Hasegawa, H. S. 01988
- Surface-wave dispersion, computation: Gregson, Victor G., Jr. 03794
- Surface-wave dispersion data, crustal parameters, effects: Takeuchi, H. 08336
- SV and SH, diffracted, amplitude contrast, cause: Teng, Ta-Liang. 02016
- S-waves, explosive source, salt cavity: Perret, William R. 06305
- S-waves, traveltime curves, mantle structure: Ibrahim, Abou-Bakr Khalil. 01361

Seismology—Continued*Elastic waves*—Continued

Synthetic seismograms, cf. nuclear explosions, upper mantle models: Helmberger, Donald V. 06637

Torsional disturbances, Gutenberg-Bullen A' earth model: Sato, Yasuo. 00379

T-phase, classic and abyssal: Johnson, Rockne H. 04673

T-phases, source characteristics, relations, Pacific Ocean: Northrop, John. 06556

Transfer ratio, layered model: McCamy, Keith. 00870

Traveltime anomaly, effect of thermal field: Horai, Ki-iti. 05003

Traveltime curve, measurements, LASA: Chinnery, Michael A. 08250

Traveltime tables, smoothing: Arnold, E. P. 03112

Traveltimes, change with stress at depth: Sawyers, Kenneth N. 04828

Velocities, crustal studies, ocean vs. continent: Drake, Charles L. 04665

Velocity, attenuation, dissipation mechanism: Gordon, R. B. 00017

Velocity, attenuation, dissipation mechanism: Savage, J. C. 00018

Velocity, attenuation, imperfectly elastic rock: Gordon, R. B. 01952

History

Early: Dewey, James. 08261

Observatories

Array, design methods: Haubrich, Richard A. 02302

Selenium*Analysis*

Atomic absorption spectroscopy: Chakrabarti, Chuni L. 02996

Geochemistry

Ferroselite, synthesis: Warren, C. Gerald. 04235

Shale*Montana*

Resources, ceramic properties, expandability, analyses: Berg, R. B. 09121

Shorelines*Ancient*

Appalachian Plateau, Pennsylvanian, indicators: Cavaroc, V. V., Jr. 00468

Florida, Tertiary, mammalian indicators: Olsen, S. J. 04006

North Carolina, Outer Banks, beach ridge, evolution: Fisher, John Joseph. 02033

Ontario, Manitoulin Island: Lewis, C. F. M. 05304

Ontario, Manitoulin Island, Lake Nipissing: Smith, J. Edward. 09469

Barbados

West coast, erosional terrace, reefs: Macintyre, Ian G. 04886

Changes

Alaska, Middleton Island, uplift, tilt, color airphoto: Swanson, Lawrence W. 02372

Florida, Bahamas, hurricane effects: Perkins, R. D. 05681

Gulf of California, Quaternary stratigraphic record: Walker, Theodore R. 03890

Hawaii, beaches and other features: Moberly, Ralph, Jr. 09883

Massachusetts, Monomoy Point quadrangle: Koteff, Carl. 11312

Shorelines—Continued*Changes*—Continued

Pleistocene, terrace chronology, analysis method: Flemming, N. C. 03455

Evolution

Barrier island-lagoon system: Cooke, C. Wythe. 01894

Barrier island-lagoon systems: Hoyt, John H. 01895

British Honduras, northern coast: High, Lee R., Jr. 01217

California, Crescent City area, Smith River Plain beaches: Roberts, James A. 10965

Georgia, barrier island-lagoonal complex, cf. Australia: Hails, John R. 07319

West Indies, Bonaire: Zonneveld, J. I. S. 07046

Georgia

Pleistocene, evolution, modification: Hoyt, John H. 08956

Littoral drift

Quantitative research: Bruun, Per. 09540

Louisiana

Sedimentary processes, western: Beall, Arthur O., Jr. 03546

North Carolina

Changes, Capes Hatteras to Fear: El-Ashry, Mohamed T. 07369

Silicon*Abundance*

Alkaline brines, volcanic terrane, Oregon: Jones, B. J. 08753

Meteorites and standard rocks, activation analysis: Ehmann, William D. 01514

Volcanics, Oregon, Mount Jefferson area: Greene, Robert C. 01870

Water, inshore, open ocean, silicate silica: Oppenheimer, Carl H. 10330

Analysis

Atomic absorption spectrometry, silicate rocks, lithium metaborate fusion: VanLoon, J. C. 01828

Atomic absorption spectroscopy: Katz, Amitai. 02234

Gravimetric, fluosilicates: Tewari, D. N. 09640

Geochemistry

Phytoliths, grass, silica source in sediments, soils: Twiss, P. C. 09721

Radiolarian skeletons, solution rate at depths: Berger, Wolfgang H. 00309

Thermal springs, solubility, estimation of underground temperatures: Fournier, Robert O. 07726

Water, interactions with iron: Schenk, John E. 09037

Silurian*Alabama*

Birmingham area, palynomorphs, climate: Cramer, Fritz H. 01502

Northwestern, Ostracoda, stratigraphy: Lundin, Robert F. 08787

Alaska

Boundary with Devonian, location: Churkin, M. 02831

Anthozoa

Tabulata, growth patterns, paleoclimatic, paleogeographic tools: Fischer, A. G. 04678

Appalachians

North-central, sedimentation: Smith, Norman D. 09935

North-central, stratigraphy: Smith, Norman Dwight. 01356

Northern, paleogeography: Boucot, A. J. 07139

Silurian—Continued

Arkansas

- Batesville district, conodonts, biostratigraphy: Craig, William Warren. 04534
 Brachiopoda, *Dicoelosis*, value changes: Amsden, Thomas W. 07746
 North-central, Brachiopoda, St. Clair Limestone, correlation: Amsden, Thomas W. 03222

Brachiopoda

- Chonetacea, taxonomy, phylogeny: Boucot, A. J. 00491
 Paleoeecology, benthonic communities, Lower: Ziegler, Alfred M. 07394

British Columbia

- Peace to Muskwa Rivers, stratigraphy: Davies, E. J. L. 04065

Canada

- James Bay lowland, Cephalopoda: Flower, Rousseau H. 11279
 Northwestern, mainland, Graptolithina, biostratigraphy: Lenz, A. C. 02832

Coelenterata

- Geographic distribution: Fox, Steven K., Jr. 03845

Colorado

- Inclusions in diatremes: Chronic, John. 00019

Correlation

- Lithofacies, interpretation, continental drift, tectonics: Boucot, Arthur J. 05894

Cystoidea

- Caryocrinites*, morphology: Sprinkle, James. 10935

Idaho

- Southeastern, Laketown Dolomite: Budge, David R. 08580

Illinois

- Chicago area, Anthozoa, Niagaran dolomite: Stumm, Erwin C. 06898

Indiana

- Northern, Foraminifera, arenaceous, descriptions, zonation: Mound, Michael C. 04550
 Southeastern, stratigraphy, conodont zoning: Nicoll, Robert S. 06701

Iowa

- Eastern, Gower Dolomite bioherms facies: Hinman, Eugene E. 03641

Kentucky

- Estill County, Brassfield Limestone, Crinoidea: Jillson, Willard Rouse. 07855
 Louisville area, Silurian-Devonian contact, erosion: Freeman, Tom. 10103
 Pulaski County, stratigraphy: Helton, Walter L. 04182

Maine

- Cupsuptic quadrangle, fossiliferous rocks, Taconic orogeny: Harwood, David S. 09786
 Eastport area, Eastport Shale: Greenwood, Robert. 01897
 Merrimack synclorium, stratigraphy: Osberg, P. H. 07245
 Northeastern, Carys Mills Formation: Pavlides, Louis. 04107
 Waterville-Vassalboro area, stratigraphy: Osberg, Philip H. 05444

Manitoba

- Hudson Bay, Kaskattama well, faunal assemblages, correlation: Nelson, Samuel J. 07320

Michigan

- Grand Traverse County, Niagaran stratigraphy: Sanford, John T. 01194

Silurian—Continued

Michigan—Continued

- Northern, boreholes, correlation: Sanford, John T. 04719
 Saint Clair County, Niagaran-Salinan carbonate-evaporite reefs: Jodry, R. L. 01168

Nevada

- Graptolithina, biostratigraphy: Berry, W. B. N. 02830
 Roberts Mountain Formation, Brachiopoda, shelly faunal units: Boucot, A. J. 08616

New Brunswick

- Charlo map-area, stratigraphy and paleontology, Devonian boundary: Greiner, Hugo. 03799

New England

- Paleogeography: Boucot, A. J. 07139

New York

- Becraft Mountain, stratigraphy, revision: Johnsen, John H. 08182
 East-central, Herkimer Formation: Zenger, Donald H. 09958
 Erie-Niagara basin, lithologic units, groundwater resources: LaSala, A. M., Jr. 09113
 High Falls Shale, depositional environment: Fagan, John J. 06612
 Hudson Valley, Fuyk Member of Rondout Formation: Harper, John D. 01214
 Niagara Escarpment, Thorold and Grimsby Sandstones of Medina Formation: Martini, I. 10686
 Rochester, Protista, acritarchs, Maplewood Shale: Cramer, Fritz H. 07292
 Western, Protista, new acritarchs, Maplewood Shale: Deunff, Jean. 06923

Newfoundland

- New Bay area, stratigraphy: Helwig, James Anthony. 02632
 Upper Black Island: Oversby, Brian S. 09814

North America

- Boundary with Devonian, location: Berdan, J. M. 02829
 Northeastern, absolute age, volcanics: Fullagar, Paul D. 06054

North Dakota

- Grand Forks and Pembina Counties, stratigraphy: Anderson, Sidney B. 07051

Northwest Territories

- Arctic, western, stratigraphy: Gallup, W. B. 00109
 Ellesmere Island, Pisces, acanthodians: Spjeldnaes, Nils. 02874

Nova Scotia

- Arisaig area, conodonts, Pisces, Stonehouse Formation: Legault, J. A. 06732
 Arisaig-Antigonish area, Ordovician boundary, volcanics, absolute age: Fullagar, Paul D. 01972

Ohio

- Maumee area, Salina Formation: Kahle, Charles F. 01169
 South Birmingham Pool area, stratigraphy: Janssens, A. 05649

Oklahoma

- Brachiopoda, *Dicoelosis*, value changes: Amsden, Thomas W. 07746
 Brachiopoda, Henryhouse Marlstone, subsurface: Amsden, Thomas W. 10060
 South-central, Brachiopoda, Clarita Formation, correlation: Amsden, Thomas W. 03222
 Stratigraphy, relation to Devonian: Amsden, Thomas W. 02883
 West Campbell field, Hunton Goup: Harvey, Ralph L. 09844

Silurian—Continued

Ontario

Hamilton map-area, stratigraphy: Hewitt, D. F. 07326

Manitoulin Island, faunal assemblages: Bolton, Thomas E. 05275

Manitoulin Island, Niagara Series: Shelden, Frank D. 05276

Manitoulin Island, stratigraphy: Liberty, B. A. 05274

Niagara Escarpment, Thorold and Grimsby Sandstones of Medina Formation: Martini, I. 10686

Northern, Cephalopoda, Attawapiskat Limestone: Hansman, Robert H. 02186

Paleobotany

Land plants, earliest occurrences: Banks, Harlan P. 02873

Paleolatitudes

Protista, acritarch provinces: Cramer, Fritz H. 10949

Pennsylvania

Delaware Water Gap, Coelenterata, Dipleurozoa: Fox, Steven K., Jr. 03845

Ostracoda, *Craspedobolbina*: Martinsson, Anders. 05564

Salina Group, salt beds, correlation: Fergusson, William B. 06505

Schuylkill Gap, Clinton Formation, cyclic facies: Smith, Norman D. 06601

Western, Salina Group: Fergusson, William B. 09773

Quebec

Appalachians, Val Brilliant and Robitaille sandstones: Lajoie, Jean. 03556

Lake Memphremagog map-area, stratigraphy, correlation: Boucot, Arthur J. 07861

Matapedia-Temisouata region, stratigraphy: Lajoie, J. 01468

Perce region, Trilobita, White Head Formation, fauna: Lesperance, Pierre J. 03790

Stratigraphy

Devonian boundary, graptolite marker: Berry, William B. N. 02875

United States

Central, Brachiopoda, Late fauna: Amsden, T. W. 02828

Utah

Northeastern, Laketown Dolomite: Budge, David R. 08580

Worldwide

Lithofacies patterns, continental development: Berry, W. B. N. 06114

Wyoming

Inclusions in diatremes: Chronic, John. 00019

Yukon

Royal Creek area, Upper, biostratigraphy: Lenz, A. C. 02893

Silver

Abundance

Sediments, deep-sea accumulation rates, Atlantic Ocean: Turekian, Karl K. 02356

Appalachians

Resources, review: Luttrell, Gwendolyn W. 01330

Arizona

Yavapai County, Iron King mine, occurrence, genesis: Gilmour, Paul. 05429

Colorado

Creede district, production, reserves, resources: Meeves, Henry C. 01156

Leadville district, occurrence, genesis: Tweto, Ogdén. 05387

Silver—Continued

Exploration

Geochemical, natural waters, adsorption on sample containers: Chao, T. T. 05171

General

Geochemistry, occurrence, exploration, production: Boyle, R. W. 04720

Geochemistry

Concentrations, ore minerals: Hall, Wayne E. 04122

Corals, control of deposition in skeleton: Veeh, H. Herbert. 02537

Maine, in sphalerite: Jolly, Janice L. 05981

Sulfosalts, synthesis: Hall, H. T. 01907

Tellurides, composition: Cabri, L. J. 03756

Idaho

Big Creek district, occurrence in tungsten deposit: Leonard, B. F. 00525

Coeur d'Alene district, occurrence, genesis: Hobbs, S. Warren. 05346

Silver City area, history, occurrence, possibilities: Asher, R. R. 03164

Mexico

Catorce mining region, occurrence: Monroy Plowers, Salvador. 07365

Durango, Mapimi district, occurrence: Hoffman, Victor J. 11303

Metallogenetic provinces: Wilson, Ivan F. 04148

Naica, Fresnillo, exploration: Villaseñor, Luis. 04133

Pachuca-Real del Monte district, exploration: Geyne, Arturo R. 04882

Queretaro, La Negra area, occurrence: Sanchez Mejorado, Pedro. 11347

San Luis Potosi, ore guides: Gomez, Manuel. 04115

Tayoltita, occurrence: Randall, John A. 04197

Nevada

Lander County, Copper Canyon, occurrence: Sayers, R. W. 09461

Morey district, mineralogy: Williams, Sidney A. 03754

Nellis Air Force range, occurrence: Ekren, E. B. 06822

Pioche district, occurrence, genesis: Gemmill, Paul. 05378

Tuscarora area, Independence Valley, possibilities: Coats, R. R. 00782

New Mexico

Burro Mountains, occurrence: Gillerman, Elliot. 01915

Red River district, occurrence: Clark, K. F. 04226

Ontario

Cobalt area, Glen Lake mines: Ninacs, George J. 10161

Cobalt area, Nipissing 407 mine: Thorniley, B. H. 10162

Cobalt area, Silverfields mines: Moore, H. A. 10160

Cobalt district, mineralogy, genesis: Petruk, William. 09450

Cobalt-Gowganda area, occurrence, genesis: Petruk, William. 04130

Elk Lake area, property descriptions: MacKean, B. E. 04315

Kirkland Lake area, Upper Canada mine: Bragg, J. G. 10149

McGarry Township, Kerr Addison mines: Abel, M. K. 10151

Porcupine district, Coniaurum mine area, occurrence: Carter, O. F. 01819

Silver — Continued

Ontario — Continued

- Porcupine district, Dome mine, occurrence: Holmes, T. C. 01767
- Porcupine district, Hollinger mine, occurrence: Jones, W. A. 01779
- Porcupine district, McIntyre mine, occurrence: Griffiths, A. T. 01768
- Porcupine district, Moneta mine area, occurrence: Buffam, B. S. W. 01789
- Tisdale township, occurrence: Ferguson, Stewart A. 01820
- Vein deposits, occurrence, production, summary: Sergiades, A. O. 06336

Oregon

- Review: Brooks, Howard C. 07628

Quebec

- Lamaque and Sigma mines, Au:Ag ratios: Fitzgerald, A. C. 11413
- Noranda area, occurrence: Sharpe, John I. 10145

South Dakota

- Galena district, Double Rainbow mine, mineralogy: Garske, David H. 05874
- Trojan area, Bald Mtn. mine tailings, analysis: Fredlund, Daniel A. 11281

United States

- Southwestern, hypogene manganese veins, possibilities: Hewett, D. F. 00136

Utah

- Park City district, occurrence, genesis: Barnes, Marvin P. 05376
- Tintic district, occurrence, genesis: Shepard, W. M. 05485

Washington

- Republic area, Knob Hill mine, electron-probe study: Taylor, Charles Mosser. 05501
- Republic mining district, occurrence, genesis: Full, Roy P. 05355

Yukon

- Resources, lode mining potential: Green, L. H. 08056

Snow

Accumulation

- Greenland, regional, local distribution compared: Mock, Steven J. 00945

Physical properties

- Strength, measurement, resistograph vs. direct loading: Bradley, Charles C. 04880

Sodium

Analysis

- Neutron activation, common rocks: Parker, Ronald B. 05095

Geochemistry

- Aqueous solutions and coexisting silicate melts, K-Na ratios: Gammon, J. B. 00034
- Hudson River water, New York: Fabricand, Burton P. 03551
- Melting curves to 80 kb: Luedemann, H. D. 00570
- River sediments, New York, Hudson River: McCrone, Alistair W. 03558

Sodium sulfate

Canada

- Great Plains, northern, genesis: Grossman, I. G. 01653

Saskatchewan

- Ingebrigt deposit, genesis, production: Rueffel, P. G. 07887

United States

- Great Plains, northern, genesis: Grossman, I. G. 01653

Soils

Alaska

- Arctic slope: Tedrow, J. C. F. 02091

Alberta

- Major zones, development: Green, Robert. 10925

Arctic

- Pedogenic gradients: Tedrow, J. C. F. 02257

Arizona

- Moisture-energy relationships, riparian vegetation: McQueen, I. S. 10374
- Sonoran Desert: Dunbier, Roger. 09496

California

- Castac Valley, toxic elements, distribution: Laskowski, Edward Albin. 02615
- Fort Bragg area, podzolic, genesis: Gardner, Robert Alexander. 04446
- San Luis Rey watershed, development: Nettleton, Wiley D. 06077

Classification

- Quantitative morphology, importance of lithologic discontinuities: Arnold, R. W. 07436
- Quebec, Kamouraska County: Baril, Roger. 11052
- Research, appraisal: Dregne, Harold E. 08102
- Zonality, validity of concept, climatic and other factors: Harris, Stuart A. 07435

Colorado

- Adams County, U. Th, K concentrations: Bunker, Carl M. 00789

Correlation

- Quaternary, North America: Morrison, R. B. 03989

Engineering properties

- Alberta, Rocky Mountain Forest Preserve, erosion prediction: Rutter, N. W. 05334
- Anisotropic clays, undrained strength and pore-water pressures: Duncan, J. M. 09376
- Attenuation of airblast-induced motions: Hendron, Alfred J., Jr. 08880
- Bulk density, determination technique: Abrol, I. P. 07566
- California, creep rates: Kojan, Eugene. 07918
- Canada, Ottawa-St. Lawrence valleys, Leda clay, shear strength: Crawford, Carl B. 04195
- Clay, electrokinetic stabilization, experiments: Edwards, Donald M. 00127
- Clay, experimental studies, stabilization, electrokinetic: Esrig, Melvin I. 01936
- Clay, isothermal water movement: Lytton, Robert Leonard. 01742
- Clay mineralogy: Winterkorn, Hans F. 09614
- Clays, sensitive, cyclic stress-strain characteristics: Thiers, Gerald R. 09473
- Clay-water system: Yasutomi, Rokyro. 02198
- Cohesive, energy dissipation: Ho, Michael Man-Kai. 01760
- Cohesive, erosive behavior, experimental: Dash, Umakant. 07165
- Consolidation, strain-rate effects: Smith, Ronald Ellis. 02622
- Creep, rate process theory: Mitchell, James K. 00133
- Data sheet: VanHorn, Richard. 04830
- Density, gamma-ray measurement: Pirie, E. 07563
- Density, moisture, sampling techniques: McIntyre, D. S. 01066
- Determination, instrumental projectile, air-dropped: Caudle, W. N. 07809

Soils—Continued

Engineering properties—Continued

- Dynamic, exploding wire technique: Fyfe, Ian M. 09384
- Dynamic, free-vibration testing technique: deGraft-Johnson, J. W. S. 07714
- Dynamic properties, field determination: Bamert, E. 09070
- Dynamic, testing method: Chae, Yong Suk. 07713
- Dynamic, testing methods, developments: Lenoe, Edward Mark. 07718
- Dynamic, vibration settlement, Ottawa sand: Greenfield, B. James. 07716
- Elastic moduli, in situ determination: Maxwell, A. A. 07703
- Elasticity, effect of clay on wave velocity: Nacci, Vito A. 07733
- Elasticity, stress wave propagation: Hampton, Delon. 07730
- Elasticity, stress-wave attenuation: Batdorf, S. B. 07729
- Elasticity, stress-wave propagation: Kondner, Robert L. 07732
- Foundation mechanics, textbook: Parcher, James V. 09446
- Freezing point depression and heat capacity: Low, Philip F. 00386
- Frost susceptibility, highways, tests: Kaplar, Chester W. 09098
- Frozen mixtures, equation of state, 60 to 500 kb: Anderson, Gordon D. 05331
- Frozen, shear strength: Groughnour, Roy Robert. 02621
- Frozen, strength tests: Black, Thomas John. 02021
- General: Holtz, W. G. 06079
- Hawaiian latosols, shear strength: Lohnes, R. A. 04846
- High-intensity surveys: Olson, Gerald W. 01058
- Hydraulic conductivity, calculation factors: Kunze, R. J. 05966
- Illinois, hydraulic conductivity, moisture regimes: Frazee, C. J. 02237
- Illinois, Livingston County: Thornburn, Thomas H. 09501
- Iowa, loess, slope angles, shear strength: Lohnes, R. A. 03458
- Iowa, Pleistocene and Holocene: Handy, R. L. 07591
- Kentucky, Paducah West-Metropolis quadrangles: Finch, Warren I. 04004
- Lateral stresses, overconsolidation effect, measurement methods: Sherif, M. A. 04845
- Liquefaction during earthquakes, cyclic shear tests: Peacock, William H. 00987
- Loess, permeability: Rosen, Milton J. 00342
- Mechanical, determination, method: Krech, Warren Willard. 01765
- Mineralogy, effect: Low, Philip F. 09615
- Mississippi Valley, Yazoo Basin: Kaufman, R. I. 08759
- Moisture, glass flask for rapid determination: Prihar, S. S. 01064
- Moisture stress, measurement, filter paper method: McQueen, Irel S. 04983
- Nevada, Las Vegas Valley, land subsidence relations: Mindling, Anthony. 10988
- One-dimensional compression testing: Schindler, L. 07720
- Ontario, Cornwall to Quebec border, Leda clays: Stermac, A. G. 04258
- Open-pit mines, slope stability: Merrill, Robert H. 02391

Soils—Continued

Engineering properties—Continued

- Partially frozen, unfrozen water content, temperature and pressure effects: Low, Philip F. 01848
- Permeability, mechanics, continuum theory, balance of mass: Raats, P. A. C. 01840
- Pile-soil system, loading response: Airhart, Tom Patterson. 01759
- Pore pressures during earthquakes: Seed, H. Bolton. 08874
- Preconsolidation pressures: Kenney, T. Cameron. 04249
- Quebec, Outardes 2 project: Sainani, U. R. 04252
- Quebec, shear strength, sensitive clays: Ladanyi, B. 04257
- Remolded clay, static and dynamic skin friction response: Raba, Carl Franz, Jr. 04458
- Remote surveying, instrumented projectiles: Caudle, William N. 01826
- Remote-sensing methods: Parker, Dana C. 00163
- Response to airplane loading: Theisen, J. G. 07727
- Response to repeated loading: Sangrey, Dwight Abram. 02022
- Sand, behavior under high stresses: Vesic, Aleksandar S. 00973
- Sand, hydrostatic compression, stress-strain relations: Parkin, Alan K. 00128
- Sewer-project studies: Greer, David M. 00210
- Shear strength, consolidation, soft sensitive clays, new concepts: Kenney, T. Cameron. 04259
- Shear strength, fibrous peat, vane tests: Wilson, N. E. 05371
- Silty, strength, field vane testing: Blight, G. E. 04250
- Slope stability, loess, test method, in situ: Lohnes, R. A. 09577
- Stability, long term: Soydemir, Cetin. 03020
- Strain measurement, gage instrumentation: Truesdale, William B. 07808
- Strain-rate dependence, effects of load history, model study: Stoll, Robert D. 07724
- Strength, determination, method: DeRoock, Bernard. 07706
- Stress-strain-strength-consistency behavior: Kondner, Robert L. 07726
- Stress-strain-time function, creep curves: Singh, Awtar. 00131
- Surveys, aerial photos, Ontario: Mathur, B. Sen. 09659
- Temperate and tropical, comparison: Meyer, Marvin P. 08806
- Textbook: Scott, Ronald F. 04344
- Volume change on compaction, clay aggregates: Chang, R. K. 00508
- Waste effluents, effects: White, W. Arthur. 08125
- Wave propagation and dynamic properties: New Mexico Univ. Dept. Civil Eng. 07811
- Wisconsin, Dunn County, irrigation potential: Olcott, Perry G. 09142
- Erosion*
- Control, engineering techniques: Heede, Burchard H. 09899
- United States, southeastern, erodibility factors: Barnett, A. P. 09901
- Wind, mechanics: Woodruff, N. P. 11056
- Experimental studies*
- Ground-water movement and aeration: Mansell, Robert S. 05081

Soils—Continued

Experimental studies—Continued

- Moisture movement, unfrozen to frozen: Hoekstra, Pieter. 07359
 Silt eluviation in sand columns: Wright, W. R. 02261
 Water-saturated, velocity-gradient relations: Russell, Donald Arthur. 07148

Florida

- Okeechobee County: Rowland, L. Orlando 10340
 Okeechobee County, genesis, deep profile studies: Fiskell, J. G. A. 06950
 Ona and Leon fine sands, aggregation of mineral and organic matter: Volk, G. M. 06963
 Western, Magnolia and Greenville, genesis, analyses: Caldwell, R. E. 06951
 Western, Marlboro and Faceville, genesis, analyses: Dantzman, C. L. 06964

Genesis

- Arizona, southeastern, semiarid environment: Smith, B. R. 01839
 Arkansas, northwestern, loess or residual: Chapman, S. L. 01855
 Atlantic and Gulf Coastal Plains, clay-poor bodies, eluvial origin: Daniels, R. B. 04985
 California, from serpentinites: Wildman, W. E. 06756
 Clay crystallite size distribution in loess-derived: Arnold, R. W. 06641
 Florida, Okeechobee County, deep profile studies: Fiskell, J. G. A. 06950
 Interpretation, importance of lithologic discontinuities: Arnold, R. W. 07436
 Kansas, Trego County, Ogallala Fm.: Glover, Robert K. 07684
 Lichens, mosses, infrared absorption spectra of mineral matter: Dormaar, J. F. 01990
 Northwest Territories, Prince Patrick Island, ecology: Tedrow, J. C. F. 09007
 Ohio, sponge spicules, distribution, loess, eolian transport: Wilding, L. P. 09083
 Oklahoma, opaline phytoliths, vegetation-type indicator: Yeck, Ronald D. 00160
 Oklahoma, Reddish Prairies, grayish claypans: Culver, James R. 05963
 Oklahoma, Wellington Formation: Culver, James R. 05140
 Organic matter, canopy drip source, leaf leachates: Malcolm, R. L. 05962
 Paleodults, Atlantic Coastal Plain: Cady, J. G. 07419
 Quebec, Kamouraska County: Baril, Roger. 11052
 Saprolite: Flach, K. W. 07418
 Solodic and associated soils, montmorillonite alteration: Klages, M. G. 05262
 Structure, recovery after remolding: Yasutomi, Rokyro. 02198
 Weathering, gold content as index: Yassoglou, N. J. 04819
 Wisconsin, northeastern, fragipan horizon: Olson, Gerald W. 02277
 Zonation, climatic and other factors, concepts: Harris, Stuart A. 07435

Geochemistry

- A-horizon, trace elements: Lapointe, Guy. 04241
 Alaska, interior, P and cations availability, forest to bog: Heilman, Paul E. 03103

Soils—Continued

Geochemistry—Continued

- Analysis, glass electrodes: Pommer, Alfred M. 09896
 Bentonites, Na, Cl activity in water and salt transport: Mokady, Raphael S. 00459
 Boron retention, Al-Fe-coated silicates: Sims, J. R. 09468
 CaCO₃, saturated solutions: Nakayama, F. S. 07564
 Calcium carbonate solubility, clay suspensions: Doner, Harvey Ervin. 03014
 California, Kern County, Lost Hills, analyses: Laskowski, E. A. 02860
 California, serpentinite montmorillonite formation: Wildman, W. E. 05960
 Cation transport: McColl, J. G. 00398
 Element concentration in water: Jordan, Carl F. 00460
 Exchange capacity, cation selectivity, clay minerals: Dolcater, D. L. 05961
 Heavy metals fixation, Mn, Fe oxide controls: Jenne, E. A. 03751
 Lithium-calcium exchange equilibria: Bair, F. L. 02255
 Loess-derived, Iowa-Missouri, Mg, nonexchangeable: Protz, R. 05965
 Metal transport, colloid coagulation process: Ong, H. Ling. 04982
 Mg, Ca, SiO₂: Eaton, Frank M. 01067
 Michigan, magnesium release, uptake: Christenson, Donald Robert. 06529
 Minnesota, sulfur capacity: Rehm, G. W. 02236
 Montana, alpine areas, nitrogen content: Faust, Richard A. 05610
 North Carolina, coastal plain, magnesium, exchange capacity: Rice, H. B. 02266
 North Carolina, Slate Belt, mica weathering: Goss, Don Woodson. 07181
 Organic material, manganese reactions: Rosell, Ramon Antonio. 04447
 Oxidation of ferrous iron, K fixation in vermiculite, biotite: Barshad, Isaac. 05028
 Phosphates, labile and crystalline, equilibrium: Roth, James Richard. 06530
 Phosphorus, colorimetric analysis, vanadate-molybdate reagent: Tandon, H. L. S. 00900
 Phosphorus, organic fraction, Canada: McKercher, R. B. 07432
 Podzolized, free iron and aluminum extraction, reagents compared: Bernier, B. 02051
 Porphyrins, chlorins, polycyclic aromatics: Hodgson, G. W. 02995
 Potassium, exchange capacity: Yaalon, D. H. 02220
 Potassium, release mechanism, experimental: Scott, A. D. 02260
 Salt transport, convective diffusion, experimental study: Overman, Allen R. 04818
 Sandy loam, nitrogen-induced changes: Schafer, John William, Jr. 06531
 Silt fraction, gold content, neutron activation: Yassoglou, N. J. 04819
 Strontium retention, North Carolina: Taylor, Alan W. 07565
 Sulfate ions, determination technique: Khan, S. U. 00507
 Sulfur in extracts, X-ray fluorescence: Roberts, S. 04986
 Texas, sodium adsorption: Thomas, Grant W. 05080
 Trace elements, A horizon: Boyle, R. W. 04232

Soils—Continued

Geochemistry—Continued

Uranium and thorium, distributions: Hansen, R. O. 00343

Water content, measurement, neutron scattering method: Luebs, R. E. 04981

Zinc, diffusion, distribution: Clarke, A. L. 02221

Geomorphology

Classification: Trewartha, Glenn T. 03122

Horizon thicknesses, Ontario, Brant series, modal profile, analysis: Protz, R. 07420

Interpretation, importance of lithologic discontinuities: Arnold, R. W. 07436

Mississippi River, use in delineating flood plain: Cain, John M. 00154

Mississippi, west-central, loess and non-loess, forest composition: Caplenor, Donald. 03102

Nebraska, Beaver Creek watershed: Allen, William H., Jr. 07574

Patterned ground, warm climate, active formation: White, Everett M. 01995

Quebec, Kamouraska County: Baril, Roger. 11052

Georgia

Land resource areas, genesis, geomorphology, summary: Perkins, H. F. 01696

Hawaii

Genesis, influence of rainfall and age: Sherman, G. Donald. 05108

Wet uplands, mica genesis, biological recycling: Juang, T. C. 00899

Heat flow

Measurement, resistance-capacitance electric analog: Pedersen, Roger J. 06072

Hydrogeology

Alaska, Juneau area, moisture loss, vegetation effect: Patric, J. H. 04987

Ground-water movement, dye tracers, evaluation: Corey, John C. 04988

Moisture retention, Pennsylvania: Petersen, G. W. 05934

Permeability, mechanics, continuum theory, balance of mass: Raats, P. A. C. 01840

Idaho

Northern, volcanic ash content: Smith, Henry W. 05622

Indiana

South-central, Pembroke soils, clay mineralogy, quantitative analysis: Post, Donald F. 06919

South-central, Pembroke soils, clay-mineral composition, changes: Post, Donald F. 06903

Interpretation

Photogeologic, color photos: Anson, Abraham. 00143

Iowa

Aggregates, physical and chemical properties: Tabatabai, M. A. 04190

Cary drift areas, formation, geomorphology, closed system: Walker, P. H. 07438

Properties, relation to landforms, multiple regression analysis: Walker, P. H. 00898

Tama County, Four-mile Creek watershed: Vreeken, W. J. 07592

Variability, trend analysis: Walker, P. H. 00902

Kansas

Ellis County, profiles: Zavesky, Larry D. 11053

Northeastern, Pleistocene, buried: Bayne, Charles K. 07643

Northern, loessial, concretions: Bidwell, O. W. 07437

Trego County, hill profiles, Ogallala Fm., vegetation: Glover, Robert K. 07684

Soils—Continued

Kentucky

Boone County, northwestern, drift, relation to vegetation: Keith, John R. 07988

Methods

Freeze-drying: Malcolm, R. L. 02693

Instruments, lysimeter, tension-free: Jordan, Carl F. 00460

Recognition of presampling deformation: Philbrick, Shailer S. 07845

X-radiography, unopened cores: Haase, M. C. 08718

Mexico

San Luis Potosi, Matehuala area, gypsiferous, morphology, genesis: Grande Lopez, Raul. 06792

Sonoran Desert: Dunbier, Roger. 09496

Mineralogy

Applications, soil chemistry: Rich, C. I. 09612

Clay minerals, interlayering: Rich, C. I. 05145

Clay minerals, quantitative analysis, methods: Post, Donald F. 06919

Effect on physical properties: Low, Philip F. 09615

Montmorillonite fraction, quantitative determination: Fink, D. H. 00506

Quantitative, limitations, parameter effects: McNeal, Brian L. 00989

Soil classification, applications: McCracken, R. J. 09613

Vermiculite, chemical, physical properties, genetic relations: Kishk, Fawzy Mohamed. 03015

Weathering, salt-affected: Rabie, Farida Hamed. 07147

Minnesota

Northwestern, pimple mounds, profiles: Ross, B. A. 00818

Moisture

Content, radiometric sensing: Kennedy, J. M. 07484

Montana

Northeastern, montmorillonite weathering: Klages, M. G. 05262

Morphology

New Mexico, southern, argillic horizon: Gile, L. H. 05082

Structure, permeability: Eaton, Frank M. 01067

New Brunswick

Podzol, clay mineralogy: Kodama, H. 04330

New Mexico

San Andres Mountains, Gardner Spring site, genesis: Gile, L. H. 04821

New York

Degradation zones, eluvial-illuvial interface: Bullock, Peter. 06528

Whiteface Mountain, morphologies, distributions: Witty, John Edward. 06532

Nomenclature

Laterite and latosol, new terminology recommended: Hamming, Edward. 03727

North America

Deserts, research, appraisal: Dregne, Harold E. 08102

Development, plant communities: Eyre, S. R. 04129

North Carolina

Coastal plain, catenas, composition, fragipan genesis: Nettleton, W. D. 04191

Coastal plain, catenas, fragipan formation, geomorphic surfaces: Nettleton, W. D. 04218

Soils—Continued

North Carolina—Continued

Coastal plain, magnesium, availability: Rice, H. B. 02266

Coastal plain, organic, genesis: Dolman, J. D. 02268

Great Smoky Mountains, bedrock, vegetation influences: Wolfe, James Alvis. 03013

Raleigh area, Cecil soils, clay skins, composition, genesis: Khalifa, E. M. 05964

Northwest Territories

Ellef Ringnes Island, Isachsen area, development: Everett, K. R. 10814

Mackenzie Delta, permafrost, lithology: Williams, P. J. 07237

Prince Patrick Island, Mould Bay area, development: Everett, K. R. 10814

Ohio

Logan County, tills, delineation: Forsyth, Jane L. 11064

Western, Celina and Morley soils, argillic horizons, genesis: Smeck, Neil E. 04193

Oklahoma

Muskogee County, micromorphology: Stiegler, Jim. 05271

Ontario

Manitoulin Island, genesis: Hoffman, Douglas W. 05242

Oregon

Pumice Desert, Crater Lake Natl. Park, development, ecology: Horn, Elizabeth Mueller. 05648

Willamette Valley, genesis, relation to geomorphology: Parsons, R. B. 04192

Pennsylvania

Textural classes, moisture retention: Petersen, G. W. 01854

Photogeology

Color and color infrared film tones, engineering features: Mintzer, Olin W. 02542

Physical properties

Arid regions, alluvial, water tight: Radwanski, S. A. 04979

Clay suspensions, flow properties, changes with reduction: Alcorido, Isabelo Suelo. 04445

Density, hydraulic conductivity, prediction: Chan, Daniel Tzeng-long. 10421

Effects on infiltration: Koon, Joe L. 10420

Evaluation, radioactivity surveys: Williamson, A. N. 06385

Microwave characteristics: Edgerton, A. T. 06390

Permeability, measurement method, apparatus: Groenewoud, H. van. 04980

Properties

Deserts, research, appraisal: Dregne, Harold E. 08102

Puerto Rico

Properties, evaluation, radioactivity surveys, gamma-ray: Williamson, A. N. 06385

Quebec

Saint Hyacinthe County, St. Jude soil, mineral composition: Ledoux, Robert. 06932

Toulmoustou soil, composition and fabric, cf. Leda clay: Quigley, R. M. 04253

Radioactivity

Neutron production rate, due to natural reactions: Feige, Y. 00967

Rhode Island

Southern, Bridgehampton soils: Bell, R. S. 11402

Soils—Continued

Sampling

Corer, trailer mounted, neutron probe access tube: Hipp, Billy. 05957

Technique, freezing in situ: Blevins, R. L. 04820

Tennessee

Great Smoky Mountains, bedrock, vegetation influences: Wolfe, James Alvis. 03013

Texas

Llano County, genesis, drainage effects: Goss, D. W. 02256

Thermoluminescence

Gamma irradiated, time effect: Nishita, H. 04989

Trinidad

Central, Montserrat series: Ahmad, N. 01094
Northern Range, Maracas series: Ahmad, N. 01095

Tropical

General review: Saenz Maroto, Alberto. 10517

United States

Paleosols, in loess, identification: Ruhe, Robert V. 02326

Properties, evaluation, radioactivity surveys, gamma-ray: Williamson, A. N. 06385

Virginia

Central, Frederick, Iredell, Lloyd series, geochemistry: Plaster, Rodger W. 06117

Washington

Eastern, western, physical properties, erodibility: Balci, A. N. 02269

Northeastern, volcanic ash content: Smith, Henry W. 05622

Southwestern, soils, Al exchange capacity, drying effects: Westfall, Dwayne Gene. 04448

Water

Undercooling, freezing point depression, ice nucleation: Anderson, Duwayne M. 02816

Weathering

Mineral desilication, reverse leaching: Jackson, M. L. 07434

Wisconsin

Jefferson County, clay accumulation, carbonate effects: Allan, R. J. 02263

Jefferson County, clay minerals, genesis: Borchardt, G. A. 02262

Lake Superior shore and Michigan basin, source material provenance: Petersen, G. W. 02288

Saint Croix-Pierce Counties, genesis, morphology: Foss, J. E. 02267

South Carolina*Areal geology*

Central, Piedmont: Secor, D. T. 04728

Economic geology

Ceramic materials, Little Mountain area, kyanite, resources, genesis: McKenzie, John C. 02555

Kaolin, Cretaceous deposits, occurrence, genesis: Grim, Ralph E. 09869

Mineral resources, production, 1967: Johnson, Henry S., Jr. 03170

Engineering geology

Radioactive waste disposal, Savannah River Plant: Reichert, S. O. 09456

Waste disposal, radioactive, Savannah River Plant: Fenimore, J. W. 11429

General

Research, current, summary: Johnson, Henry S., Jr. 03170

Geochemistry

Continental shelf sediments: Stone, Irving C., Jr. 11355

South Carolina—Continued*Geophysical surveys*

Columbia area, fault-dike relations, magnetic: Thompson, George M. 08380

Hydrogeology

Berkeley and Charleston Counties, ground-water regimen, impact of canals: Siple, George E. 04000

Greenville County, aquifers, resources: Koch, Neil C. 07172

Savannah River Plant, ground-water movement: Fenimore, J. W. 11429

Water resources investigations, U.S. Geol. Survey, Water Resources Div.: Siple, George E. 04835

Maps, geologic

Central, Piedmont: Secor, D. T. 04728

Greenville County: Koch, Neil C. 07172

Little Mountain area, Newberry County: McKenzie, John C. 02555

Maps, ground water

Greenville County: Koch, Neil C. 07172

Maps, mineral resources

Heavy minerals: Overstreet, William C. 00323

Mineralogy

Clay minerals, phosphate, Hawthorne Fm.: Heron, S. Duncan, Jr. 08528

Paleontology

Fauna, Neogene, Myrtle Beach quadrangle: DuBar, J. R. 03196

Fossil assemblage, Wicomico Formation: Colquhoun, D. J. 03005

Ostracoda, Miocene-Pliocene, Waccamaw Formation: Swain, Frederick M. 00262

Petrology

Fairfield County, Winnsboro igneous complex, contact relations: Wagener, H. D. 08563

Little Mountain area, kyanite quartzite, paragenesis: McKenzie, John C. 02555

Newberry County, eclogite, amphibolized: Libby, W. G. 10320

Piedmont, plutons: Butler, J. Robert. 08513

Winnsboro area, metamorphic rocks, facies and origin: Wagener, H. D. 04834

Sedimentary petrology

Continental shelf sediments, heavy minerals: Stone, Irving C., Jr. 11355

Horry, Marion Counties, sediments, size analysis, relations to landforms: Adams, R. D. 00925

Stratigraphy

Coastal Plain, lower: Colquhoun, Donald J. 08517

Cretaceous-Tertiary, kaolin deposits, coastal plain: Buie, B. F. 10286

Neogene, Myrtle Beach quadrangle: DuBar, J. R. 03196

Oligocene, Cooper Marl, relations to Hawthorne Formation: Heron, S. Duncan, Jr. 10307

Tertiary, coastal plain, sea-level changes: Colquhoun, D. J. 04009

Structural geology

Aiken area, Triassic basin: Siple, G. E. 08557

South Dakota*Areal geology*

Beadle County: Hedges, Lynn S. 06026

Black Hills area, guidebook: Wyoming Geological Association. 05903

Black Hills, field trip log: Gries, J. P. 05882

Black Hills, Galena-Gilt Edge area: Mukherjee, Nilendu S. 10246

South Dakota—Continued*Economic geology*

Coal, Black Hills area, resources, evaluation: Levene, Harold. 05920

Gold and silver, Trojan area, Bald Mtn. mine tailings, analysis: Fredlund, Daniel A. 11281

Gold, Homestake mine, Black Hills: Slaughter, A. L. 05352

Gold, Homestake mine, genesis: Slaughter, A. L. 05902

Metals, Black Hills area, northern, occurrence: Shapiro, L. H. 05875

Mineral resources, Black Hills, Ingersoll and Tin Mtn., mine dumps: Roberts, W. L. 06893

Pegmatite, Black Hills area, dumps, sampling: Lingard, Amos L. 05877

Pegmatite, gold, Berne quadrangle: Redden, Jack A. 01701

Pegmatite, Keystone district: Norton, James J. 05876

Petroleum, Black Hills area, northern: Tenney, Charles S. 05915

Silver, lead, Double Rainbow mine, mineralogy: Garske, David H. 05874

Tungsten, Harney Peak dome, southwestern, genesis: Kernaghan, James S. 06891

Tungsten, marble, Harney Peak dome, Custer County: Kernaghan, James S. 05873

Uranium, Black Hills area: Hart, Olin M. 05395

Uranium, Black Hills area, Edgemont district: Bowles, C. Gilbert. 05868

Uranium, southwestern: Harshman, E. N. 05394

Engineering geology

Landslides, Pierre Shale: Bruce, Richard L. 04150

Geochemistry

Eastern, ground-water pH, field and laboratory determinations, differences: Lufkin, Nat. 06995

Geomorphology

Patterned ground, contemporary, nomenclature: White, Everett M. 01995

Geophysical surveys

Deep wells, geothermal gradients: Adolphson, D. G. 05177

Hydrogeology

Artesian basin, recharge, geochemistry: Swenson, Frank A. 00552

Avon area, ground water, quality anomaly: Jorgensen, Donald G. 05702

Beadle County, water resources: Howells, Lewis W. 08016

Big Sioux aquifer system, stream discharge measurements: Ackroyd, Earl A. 06996

Black Hills area, surface water loss to Madison Formation: Gries, John Paul. 05880

Black Hills, Box Elder Creek, water losses and gains, limestone sinks: Crooks, Thomas J. 06889

Black Hills, east side, aquifer recharge from stream losses to caverns: Gries, John Paul. 06890

Britton area, ground-water investigation: McMeen, James W. 09914

Brookings area, ground-water investigation: Barari, Assad. 09924

Bryant area, ground-water investigation: Jorgensen, Donald. 09916

Burke area, ground-water investigation: Christensen, Cleo M. 09913

Dakota artesian basin, water source, movement: Swenson, Frank A. 05879

South Dakota—Continued*Hydrogeology—Continued*

Dell Rapids area, ground-water investigation: Barari, Assad. 09920

Eastern, ground-water pH, field and laboratory determinations, differences: Lufkin, Nat. 06995

Eureka area, ground-water investigation: Steece, Fred V. 11058

Faultkon area, ground-water investigation: Christensen, Cleo M. 09909

Lake Andes area, ground-water investigation: Shurr, George W. 09918

Lake Norden area, ground-water investigation: Jorgensen, Donald. 09915

Lake Preston area, ground-water investigation: Hedges, Lynn S. 09910

Madison area, ground-water investigation: Tipton, M. J. 11059

Menno area, ground-water investigation: Bruce, Richard L. 09911

Miller area, ground-water investigation: Christensen, Cleo M. 09912

Mission area, ground-water investigation: Barari, Assad. 11255

Mitchell area, ground-water investigation: Barari, Assad. 09922

Sanborn County, glacial drift aquifers: Steece, Fred V. 10516

Selby area, ground-water investigation: Wong, H. D. 11060

Sioux Falls area, new aquifer: Vaughan, Kenneth D. 06892

Southeastern, Choteau aquifer, analog model and analyzer study: Kume, Jack. 06998

Tyndall area, ground-water investigation: Bruce, Richard L. 09908

Viborg area, ground-water investigation: Beffort, J. David. 09923

Waubay area, ground-water investigation: Beffort, J. David. 09921

Wessington Springs area, ground-water investigation: Steece, Fred V. 09919

Winner area, ground-water investigation: Barari, Assad. 09917

Maps, geologic

Beadle County: Hedges, Lynn S. 06026

Berne quadrangle, mineral data: Redden, Jack A. 01701

Maps, ground water

Beadle County: Howells, Lewis W. 08016

Mineralogy

Black Hills, Ingersoll and Tin Mtn. mine dumps: Roberts, W. L. 06893

Pegmatite minerals, Black Hills, check list: Lingard, Amos L. 05877

Silver-lead ore, Galena district, Double Rainbow mine: Garske, David H. 05874

Paleontology

Cephalopoda, Cretaceous, Turonian age, Niobrara Formation: Tourtelot, Harry A. 05864

Cretaceous, Fox Hills-Hell Creek Formations, central, paleoecology: Waage, Karl M. 10881

Fauna, Tertiary, Turtle Butte area: Skinner, Morris F. 11351

Mammalia, Miocene, Sharps Formation, southwestern, entelodont: Green, Morton. 07000

Mammalia, Oligocene, Chadron, Brule Formations, tapiroids: Bjork, Philip R. 03669

Mammalia, Oligocene, Chadron Formation, new insectivore family: Clark, John. 01144

South Dakota—Continued*Paleontology—Continued*

Mammalia, Oligocene, ischyromyid rodents: Black, Craig C. 02848

Mammalia, Pleistocene, South Dakota, Bennett, Walworth, Lincoln Counties, muskrats: Harksen, J. C. 06895

Palynomorphs, Cretaceous, Hell Creek Formation, catalog: Traverse, A. 01651

Palynomorphs, Cretaceous, Inyan Kara Group: Cahoon, Elizabeth J. 02317

Petrology

Berne quadrangle, Precambrian metamorphic rocks, pegmatite: Redden, Jack A. 01701

Black Hills, Bear Mountain amphibolite: Walawender, Michael J. 10273

Harney Peak dome, southwestern, metamorphic rocks: Kernaghan, James S. 06891

Sedimentary petrology

Black Hills, Deadwood Formation, lithofacies: Kulik, Joseph W. 10110

Niobrara Formation, phosphate nodules at base: Tourtelot, Harry A. 05864

Stratigraphy

Black Hills area, catalog of formation names: Wulf, George R. 05883

Cretaceous, Fox Hills Formation, type area, northwestern: Waage, Karl M. 09882

Cretaceous, Fox Hills-Hell Creek Formations, central, biostratigraphy: Waage, Karl M. 10881

Cretaceous, Muddy Sandstone, Rocky Mts.: Wulf, George R. 05905

Cretaceous, Niobrara Formation, Black Hills: Tourtelot, Harry A. 05864

Miocene, Batesland Formation, southwestern: Harksen, J. C. 10519

Miocene, Rosebud Formation, Todd County: Macdonald, J. R. 10520

Precambrian, Cretaceous, formation tops, selected, water wells: Schoon, Robert A. 09076

Quaternary, Red Dog Loess, southwestern: Harksen, J. C. 10521

Tertiary, Turtle Butte: Skinner, Morris F. 11351

Structural geology

Berne quadrangle, general: Redden, Jack A. 01701

Black Hills area, tectonics, regional setting: Sales, John K. 05904

Specific gravity*Ground water*

Relations to total dissolved salts: Agnihotri, S. K. 09044

Igneous rocks

British Columbia, Coast Mts.: Hutchison, W. W. 10008

Instruments

Hydrostatic weighing apparatus for powders: Aitcin, P. C. 06777

Interpretation

Hydraulic equivalence of mineral grains, placer origin: Tourtelot, Harry A. 00112

Measurement

Powder, hydrostatic weighing procedure: Aitcin, P. C. 06777

Spectroscopy*Absorption*

Atomic, Ca and Mg, air-acetylene and nitrous oxide-acetylene flames: Ramakrishna, T. V. 11343

Atomic, electrothermal atomization: Woodriff, Ray. 04271

Spectroscopy—Continued*Absorption—Continued*

- Atomic, geologic samples, major constituents: Galle, O. Karmie. 04270
- Atomic, gold determination: VanSickle, Gordon H. 01141
- Atomic, indirect methods: Boltz, David F. 03479
- Atomic, instrumental variables, evaluation: Grunder, F. I. 03467
- Atomic, Pb, Co, Ni in fresh water, chelation-extraction: Fishman, Marvin J. 04308
- Atomic, sampling techniques, recent developments: Manning, David C. 03478
- Bauxite, hydrofluoric acid decomposition technique: Langmyhr, F. J. 06739
- Bentonite, Kansas, Carlile Shale: Hostetler, James M. 09285
- Copper: Heller, R. L., Jr. 09636
- Data, tourmaline, cordierite, chloritoid, vivianite: Faye, G. H. 06769
- Erythrite, pleochroism: Faye, G. H. 03760
- Instruments, automatic sample changer: Shapiro, Leonard. 00779
- Instruments, hollow-cathode lamp: Woodriff, R. A. 03464
- Mercury, submicrogram quantities: Hatch, W. Ronald. 09641
- Meteorites, copper and zinc analysis: Nava, David Francis. 05510
- Meteorites, platinum-group metals, spectrophotometric: SenGupta, J. G. 02999
- Muscovite, lepidolite, fuchsite, transition metal ions: Faye, G. H. 02168
- Optical, manganese minerals: Keester, Kenneth L. 07423
- Photometric, di-2-pyridylketoxime reagent for iron (II): Holland, William J. 06741
- Photometric, silicate rocks, hydrofluoric acid decomposition: Langmyhr, F. J. 06738
- Photometry, analytical and statistical techniques: Skogerboe, R. K. 03444
- River water, sample preparation: Galle, O. Karmie. 06369
- Selenium: Chakrabarti, Chuni L. 02996
- Silica, alumina in rocks, minerals: Katz, Amitai. 02234
- Silicate rock standards, Cu, Sr, Zn: Huffman, Claude, Jr. 00795
- Silicate rocks, major-element analysis: Belt, Charles B., Jr. 07819
- Silicate rocks, silica, lithium metaborate fusion: VanLoon, J. C. 01828
- Spectrophotometric, cadmium in geologic material: Nakagawa, H. M. 05196
- Spectrophotometric, rhodium determination: Schnepfe, Marian M. 05197
- Spinel, Cr³⁺ ions: Wood, D. L. 09257
- Technique, cesium, standard reference samples: Mountjoy, Wayne. 00777
- Technique, gold: Thompson, C. E. 00780
- Technique, rocks and minerals, Fe, Mg, Ca, Na, K: Abbey, Sydney. 00978
- Technique, silicates, decomposition method: Bernas, Bedrich. 09638
- Technique, tellurium, cf. catalytic procedure: Nakagawa, H. M. 00778
- Water, Kansas, Kansas River basin: Angino, Ernest E. 10062
- Yttrium, spectrophotometric: Madison, Bryan L. 02998

Activation analysis

- Age determination, crystal defects: Townsend, P. D. 03984

Spectroscopy—Continued*Activation analysis—Continued*

- Application, study of metallogenic provinces: Uken, Ernst A. 09478
- Automatic data processing: Dooley, John A. 03506
- Computer simulated system, geochemical and logging applications: Charyula, V. 06174
- Geologic materials, trapping parameters, determination tools: Braunlich, P. 03985
- Gold, fire-assay preconcentration: Simon, F. O. 10930
- Gold, fire-assay separation: Rowe, J. J. 03997
- Igneous rocks, high-resolution gamma detector: Gordon, Glen E. 11290
- Instruments, design, special: Lewis, D. R. 09422
- Instruments, techniques: Eckhoff, N. D. 07676
- Lanthanide elements, corals: Livingston, Hugh D. 10714
- Lithium-6: Sedlacek, W. A. 10928
- Pyroclastics, source identification: Theisen, Arthur A. 03047
- Rare earth elements, evaluation, comparison: Towell, D. G. 10713
- Rocks and minerals, fluorine: Vincent, H. A. 03504
- Sodium in rock, technique: Parker, Ronald B. 05095
- Soil moisture and density, sample corer, neutron probe access tube: Hipp, Billy. 05957
- Sulfide ores, osmium and ruthenium, submicrogram amounts: Chung, K. S. 06743
- Syenite standard, major and minor elements: Volborth, A. 04749
- Tantalum and hafnium, silicates: Greenland, L. Paul. 03010
- Technique, coincidence counting, cesium, cobalt: Greenland, L. Paul. 00790
- Technique, high-output isotopic neutron source: Wing, James. 03503
- Technique, Illinois Geol. Survey, application: Ruch, R. R. 03619
- Technique, new excitation source: Isenhour, T. L. 03505
- Technique, recent advances: Guinn, Vincent P. 03502
- Technique, uranium in water: Edwards, Kenneth W. 04326
- Thermoluminescence, limestone, dolomite, salt: Lewis, D. R. 03963
- Thermoluminescence, minerals, radiation effects: Levy, Paul W. 03983
- Thermoluminescence, research review, Univ. Wisconsin: Daniels, Farrington. 03982
- Electromagnetic radiation*
- Remote sensing, applications, instruments, interpretation: Reeves, Robert G. 09119
- Electron probe*
- Absorption, extended fine structure with thick targets: Hach, J. T. 04753
- Calcite, magnesium content, cf. X-ray diffraction: Weber, Jon N. 01470
- Data, skeletal magnesian carbonates: Moberly, Ralph, Jr. 07865
- Desert varnish, chemical variations: Yang, Hsiung-Yi. 11133
- Fossil bones, teeth: Parker, Ronald B. 09155
- Humite minerals: Jones, N. W. 08755
- Instruments, content-mapping attachment, semiquantitative analysis: Tomura, Teruichi. 04750
- Laser microprobe: Snetsinger, Kenneth G. 09695

Spectroscopy — Continued*Electron probe* — Continued

- Lattice-parameter determination, Kossel techniques: Lutts, A. 04754
- Magnetic spherules, beach sand, Atlantic Coastal Plain: Marvin, Ursula B. 09800
- Microanalysis, applications, auxiliary techniques: Brown, J. D. 09123
- Microanalysis, specimen preparation, standards: Yakowitz, H. 09124
- Microanalytical scanning techniques, applications: Heinrich, K. F. J. 09125
- Minerals, unary and binary oxide standards: Bence, A. E. 03891
- Petzzite, composition change, caused by bombardment: Rucklidge, John. 01614
- Phosphate minerals, quantitative analysis: Mead, Cynthia W. 05232
- Prehnite, solid solution, British Columbia, Karmutsen Group: Surdam, Ronald C. 08036
- Pyroxene analysis, standards selection: Boyd, F. R. 01536
- Pyroxene, coexisting types, technique: Boyd, F. R. 01540
- Sample mounting, sectioning, polishing: Finkelman, Robert B. 06453
- Silicate minerals, Fe and Mn oxides, valence states: Albee, Arden L. 11227
- Small-particle analysis, problems: Page, Norman J. 02712
- Sulfide assemblage, emulsion textures, New York, Balmat area: Wiltse, Milton A. 09739
- Sulfide assemblage, Minnesota, Duluth Gabbro: Hall, Henry T. 08719
- Technique, error sources: Heinrich, Kurt F. J. 04651
- Technique, porous material preparation: Sinkankas, John. 02228
- Technique, vanadium in presence of titanium: Snetsinger, Kenneth G. 07552
- Tektites, inhomogeneities: Barnes, Virgil E. 08496

Emission

- Bryozoa, Ectoprocta, chemical composition: Schopf, Thomas J. M. 03221
- Clay shales, boron determination, cobalt standard: Cody, R. D. 03469
- Europium, cathode-ray excited: Larach, Simon. 02997
- Foraminifera, trace elements: Lipps, Jere H. 11317
- Instruments, automation and computer analysis, direct-reading spectrometer: Barnes, R. M. 03488
- Instruments, hollow-cathode lamp: Woodriff, R. A. 03464
- Lake mud, exchangeable cations: Cowgill, Ursula M. 04884
- Sediments, element distribution, Connecticut, Linsley Pond: Cowgill, Ursula M. 03054
- Spark discharge, excitation processes: Walters, J. P. 03490
- Technique, after fire assay, Pd, Pt, Rh in rocks: Haffty, Joseph. 02278
- Technique, Au, Pt, Pd analysis: Barnett, Paul R. 02686
- Technique, controlled arc in argon, microgram samples, common-matrix method: Gordon, W. A. 03492
- Technique, d-c arc, development: Strock, Lester W. 03487
- Technique, magnesium-chlorine trifluoride flames: Campbell, Clement. 03493

Spectroscopy — Continued*Emission* — Continued

- Technique, mobile laboratory, geologic materials: Grimes, D. J. 02817
- Technique, photographic emulsions, calibration, test of method: Margoshes, Marvin. 03489
- Technique, rotating-disk-electrode, aluminum analysis: Kurtz, L. T. 09416
- Technique, small-area analysis, sapphire mask: Nash, D. L. 03491
- Technique, spark-discharge, development: Walters, J. P. 03486
- Technique, textbook: Am. Soc. for Testing and Materials. 06163
- Trace elements in water, thioacetamide-precipitation: Mallory, Edward C., Jr. 03750
- Water in minerals and rocks: Quesada, Antonio. 04794

Flame photometry

- Absorption, atomic, computer techniques, three-dimensional analysis: Malakoff, J. L. 03000
- Absorption, atomic, difficult areas: Ramirez-Munoz, Juan. 11344
- Absorption, atomic, premixed nitrous oxide-acetylene flame: Golightly, D. W. 03476
- Absorption, emission, fluorescence, review, comparison: Brech, Frederick. 03466
- Atomic absorption, nitrous oxide-supported flames: Willis, J. B. 03465
- Calcium determination, interferences: Popham, Ronald E. 03474
- Cesium, traces in sea water, technique, instrument: Folsom, T. R. 01152
- Emission, nitrous oxide-acetylene flame, cf. atomic absorption: Pickett, E. E. 03472
- Hydrogen-argon-entrained-air flame, interference effects: Smith, R. 03133
- Phosphorus and sulfur, fuel-rich air-hydrogen flames, shielded and unshielded: Syty, Augusta. 03475
- Sea water, barium and strontium: Andersen, Neil R. 11009
- Technique, analytical and statistical: Skogerboe, R. K. 03444
- Technique, atomization study, controlled stream of uniform-sized droplets: Hieftje, G. M. 03477
- Technique, fluorine in rocks, mica, meteorites: SenGupta, J. G. 03566
- Technique, gas flow rate and pressure measurement: Mansfield, J. M. 11322
- Technique, nitrous oxide-acetylene flame, interference effects: Koirtzmann, S. R. 03473
- Tellurium, isolation by extraction: Pollock, E. N. 11340

General

- Applications, U.S. Geological Survey, Rocky Mtn. region: Myers, Alfred T. 03495
- Spectrography, scanning and interpreting, computer-controlled system: Bailey, C. A. 03509
- Technique, teaching, low-cost instrument for students: Schulz, Werner. 01443
- Techniques, geochemical applications: Joensuu, Oiva I. 03496
- Techniques, rocks and minerals, textbook: Maxwell, John A. 07301

Infrared

- Absorption, apatite, carbonate, spectral properties: LeGeros, Racquel Z. 03511
- Amber, cf. modern resins, botanic source and age: Langenheim, Jean H. 04786

Spectroscopy—Continued*Infrared*—Continued

Apatite, hydroxy and fluorapatites: Bhatnagar, Vijay Mohan. 06376

Beryl, differences between types: Wood, D. L. 06456

Beryl, water molecules, low-frequency vibrations: Safford, G. J. 09259

Chlorite, Arkansas, Anderson talc deposit: Wu, Dah-cheng. 09303

Coal, mineral constituents: Estep, Patricia A. 09634

Data, montmorillonite: Serratos, J. M. 06748

Far, minerals and inorganics: Karr, Clarence, Jr. 03510

Lichen and mosses, spectra of mineral matter: Dormaar, J. F. 01990

Plagioclase: Thompson, C. Sheldon. 00872

Plagioclase, composition, relations: Angino, Ernest E. 08604

Reflectance, apatite, single crystals: Klein, Edward. 03512

Ion bombardment

Instruments, camera and ancillary equipment: Cunningham, R. L. 09116

Laser probe

Garnets in matrix: Blackburn, W. H. 03445

Mass

Coal, kerogen: Bitz, Mary Carol. 07826

Hydrocarbons in sediments, with gas chromatography: MacLeod, William D., Jr. 05441

Iron meteorite, trace-element distribution: Berkey, E. 11228

Organic materials: Haug, Patricia Ann. 03016

Sedimentary rocks, alkanes, determination: Modzeleski, Vincent E. 09637

Spark source, major and minor elements: Carver, Riley D. 04276

Technique, digital recording of spectra, cf. seismic data: Weichert, D. H. 11191

Technique, lithium isotopes in meteorite: Gradsztajn, Eli. 00212

Technique, on-line data processing: Wasserburg, G. J. 10743

Mössbauer effect

Layer silicates, iron analysis: Taylor, G. L. 06960

Nonsilicate minerals, Fe-57 resonance: Hafner, Stefan S. 09015

Phase diagram determination, Ni-Au system, evaluation: Howard, Ephraim Manasseh. 09401

Phosphate-iron mixtures, Fe⁺³:Fe⁺² ratio: Lerman, Abraham. 00213

Silicate minerals, Fe-57 resonance: Ghose, Subrata. 09014

Technique application: Hafner, Stefan S. 09013

Tin minerals, Sn-119 resonance: Ghose, Subrata. 09016

Nuclear magnetic resonance

Wide-line, sulfur-33 in minerals: Karr, Clarence, Jr. 02601

Ultraviolet

Calcite, thermoluminescence peaks, experimental study: Vaz, J. E. 03974

Silicate rock powders, luminescence: Nash, Douglas B. 08485

X-ray fluorescence

Automatic data processing, computer-coupled spectrometer: Bernstein, Frank. 03480

Brines, total bromine determination, accuracy: Dunton, Polly J. 01153

Bromine, iodine analysis: Wahlberg, J. S. 05233

Spectroscopy—Continued*X-ray fluorescence*—Continued

Clay, potassium content determination: Johnson, Leon J. 06959

Coal, sulfur analysis: Berman, M. 03097

Emission, silicate analysis, precision: Baird, A. K. 04746

Igneous rocks, compositional variations, geological history: Laidley, Richard A. 04273

Instrument, portable radioisotope spectrometer: Rhodes, J. R. 04758

Instruments, development, applications to other methods: Moore, B. J. 03508

Instruments, portable analyzer, Mn, Cu, Ni, Fe: Rhodes, J. R. 07701

Instruments, rhodium target tube: Dryer, H. T. 03507

Lake mud, exchangeable cations: Cowgill, Ursula M. 04884

Manganese ore: Egan, W. D. 04748

Micro, selected applications: Cuttitta, Frank. 04274

Ores, minerals, waters: Rose, Harry J., Jr. 09459

Oxygen in igneous rocks, ultra-soft: Fabbri, B. P. 05549

Plutonium, rare-earth content: Hakkila, E. A. 03485

Potassium-rubidium-caesium, combined with ion-exchange: Hayden, John A. 03484

Quantitative, solution techniques: Bertin, Eugene P. 04649

Rare earths in complex minerals: Rose, Harry J., Jr. 04275

Rocks, minor elements, determination, thin film technique: Price, N. B. 09635

Shale, trace elements, Saskatchewan: Williams, G. D. 01411

Silicate rocks, Rb-Sr ratio determination: Doering, Willis P. 02697

Sulfur analysis, soil extracts: Roberts, S. 04986

Syenite standard, major and minor elements: Volborth, A. 04749

Technique, background and matrix effects, unusual: Mitchell, Betty J. 03483

Technique, cesium, standard reference samples: Mountjoy, Wayne. 00777

Technique, computerized statistical: Mitchell, Betty J. 04747

Technique, gold, rhodamine B: Marinenko, John. 10929

Technique, wavelength of lines, voltage effect: Burr, Alex. F. 03482

Techniques, matrix problems, slope-ratio solution: Cuttitta, Frank. 03463

Technique, ultrasoft X-rays, total reflection at critical angle: Herglotz, H. K. 03481

Wall rocks, element distributions, Quebec, Chibougamau: Hawkins, W. M. 08217

Springs*Arizona*

Coconino County, basic data, source rocks, selected: McGavock, E. H. 00566

Colorado River canyon, Lees Ferry to Lake Mead: Johnson, P. W. 00915

California

Borrego, Carrizo, San Felipe Valley areas: Moyle, R. W., Jr. 11016

Geochemical prospecting

Wisconsin, zinc: DeGeoffroy, J. 06944

Missouri

North Fork River, Bryant Creek basins, structural controls: Skelton, John. 02701

Ozark Mountains, Hurricane Creek basin, relation to karst watershed: Aley, Thomas. 07052

Springs—Continued

South Dakota

Black Hills, Box Elder Creek, connection with sinkholes: Crooks, Thomas J. 06889

Utah

Sevier River basin, Scipio, Little, and Mills Valleys: Bjorklund, L. J. 00073

Water quality

Contamination, purification, chemical reactions: Behrman, A. S. 00601

Statistical methods*Correlation*

Dendrograph, two-dimensional tool: McCammon, Richard B. 04281

Earthquakes

Variance analysis, epicenter and magnitude determinations: Bolt, Bruce A. 00635

Ecology

Variance analysis, species abundances: Imbrie, John. 01213

Economic geology

Factor analysis, magnetite distribution: Zodrow, Erwin L. 07764

Linear discriminant analysis, vein and ore classification: Koch, George S., Jr. 11311

Mean-square-successive-difference tests, ore reserve calculation: Hazen, Scott W., Jr. 05224

Regionalized variables theory, ore reserve calculation: Blais, Roger A. 05226

Trend-surface analysis: Garrett, Robert G. 04233

Trend-surface analysis, Alaska, mineral deposits: Heiner, Lawrence E. 09834

Trend-surface analysis, California, Rocky Hill stock, metals: Putnam, George W. 00816

Trend-surface analysis, geochemical prospecting: DeGeoffroy, J. 06944

Trend-surface analysis, Newfoundland, Whalesback mine: Agterberg, F. P. 05217

Trend-surface analysis, Newfoundland, Whalesback mine: Agterberg, F. P. 05228

Trend-surface analysis, Newfoundland, Whalesback mine: Piloski, M. J. 05315

Trend-surface analysis, ore grade distribution: Phillips, R. J. 09563

Weighted moving average technique, gold, reserve calculation: Krige, D. G. 05225

Engineering geology

Factor analysis, rock properties, interrelations: Mutmanky, Jan M. 11163

General, graphic analysis: Mavis, Frederic T. 04579

Regression analysis, Nevada Test Site, granitic rock, properties: Ege, John R. 06812

Regression analysis, soils, moisture retention, textural classes: Petersen, G. W. 01854

Terrain analysis, mathematical models of relations: Grabau, Warren E. 08884

General

Applications, accuracy, distributions: Kelly, A. M. 09564

Factor analysis, Q-mode, FORTRAN IV program: Klován, J. E. 01056

Methods, review: Charlier, Roger H. 07341

Nonparametric methods: Cain, J. Allan. 08637

Probability analysis, contour map derivation: Newton, R. 02179

Regression and trend analyses, KWIKR8 program: Esler, J. E. 07586

Seriation, elementary scale and cluster analysis: Johnson, LeRoy, Jr. 06313

Statistical methods—Continued*General—Continued*

Trend analysis, harmonic, FORTRAN IV program: Harbaugh, J. W. 07587

Trend analysis, stepwise regression and non-polynomial models: Miesch, A. T. 07585

Trend-surface analysis, Fortran IV computer program, Alaska University: Heiner, Lawrence E. 09832

Variance analysis, Wilks' λ criterion, computer program: Rao, S. V. L. N. 01055

Geochemical prospecting

Multivariate, trace metals in stream sediments: Dahlberg, Eric Charles. 07159

Trend-surface analysis, Utah, Park City district: Nackowski, M. P. 10999

Geochemistry

Distribution curve, simulation technique, geochemical prospecting: Dahlberg, Eric C. 04236

Factor analysis, R-mode, brines, Kansas: Sampson, Robert J. 01006

Trend-surface analysis, Alaska, geochemical prospecting: Heiner, L. E. 09835

Trend-surface analysis, British Columbia, Slocan district, sulfides, minor elements: Sinclair, A. J. 03603

Trend-surface analysis, California, Rocky Hill stock, metals: Putnam, George W. 00816

Variance analysis, Minnesota: Lepp, Henry. 00472

Geomorphology

Convergent mean model, fluvial systems: Woldeberg, Michael J. 00007

Factor analysis, Iowa, loess watersheds, hillslope models, soil formation: Ruhe, R. V. 07440

Probability analysis, meander formation: Thakur, T. R. 00385

Regression analysis, karst depression, morphology: LaValle, Placido. 05165

Regression analysis, stream flow, simulation techniques: Stolte, W. J. 05439

River networks, microcanonical ensembles, temperature analog: Scheidegger, A. E. 09462

Shore features, trend-surface analysis, sand distribution: Boon, John D., 3d. 00529

Time-series analysis, sediment-water discharge: Rodriguez-Iturbe, Ignacio. 02988

Trend-surface analysis, Basin and Range province: Lustig, Lawrence K. 08788

Variance analysis, slope data, drift differentiation, Iowa: Thomas, Barbara. 06643

Variance analysis, stream channels, pools and riffles: Dolling, Ray. 03725

Glacial geology

Trend-surface analysis, postglacial uplift, Canada: Andrews, J. T. 03892

Hydrogeology

Probability analysis, pore distribution in porous medium: Brutsaert, Wilfried. 00392

Regression analysis, stream-flow variables vs. bar conditions, Columbia River: Norgaard, Richard B. 01850

Time-series analysis, sediment-water discharge: Rodriguez-Iturbe, Ignacio. 02988

Trend-surface analysis, ground-water fluctuations: Rockaway, John Dobbling, Jr. 07156

Trend-surface analysis, ground-water research, Indiana: Rockaway, J. D. 09500

Trend-surface analysis, Wyoming, Tensleep Sandstone: Bredehoeft, John D. 07801

Variance analysis, stream depletion, by well-pumping: Jenkins, C. T. 00618

Statistical methods—Continued*Hydrogeology—Continued*

Variance analysis, transient flow in multi-layered aquifer: Javandel, Iraj. 02581

Maps, contour

Trend-surface analysis, computer plotting program: McIntyre, Donald B. 09431

Mineral exploration

Factor analysis, orebody delineation: Klován, J. E. 01033

Mineralogy

Regression analysis, crystal structure, olivine: Louisnathan, S. J. 09063

Oceanography

Trend-surface analysis, three-dimensional: Brogden, W. B. 10284

Paleoecology

Factor analysis, Ordovician, Indiana: Fox, William T. 05678

Variance analysis, species abundances: Imbrie, John. 01213

Paleogeography

Schmidt plot, modified, and azimuth-frequency diagrams, dipmeter data: Campbell, R. L., Jr. 03784

Paleomagnetism

Variance analysis, vector populations, application, Quebec: Larochelle, A. 07383

Paleontology

Binomial distribution, Foraminifera, Delaware, Rehoboth Bay: Buzas, Martin A. 10994

Bivariate analysis, trilobite growth: Pabian, Roger K. 07399

Cluster analysis, fossil communities, Ordovician, Indiana: Fox, William T. 05678

Frequency analysis, silicoflagellate faunules, California: Mandra, York T. 04790

Multivariate analysis, Gastropoda, species convergence: Eldredge, Niles. 00488

Ordination model, paleoecology of pelecypods: Park, Richard A. 05673

Regression analysis, Crinoidea, ontogeny: Macurda, Donald B., Jr. 05740

Regression analysis, foraminifera, Kansas, Hughes Creek Shale: Kaesler, Roger L. 08757

Sampling, benthonic communities, binomial theory: Dennison, John M. 08142

Trend-surface analysis, least squares, morphologic comparisons, computer programs: Graus, Richard R. 08709

Variance analysis, biometric, computer program: MacTavish, John N. 05773

Variance analysis, Bryozoa, taxonomic characters: Anstey, Robert L. 11396

Variance analysis, FORTRAN IV program: Wolleben, J. A. 01045

Variance analysis, Oligocene rodents: Black, Craig C. 02848

Petrology

Regression analysis for phase rule application: Greenwood, H. J. 06057

Variance analysis, model composition, gneiss: Schryver, K. 07522

Variance analysis, open variables from Harker arrays, negative variances: Chayes, F. 01581

Sedimentary petrology

Discriminant functions, diamictic deposits: Landim, Paulo M. B. 06594

Factor analysis, soils, moisture regime, Pennsylvania: Petersen, G. W. 05934

Markov least-square, sand-sized particles: Clausen, Eric. 10219

Models, descriptive, analytic, and stochastic: Krumbein, W. C. 04725

Statistical methods—Continued*Sedimentary petrology—Continued*

Moment kurtosis and peakedness: Baker, R. A. 03554

Multivariate analysis: Griffiths, John C. 09562

Probability analysis, distribution of orientation data: Jones, Thomas A. 01480

Regression analysis, Florida, Perdido Bay, bottom sediments: Parker, Neal M. 08992

Regression analysis, grain-size parameters: Sevón, W. D. 01455

Regression analysis, soil properties, relation to landforms: Walker, P. H. 00898

Regression analysis, United States, soil erodibility factors: Barnett, A. P. 09901

Trend analysis, Iowa, Cary drift, soil formation: Walker, P. H. 07438

Trend-surface analysis, Bermuda, carbonate platform: Upchurch, Sam B. 01203

Trend-surface analysis, Colorado, Parting Formation: Campbell, John A. 02871

Trend-surface and variance analysis, soils, Iowa: Walker, P. H. 00902

Variance analysis and others, population sampling: Griffiths, John C. 07588

Variance analysis, calcium carbonate content with depth in ocean: Smith, Stephen V. 07371

Variance analysis, environment classification, Bahama Bank: McCammon, Richard B. 05685

Variance analysis, graywacke, sedimentation processes, effects: Dahlberg, Eric C. 08946

Variance analysis, Illinois, carbonate microfacies: Carozzi, Albert V. 03136

Variance analysis, mineral composition, Tyee Formation, Oregon: Lovell, J. P. B. 00011

Variance analysis, New York-Ontario, Medina Formation: Martini, I. 10686

Variance analysis, sediments, Columbia River: Kelley, James C. 08760

Variance analysis, South Carolina, coastal sediments: Adams, R. D. 00925

Variance analysis, textural parameters: Moiola, R. J. 09434

Sedimentation

Adjustment coefficients, quality control: Guy, Harold P. 00739

Regression and factor analysis, sediments, suspended, Trinity River, Texas: Wang, Kung Teh. 09861

Sand waves, properties: Nordin, Carl F., Jr. 07401

Variance analysis, delta model, computer program: Bonham-Carter, G. F. 06789

Variance analysis, streambed dune waves, description: Nordin, Carl F. 05164

Seismology

Chi-square test, seismic waves, time-residual samples: Borchardt, R. D. 05462

Finite difference methods, elastic wave equation solution: Alsop, L. E. 06649

Soils

Variance analysis, modal profiles, landscape control: Protz, R. 07420

Stratigraphy

Markov processes, lithologic transitions: Potter, Paul Edwin. 00464

Regression analysis, linear, facies thickness prediction: Flores, Romeo M. 03570

Trend-surface analysis, paleocurrents, ostracod indicators: Jones, Michael L. 05582

Structural geology

Trend-surface analysis, geometric equations, computer application: Chang, Yi-Maw. 00615

Statistical methods—Continued*Structural geology*—Continued

Trend-surface analysis, petroleum exploration: Schramm, Martin W., Jr. 03781

Variance analysis, fold geometry, computer program: Whitten, E. H. Timothy. 06682

Terrain evaluation

Military and engineering geology: Benn, Bob O. 08881

Trend-surface analysis

Stratigraphic data, computer application: Harbaugh, John W. 02562

Well logging

Neutron log correlation: Walters, E. J. 07271

Stocks*Absolute age*

Colorado, Eldora area, fission-track: Naeser, Charles Wilbur. 07197

Mexico, north-central, rhyodacitic porphyry and monzonite: Pantoja-Alor, Jerjes. 09220

Mexico, Providencia-Concepcion del Oro district: Ohmoto, Hiroshi. 07851

Arizona

Ithaca Peak, crystallization, mineralization: Eidell, J. James. 07708

British Columbia

Copper Mountain intrusions, petrology, absolute age: Montgomery, Joseph Hilton. 07154

Princeton area, Copper Mountain, petrology: Montgomery, J. H. 03595

Colorado

Audubon-Albion complex, chemical variation, crystal cumulate: Mathews, Geoffrey W. 08793

Eldora, contact zone, fission-track age relations: Naeser, C. W. 08820

North-central, Never Summer complex, assimilation: Corbett, Marshall K. 10220

Pitkin County, Mount Sopris complex: Foland, Kenneth A. 10226

Rabbit Ears Range, Poison Ridge porphyry: Kinney, Douglas M. 03994

Spanish Peaks region: Johnson, Ross B. 01702

Montana

Crazy Mountains, Big Timber complex: Tappe, John. 10268

Nevada

Yucca Flat area, Mesozoic: Hinrichs, E. Neal. 06794

New Mexico

Santa Rita monzonite, mineral zoning: Nielsen, Richard L. 07835

Ontario

Otto stock, absolute age: Purdy, J. W. 07478

Petrology

Arizona, Ajo area: Wadsworth, William B. 01910

Haiti, Terre-Neuve quartz monzonite, magmatic assimilation of marble: Kesler, Stephen E. 05651

New Mexico, Rialto: Thompson, Tommy B. 07639

New Mexico, Santa Rita area: Nielsen, Richard L. 00471

Zoning: Giles, David L. 04154

Washington

Carlton area: McKee, Bates. 00399

Pasayten River area, granitic: Tabor, R. W. 02713

Stratigraphy*Applications*

Petroleum exploration, Canada: Landes, R. W. 09215

Stratigraphy—Continued*Automatic data processing*

Application, sedimentary basin analysis, textbook: Harbaugh, John W. 02562

Coding: Kottowski, Frank E. 08122

Physical observations, paleobiometric data: Poche, David. 08313

Transgression-regression, continuous-time models, computer program: Krumbein, W. C. 06703

Transgressive and regressive deposits, simulation, Markov model: Krumbein, W. C. 06171

Cyclothems

General: Westoll, T. S. 05870

Education

Laboratory study, plasticene clay models: MacQuown, W. C., Jr. 01448

General

Application to time scales: Harbaugh, John W. 04704

Methods

Carbonate rocks, quantitative chemical approach: Sanford, John T. 01194

Cross sections, graphic analysis of multiple data: Menzer, Fred J., Jr. 00614

Dipmeter data, statistical analysis, trends: Campbell, R. L., Jr. 03784

Faunal correlation, Lyell's percentage method and binomial distribution: Bird, Samuel O. 06116

Lithology determination, micro-seismogram log: Spalding, Joe S. 06522

Melanges, tectono-stratigraphic units, interpretation: Hsu, K. Jinghwa. 09403

Pelagic sediments, interpretation, vertical mixing: Berger, Wolfgang H. 01812

Pleistocene deposits, techniques, criteria: Frye, John C. 07679

Protista: Loeblich, Alfred R., Jr. 07944

Pteropods in pelagic sediments, Pleistocene: Chen, Chin. 03129

Simulation techniques, computerized, rhythmic sequences: Buttner, Peter J. R. 03432

Stratigraphic map diagrams, regional, application to unconformities: Melton, Frank A. 00308

Subsurface, unit delineation by chemical analysis: Sanford, John T. 04719

Time markers, Precambrian, fossil possibilities: Glaessner, M. F. 07416

Trend analysis, sedimentary basins, computer use: Harbaugh, John W. 02562

Nomenclature

"Holocene" replaces "Recent": Cohee, George V. 03885

Lexicon of Idaho geologic names: Savage, C. N. 07903

Litho-, bio-, chronostratigraphic terms: Barnes, Christopher R. 02181

New term "format": Tucker, Delos R. 03884

Precambrian, Ontario, Federal-Provincial Comm. report: Robertson, J. A. 07799

Rules, Alberta Soc. Petroleum Geologists: Hawryszko, J. W. 04079

Principles

Bedding sequences, random processes: Potter, Paul Edwin. 00464

D'Orbigny's stage and zone concepts: Monty, Claude L. V. 03241

Facies structure, functional classification: Zigich-Toshich, Darinka. 01413

Unconformities, operational classification: Freeman, Tom. 01210

Stratigraphy—Continued*Textbooks*

- Analytical methods, automatic data processing, sedimentary basins: Harbaugh, John W. 02562
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Tectonics—Continued

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- Sea-floor spreading, magnetic model: Hayes, Dennis E. 02334
- Sea-floor spreading, mountain-building cycle: Wilson, J. Tuzo. 10656
- Sea-floor spreading, North Atlantic: McGregor, Bonnie A. 07372
- Sea-floor spreading, originator of concept: Dietz, Robert S. 03935
- Sea-floor spreading, originator of concept: Hess, H. H. 03936
- Sea-floor spreading, originator of concept: Meyerhoff, A. A. 03934
- Sea-floor spreading, Pacific Ocean: Fisher, David E. 01926
- Sea-floor spreading, Pacific Ocean: Pitman, W. C., 3d. 00573
- Sea-floor spreading, Pacific Ocean, Cobb seamount: Dymond, J. R. 01941
- Sea-floor spreading, Pacific Ocean, Gorda rise, mechanism: Atwater, Tanya M. 08456
- Sea-floor spreading, Pacific Ocean, Hawaiian Island chain, Emperor seamounts, evolution: Christofferson, Eric. 08466
- Sea-floor spreading, Pacific Ocean, Juan de Fuca ridge, turbidites: Hamilton, E. L. 08455

Tectonics—Continued

Processes—Continued

- Sea-floor spreading, problems, convection cells: Menard, H. W. 05869
- Sea-floor spreading, rate: Garland, G. D. 03625
- Sea-floor spreading, rates, magnetic anomalies, random injection model: Vine, F. J. 09725
- Sea-floor spreading, recent evidence: Simmons, Gene. 00341
- Sea-floor spreading, relation to Aleutian earthquake focuses: Stauder, William. 05264
- Sea-floor spreading, seismologic evidence: Sykes, Lynn R. 05889
- Sea-floor spreading, transform faults, association questioned: Ranalli, G. 11225
- Strain, Earth's surface, extensometer for observation: Vali, V. 07055
- Stress, changes at depth, detection: Sawyers, Kenneth N. 04828
- Stress planes tangent to core, geophysical evidence: Bisque, Ramon E. 07760
- Stress planes tangent to core, relation to surface features: Rouse, George E. 07779
- Transform fault concept, extension to spherical surface: Morgan, W. Jason. 00643
- Recent deformation*
 - Canada, Hudson Bay area, raised beaches, rate: Wagner, Frances J. E. 01423
 - Colorado, Denver area, earth-tilt measurements: Marshall, G. E. 02909
 - Symposium, 1968, Leningrad: Markowitz, William. 03882
- Rift valleys*
 - Arctic Ocean, relict and present, evolution: Johnson, G. Leonard. 08445
- Theoretical studies*
 - Denudation hypothesis as determinant: Voight, Barry. 09946
- Vertical tectonics*
 - Causes, temperature changes in low-velocity layer: Hales, A. L. 01946
 - Hawaii, Kilauea Volcano, activity December 1965: Fiske, R. S. 02427
 - Orogeny, main factor, experimental studies: McCunn, H. J. 09313
 - Recent movements: Kalashnikova, I. V. 09632
 - Wyoming, Bighorn Mountains, northern: Jennings, Ted Vernon. 00853
- Tektites**
 - Absolute age*
 - Fission track, K-Ar, possible errors: Gentry, Robert V. 08501
 - Composition*
 - Boron abundance, terrestrial parent: Mills, A. A. 08036
 - Georgia, Martha's Vineyard, soda, potash: King, Elbert A., Jr. 00662
 - Georgia, Massachusetts, 22 elements: Cuttitta, Frank. 10702
 - Metallic spherules: Brett, Robin. 07469
 - Variations: Walter, Louis S. 09728
 - General*
 - Relation to planetary physics: Kaula, William M. 09412
 - Genesis*
 - Meteorite impact, physical model: Remo, J. L. 01980
 - Recent information: King, Elbert A., Jr. 07474
 - Geochemistry*
 - Compositional trends, vapor fractionation: Walter, Louis S. 07973
 - Georgia*
 - Washington County, new description: Pickering, Sam M., Jr. 00889

Tektites—Continued

Methods

Electron probe analysis, inhomogeneities:

Barnes, Virgil E. 08496

Infrared, water content: Senftle, F. E. 08483

Research

1967, review: Wood, John A. 00001

Tellurium*Analysis*

Atomic absorption, cf. catalytic procedure:

Nakagawa, H. M. 00778

Spectrophotometric, isolation by extraction:

Pollock, E. N. 11340

Isotopes

Natural tellurides, fractionation: Smithers, R. M. 09071

Tennessee*Absolute age*

C-14, ORAU list: Noakes, John E. 03041

Areal geology

Elk Valley area: Englund, Kenneth J. 01711

Great Smoky Mountains National Park: King, Philip B. 00263

Economic geology

Ceramic materials, clay, western, electron microscopy: Larson, L. T. 10317

Ceramic materials, western, clays, mineralogy: Mersch, Carl E. 10325

Coal, Elk Valley area, occurrence, resources: Englund, Kenneth J. 01711

Coal, limestone, Okaloona quadrangle: Garman, R. Keith. 03071

Construction materials, Masseyville quadrangle, sand: Sykes, C. Ronald. 07604

Copper, iron, zinc, Ducktown district: Magee, Maurice. 05415

Fluorite, Sweetwater barite district, mineralization temperature: Nadeau, Joseph E. 10327

Gravel, clays, Hebron quadrangle: Sykes, C. Ronald. 03785

Gravel, Counce quadrangle: Russell, Ernest E. 03577

Gravel, Hustburg quadrangle: Larson, Lawrence T. 03608

Gravel, other resources, Smithville quadrangle: Wilson, Charles W., Jr. 05542

Gravel, Poplar Creek quadrangle: Wilson, Charles W., Jr. 03606

Gypsum, Nashville area, anhydrite pod: Hershey, R. E. 09078

Iron, gravel, Ellis Mills quadrangle: Wilson, Charles W., Jr. 03575

Iron, limestone, gravel, Cumberland City quadrangle: Wilson, Charles W., Jr. 03073

Iron, limestone, Needmore quadrangle: Wilson, Charles W., Jr. 03578

Limestone, Adams quadrangle: Hershey, Robert E. 07606

Limestone, Baxter quadrangle: Taylor, Landon C. 03582

Limestone, Burgess Falls quadrangle: Wilson, Charles W., Jr. 03075

Limestone, Cookeville East quadrangle: Ferguson, Carl C. 11188

Limestone, Cookeville West quadrangle: Taylor, Landon C. 03583

Limestone, Gassaway quadrangle: Wilson, Charles W., Jr. 03581

Limestone, gravel, Dibrell quadrangle: Wilson, Charles W., Jr. 05543

Limestone, gravel, Liberty quadrangle: Wilson, Charles W., Jr. 03696

Tennessee—Continued

Economic geology—Continued

Limestone, gravel, Sugar Tree quadrangle: Wilson, Charles W., Jr. 03607

Limestone, gravel, uranium, Sligo Bridge quadrangle: Wilson, Charles W., Jr. 05537

Limestone, gravel, Woodbury quadrangle: Wilson, Charles W., Jr. 05535

Limestone, petroleum, natural gas, Springfield North quadrangle: Hershey, Robert E. 07607

Limestone, phosphate, Silver Point quadrangle: Wilson, Charles W., Jr. 03076

Limestone, sand, Campaign quadrangle: Wilson, Charles W., Jr. 03077

Limestone, sandstone, Cassville quadrangle: Wilson, Charles W., Jr. 03082

Limestone, sandstone, clays, shale, Alpine quadrangle: Taylor, Landon C. 03072

Limestone, sandstone, gravel, Short Mtn. quadrangle: Wilson, Charles W., Jr. 07609

Limestone, sandstone, Livingston quadrangle: Taylor, Landon C. 05538

Limestone, Youngville quadrangle: Hershey, Robert E. 07608

Limestone, zinc, gravel, Readyville quadrangle: Wilson, Charles W., Jr. 03074

Mineral resources, Daniels Landing quadrangle: Wilson, Charles W., Jr. 01792

Mineral resources, Erin quadrangle: Wilson, Charles W., Jr. 03579

Mineral resources, Hilham quadrangle: Taylor, Landon C. 03584

Mineral resources, Jeannette quadrangle: Wilson, Charles W., Jr. 03690

Mineral resources, Luray quadrangle, possibilities: Sykes, C. Ronald. 07612

Mineral resources, Monterey quadrangle: Garman, R. Keith. 09509

Mineral resources, Perryville quadrangle: Wilson, Charles W., Jr. 03689

Mineral resources, Pitcher Ridge quadrangle, possibilities: Ferguson, Carl C. 09379

Mineral resources, Rose Creek quadrangle, possibilities: Sykes, C. Ronald. 07602

Petroleum, Spring Creek field: Munn, M. J. 11189

Phosphate, central, Ordovician, prospecting methods: Collette, W. J. 09105

Polymetallic ores, Ducktown, genesis: Salotti, C. A. 06856

Sand, Beech Bluff quadrangle: Sykes, C. Ronald. 07611

Sand, Chesterfield quadrangle: Hershey, Robert E. 05534

Sand, clays, Claybrook quadrangle: Sykes, C. Ronald. 03070

Sand, clays, Juno quadrangle: Sykes, C. Ronald. 03069

Sand, clays, Medon quadrangle: Sykes, C. Ronald. 07610

Sand, Henderson quadrangle: Sykes, C. Ronald. 07605

Sand, Mount Peter quadrangle: Larson, Lawrence T. 07603

Sand, Silerton quadrangle: Sykes, C. Ronald. 05539

Zinc, Mascot-Jefferson City district: Crawford, Johnson. 05416

Zinc, Mascot-Jefferson City district, genesis: Ridge, John Drew. 02554

Engineering geology

Dams, Chattanooga area, Nickajack project: Parker, Robert L. 10331

Tennessee — Continued

Engineering geology — Continued

- Slope stability, loess, test method, in situ:
Lohnes, R. A. 09577

General

- Bibliography, ground-water investigations,
through July 1967: Wilson, John M. 11197

Geochemistry

- Kentucky Lake-Nashville, ground water, soils,
rocks, zinc: Hershey, R. E. 09079
- Mercury and trace elements in sphalerite: Jolly,
Janice L. 05981
- Stream sediments, geochemical prospecting,
lead-zinc: Carpenter, R. H. 06834

Geomorphology

- Sequatchie Valley area, evolution: Milici,
Robert C. 01821
- Tennessee River, lower course, history: Milici,
Robert C. 03897

Geophysical surveys

- Memphis area to Bowling Green, Mo., gravity,
crust: Phelan, Michael. 08363
- Wells Creek structure: Wilson, Charles W., Jr.
11374

Hydrogeology

- Memphis area, ground-water flow, quality: Bell,
Edwin A. 03678

Maps, geologic

- Adams quadrangle: Moore, Gerald K. 07595
- Alpine quadrangle: Ferguson, Carl C. 03085
- Baxter quadrangle: Barnes, Robert H. 03698
- Beech Bluff quadrangle: Parks, William S.
07600
- Blue Ridge area: Lesure, Frank G. 00261
- Burgess Falls quadrangle: Wilson, Charles W.,
Jr. 03080
- Campaign quadrangle: Wilson, Charles W., Jr.
03083
- Cassville quadrangle: Wilson, Charles W., Jr.
03082
- Chesterfield quadrangle: Russell, Ernest E.
05540
- Claybrook quadrangle: Parks, William S. 03088
- Cookeville East quadrangle: Ferguson, Carl C.
11170
- Cookeville West quadrangle: Wilson, Charles
W., Jr. 03699
- Counce quadrangle: Russell, Ernest E. 03577
- Cumberland City quadrangle: Tiedemann, Her-
bert A. 03078
- Daniels Landing quadrangle: Wilson, Charles
W., Jr. 01800
- Dibrell quadrangle: Wilson, Charles W., Jr.
05543
- Ellis Mills quadrangle: Wilson, Charles W., Jr.
03692
- Erin quadrangle: Stearns, Richard G. 03694
- Gassaway quadrangle: Barnes, Robert H. 03697
- Great Smoky Mountains National Park: King,
Philip B. 00263
- Hebron quadrangle: Parks, William S. 03789
- Henderson quadrangle: Brown, Donald L.
07594
- Hilham quadrangle: Wilson, Charles W., Jr.
03700
- Hustburg quadrangle: Barnes, Robert H. 03691
- Jeannette quadrangle: Wilson, Charles W., Jr.
03690
- Juno quadrangle: Parks, William S. 03087
- Ketchen, Jellico West quadrangles: Englund,
Kenneth J. 01711
- Liberty quadrangle: Wilson, Charles W., Jr.
03696

Tennessee — Continued

Maps, geologic — Continued

- Livingston quadrangle: Wilson, Charles W., Jr.
05545
 - Luray quadrangle: Brown, Donald L. 07601
 - Masseyville quadrangle: Brown, Donald L.
07593
 - Medon quadrangle: Parks, William S. 07599
 - Monterey quadrangle: Garman, R. Keith. 09508
 - Mount Peter quadrangle: Russell, Ernest E.
07614
 - Needmore quadrangle: Stearns, Richard G.
03693
 - Okalona quadrangle: Garman, R. Keith. 03084
 - Perryville quadrangle: Wilson, Charles W., Jr.
03689
 - Pine Mountain fault zone: Englund, Kenneth J.
01711
 - Pioneer, Ivydell quadrangles: Englund, Kenneth
J. 01711
 - Pitcher Ridge quadrangle: Ferguson, Carl C.
03695
 - Poplar Creek quadrangle: Wilson, Charles W.,
Jr. 03576
 - Readyville quadrangle: Wilson, Charles W., Jr.
03079
 - Rose Creek quadrangle: Parks, William S. 07613
 - Short Mountain quadrangle: Wilson, Charles
W., Jr. 07598
 - Silerton quadrangle: Parks, William S. 05546
 - Silver Point quadrangle: Wilson, Charles W., Jr.
03081
 - Sligo Bridge quadrangle: Wilson, Charles W., Jr.
05544
 - Smithville quadrangle: Wilson, Charles W., Jr.
05542
 - Springfield North quadrangle: Moore, Gerald K.
07596
 - Sugar Tree quadrangle: Wilson, Charles W., Jr.
03688
 - Wells Creek area: Wilson, Charles W., Jr. 11374
 - Woodbury quadrangle: Wilson, Charles W., Jr.
05541
 - Youngville quadrangle: Moore, Gerald K. 07597
- Maps, gravity*
- Wells Creek area: Wilson, Charles W., Jr. 11374
- Maps, ground water*
- Memphis area, "500-ft" sand: Bell, Edwin A.
03678
- Maps, mineral resources*
- Monterey quadrangle, Wilder coal seam: Gar-
man, R. Keith. 09508
- Maps, structure*
- Wells Creek area: Wilson, Charles W., Jr. 11374
- Paleontology*
- Bryozoa, worm borings, Mississippian, Warsaw
Limestone: McKinney, Frank K. 04100
 - Conodonts, Mississippian(?), "Hardin sand-
stone", redescription: Huddle, John W. 00209
 - Crinoidea, Silurian, Waldron Shale, ontogeny,
analysis: Macurda, Donald B., Jr. 05740
 - Foraminifera, Paleocene, Clayton Formation,
Hardeman County, cf. adjacent areas: Her-
rick, Stephen M. 02721
 - Gastropoda, Pleistocene, cave deposits: Bickel,
David. 03649
 - Mollusca, Ordovician, Middle, *Polylophia*:
Yochelson, Ellis L. 01146
 - Trilobita, Cambrian, Upper, nomenclature:
Rasetti, Franco. 05700
- Petrology*
- Ducktown, metamorphism, P-T conditions: Kul-
lerud, G. 08539

Tennessee—Continued

Petrology—Continued

- Ducktown, wall rock, inclusions, alteration: Brown, Henry S. 08512
 Eastern, metamorphic isograds: Carpenter, Robert H. 10289

Sedimentary petrology

- Athens area, Knox Group: Frank, William. 11081
 Caryville area, Pottsville sandstone: Freeman, Timothy F. 08526
 Cocke County, Ocoee Series, heavy minerals: Carpenter, Robert H. 08515
 Eastern, Chilhowee Group, provenance, sedimentation: Whisonant, Robert Clyde. 09864
 Great Smoky Mountains, soils, vegetation, bedrock influences: Wolfe, James Alvis. 03013
 Hawkins County, silicified strata above bentonite: Hergenroder, John D. 08534
 Sevier County, Ocoee Series, phosphorite: Wedow, Helmuth, Jr. 08567

Stratigraphy

- Cambrian-Quaternary, Cumberland City quadrangle, section: Tiedemann, Herbert A. 03078
 Paleocene, Clayton Formation, Hardeman County, correlation: Herrick, Stephen M. 02721
 Wells Creek structure: Wilson, Charles W., Jr. 11374

Structural geology

- Eastern, Dumplin Valley fault system: Hatcher, Robert, D., Jr. 10304
 Flynn Creek crater, cf. meteor craters: Roddy, David J. 08504
 Greeneville area, Pulaski fault: Byerly, Don W. 10288
 Iron Mountain-Holston Mountain thrust, Ordovician(?) age: Cooper, Byron N. 10851
 Mascot-Jefferson City zinc district, ore control: Ridge, John Drew. 02554
 Wells Creek cryptoexplosion structure, meteor impact model: Wilson, Charles W., Jr. 07995
 Wells Creek structure: Wilson, Charles W., Jr. 11374

Tertiary

Absolute age

- Miocene-Pliocene boundary, K-Ar, summary: Turner, Donald L. 10051
 Porphyry copper, Arizona: Livingston, Donald E. 00541

Alabama

- Anthozoa, Gosport and Lisbon Formations, distribution: Newman, Harry E., 3d. 08163
 Barbour County, Midway-Wilcox-Claiborne Groups: Newton, J. G. 07393
 Cephalopoda, new, Eocene: Allen, James E. 02974
 Conecuh County, stratigraphy: Reed, Philip C. 07050
 Covington County, stratigraphy: Turner, J. D. 06084
 Crenshaw County, stratigraphy: McWilliams, R. G. 06085
 Dale County, stratigraphy: Newton, John G. 06083
 Henry County, stratigraphy: Newton, John G. 06086
 Mobile area, Vertebrata, Graham Ferry Formation(?): Lamb, George. 08162
 Paleocene-Eocene formations: Reynolds, William R. 01189

Tertiary—Continued

Alabama—Continued

- Pike County, stratigraphy: Shamburger, Victor M., Jr. 06087
 Saint Stephen area, Bryozoa, paleoecology: Askren, L. T., Jr. 04099
 Southeastern, Miocene, stratigraphy: Clarke, Otis M., Jr. 07667
 West-central, exposures: Bollman, James F. 09003
 Wilcox County, Naheola Formation, older palynomorphs: McLean, Dewey M. 06008
 Wilcox Group, depositional systems: Galloway, William E. 09334

Alberta

- Edmonton-Cadomin area, Highways 16 and 47, surficial geology: Williams, G. D. 09683
 Foremost area, stratigraphy: Irish, E. J. W. 02922
 General: Stelck, Charles R. 10924
 Gulf Spring Point, upper Willow Creek-Porcupine Hills sandstones: Nelson, H. W. 07321
 Mammalia, Paskapoo Formation, Paleocene, condylarth, n. sp.: Fox, Richard C. 09035

American Samoa

- Manu'a Islands, Pliocene, stratigraphy: Stice, Gary D. 11380

Arctic Ocean

- Mammalia, migration from Pacific Ocean: Mitchell, Edward. 07871

Arizona

- Chiricahua Mountains, stratigraphy: Marjanemi, Darwin. 02660
 Chiricahua Mountains, stratigraphy: Percious, J. K. 02659
 Dos Cabezas Mountains, stratigraphy: Erickson, Rolfe C. 02658
 Magnetic field, intensity: Kono, M. 05341
 Parker-Blythe-Cibola area, Bouse Formation, new: Metzger, D. G. 05185
 San Cayetano Mountains, gymnosperms, volcanics: Damon, Paul E. 11423
 San Pedro Valley, Mammalia, rabbits, Pliocene: Downey, Joe S. 05230
 Santa Rita Mountains, new formations, absolute age: Drewes, Harald. 04108
 South-central, stratigraphy: Sell, James D. 02664
 Southeastern, ash-flow stratigraphy: Elston, Wolfgang E. 02654
 Yuma area, stratigraphy: Olmsted, F. H. 07853

Arkansas

- Crowley's Ridge, bryophytes, Wilcox Formation: Wittlake, Eugene B. 06509

Atlantic Coastal Plain

- Miocene strata, environments: Gibson, T. G. 08949
 Sedimentary sequences, lithofacies: Owens, James P. 08964
Atlantic Ocean
 Mid-Atlantic Ridge, sediments: Tsunemasa, Saito. 08078
 The Gully, submarine canyon, stratigraphy, Oligocene-Miocene: Marlowe, J. I. 10323

British Columbia

- Central, Princeton Group, Insecta, Eocene: Rice, H. M. A. 01611
 Coastal, intermontane areas, palynology: Rouse, Glenn E. 08084
 Greenwood area, Kettle River and Marron Formations: Monger, J. W. H. 06314
 Rocky Mountain Trench, Sifton Formation: Rutter, N. W. 00984

Tertiary—Continued

British Columbia—Continued

- Southwestern, Miocene strata, palynology: Hopkins, William S., Jr. 01885
 Southwestern, stratigraphy: Danner, W. R. 09085
 Vancouver Island, Mammalia, Sooke Formation, cetacean: Russell, Loris S. 02729
 White Lake area, stratigraphy: Church, Barry Neil. 07187

California

- Adelaida quadrangle, Foraminifera, stratigraphy: Smith, Patsy B. 04774
 Alvord Mountain area, Mammalia, Barstow Formation: Lewis, G. Edward. 02722
 Barstow area, Miocene fossil beds: Walker, Helen. 03099
 Berkeley-San Leandro Hills, Upper, revision: Case, J. E. 06014
 Black Canyon area, Barstow Formation, diatoms, correlation: Lohman, Kenneth E. 01843
 Boron area, Mammalia, Tropico Group, Miocene: Whistler, David P. 11029
 Caliente Range, southeastern, Miocene rocks, fault effects: Clifton, H. Edward. 04040
 Carrizo Plain-Temblor Range, correlation across fault, Mollusca: Addicott, Warren O. 04037
 Coast Ranges, Miocene-Pliocene boundary, biostratigraphy: Stanton, Robert J., Jr. 10043
 Correlation, Barstow Formation, Mud Hills area: Lewis, G. Edward. 01842
 Diatoms, floras, cf. circum-Pacific: Wornardt, Walter William, Jr. 10802
 Escarpado Canyon, Moreno Formation, Protista: Drugg, Warren S. 07704
 Foraminifera, San Juan Bautista Formation, age: Waters, J. N. 00329
 Foraminifera, chamber variations, Miocene: Bandy, Orville L. 10889
 Fremont Peak and Opal Mtn. quadrangles, stratigraphy: Dibblee, T. W., Jr. 01841
 Gualala area, stratigraphy: Wentworth, Carl M. 04036
 Kettleman Hills, Malacostraca, Etchegoin Formation: Nations, J. Dale. 00492
 Laguna Hills, Aves, Miocene(?) fauna: Howard, Hildegard. 06803
 Miocene-Pliocene, differentiation, diatoms: Wornardt, W. W., Jr. 10057
 Mojave Desert, Mammalia, Barstow Formation: Lindsay, Everett. 08296
 Mono County, Bodie Hills, volcanics, stratigraphy: Chesterman, Charles W. 06493
 Mud Hills area, Barstow Formation, Mammalia: Lewis, G. Edward. 01842
 Nomenclature, Jackhammer, Pickhandle, Barstow Formations: Dibblee, T. W., Jr. 01841
 Pacific margin, Foraminifera, Miocene-Pliocene evolution: Asano, Kiyoshi. 03808
 Parker-Blythe-Cibola area, Bouse Formation, new: Metzger, D. G. 05185
 Paso Robles Formation, paleocurrent study: Galehouse, Jon S. 01078
 Potrero Hills-Rio Vista area, Domengine Formation, Eocene: Todd, Thomas W. 06737
 Protista, silicoflagellates, Eocene-Miocene, catalog, correlation: Mandra, York T. 04790
 Sacramento Valley, stratigraphy: Safonov, Anatole. 02124
 Salinas Valley, stratigraphy, paleoecology: Smith, Patsy B. 09470

Tertiary—Continued

California—Continued

- San Andreas fault area, Miocene phosphatic facies, correlation: Dickert, Paul F. 04039
 San Diego area, La Jolla Formation, Cretaceous contact relations: Nordstrom, C. E. 08829
 San Joaquin basin, middle marine units, faunal facies: Bandy, Orville L. 01322
 San Joaquin Valley, Miocene, Pseudosaucian facies: Rudel, C. H. 02863
 San Joaquin Valley, Miocene-Pliocene boundary, biostratigraphy: Adegoke, Oluwafeyisola S. 09960
 San Joaquin Valley, palynomorphs, catalog: Traverse, A. 04328
 San Joaquin Valley, western, stratigraphy: Callaway, David C. 02865
 Santa Barbara County, Refugian Stage, type area, re-evaluation: Weaver, Donald W. 10055
 Santa Cruz Mountains area, correlation across fault: Clark, Joseph C. 04038
 Santa Cruz Mountains, Miocene-Pliocene boundary: Clark, Joseph C. 09978
 Sharktooth Hill, Miocene, Pisces, carangid: Fierstine, Harry L. 06801
 Silver Peak region, volcano-sedimentary stratigraphy: Robinson, Paul T. 06578
 Simi Valley, Foraminifera, Santa Susana Formation, Paleocene: Schmidt, Ronald R. 08868
 Southern, Mollusca, Miocene, taxonomy: Fritsche, A. Eugene. 09997
 Southern, paleoecology, Santa Barbara fauna: Meade, Robert F. 07879
 Southern, Paleogene conglomerates: Woodford, A. O. 04291
 Southern, San Diego Formation, fossil collecting: Frazier, Kenneth. 00019
 Southern, Sespe Formation: Flemal, Ronald C. 01209
 Southern, tectonics, relation to Pacific basin: Yeats, Robert S. 05052
 Ventura basin, Fernando Group, Mollusca: Meade, Robert Francis. 02037
 Ventura basin, Towsley Formation, paleoecology: Kern, John Philip. 06552
 Ventura County, Mammalia, Sespe Fm., rodents: Lindsay, Everett. 08021

Caribbean region

- Bryozoa, cheilostome genera, first fossil records: Lagaaij, Robert. 11424
 Foraminifera, *Globigerina mexicana*, taxonomy: Blow, W. H. 05012
 Foraminifera, larger, Oligocene: Cole, W. Storrs. 01876
 Foraminifera, orbitolinids, Eocene, taxonomic revision: Butterlin, Jacques. 04324
 Guadeloupe Island, Miocene, Pelecypoda: Mongin, Denise. 05149
 Ostracoda, trachyleberid distribution, Miocene-Pliocene: Bold, W. A. van den. 09130
 Palynology, correlation: Germeraad, J. H. 07373

Caribbean Sea

- Base of Pliocene, foraminiferal biostratigraphy: Beard, John H. 09326
 Correlation, Plio-Pleistocene boundary, Nicaragua Rise, nannoplankton: Hay, W. W. 10985

Central America

- Foraminifera, large: Eames, F. E. 01042

Colorado

- Front Range, Tertiary intrusives, mineralization: Taylor, Richard B. 05126

Tertiary—Continued

Colorado—Continued

- Hot Sulphur Springs quadrangle: Izett, Glen A. 05557
 Huerfano Basin, Mammalia, Eocene, opossum: Simpson, George Gaylord. 11008
 North and Middle Parks area, stratigraphy: Hail, William J., Jr. 05982
 Palynomorphs, Eocene, Oligocene, conifer pollen: Ting, William S. 07632
 Powderhorn-Black Canyon region, volcanics, stratigraphy: Olson, J. C. 00374
 Rosita Hills-Silver Cliff district, volcanics: Siems, Peter L. 05125
 San Juan Mountains, Summer Coon Volcanic center: Lipman, Peter W. 05118
 San Juan Mountains, volcanism, cauldron development: Luedke, Robert G. 05116
 Sangre de Cristo Mts. area, volcanics: Johnson, Ross B. 11070
 South-central, Oligocene volcanism, absolute age: Steven, Thomas A. 05121
 Specimen-Lulu-Iron Mountain area, volcanism: Corbett, Marshall K. 05128
 Thirtynine Mile volcanic field, volcanism: Epis, Rudy C. 05129

Correlation

- Miocene-Pliocene boundary, vertebrate fossils: Repenning, Charles A. 10036

Costa Rica

- Turrialba zone, stratigraphy: Malavassi V., Enrique. 10673

Cuba

- Correlation, presence of Oligocene: Iturralde-Vinent, Manuel A. 00559
 Sierra de Nipe, southern, Paleocene-Eocene: Kumpera, Otakar. 07896

Dominican Republic

- Northwestern, Ostracoda, Yague Group, Miocene: Bold, W. A. van den. 00916

Florida

- Blake Plateau area, Foraminifera, Eocene: Corday, W. G. 02925
 Bryozoa, Chipola Fm., paleoecology, marine biofacies: Sclaro, Reginald J. 11393
 Cirripedia, Miocene, barnacle: Ross, Arnold. 04199
 Foraminifera, Chipola Formation: Seiglie, George A. 00337
 Gastropoda, Chipola Formation, *Orthaulax* variations: Vokes, Harold E. 05056
 Manatee County, Bone Valley Formation, Vertebrata: Webb, S. David. 05212
 Northeastern, Paleocene-Miocene formations: Leve, G. W. 00620
 Pelecypoda, Crystal River Formation, Eocene, glossid, n. sp.: Nicol, David. 09019
 Protista, coccoliths, Eocene-Oligocene: Wilson, James. 00881
 Sedimentation, Hawthorn Formation and other phosphatic units: Freas, Donald H. 09104
 Southern, guide fossils, *Pecten*, late Miocene: Hunter, M. E. 09347
 Thomas Farm, Miocene, Amphibia: Holman, J. Alan. 02824

Foraminifera

- Globorotalia fohsi*, morphology: Cifelli, Richard. 05016

Gastropoda

- Taxonomy, distribution, Cymatiidae: Terry, Judith Shoemaker. 05497

Georgia

- Brunswick area, Lake City Formation, Eocene, echinoids: Kier, Porter M. 04127

Tertiary—Continued

Georgia—Continued

- Central, eastern, Jackson Group: Carver, Robert E. 08516
 Coastal plain, Echinoidea, Eocene-Oligocene: Pickering, Sam M., Jr. 00880
 Coastal plain, kaolin deposits: Buie, B. F. 10286
 Eastern, stratigraphy, guidebook: Georgia Geological Society. 06074
 Pulaski County, Oligocene, middle: Herrick, S. M. 10308

Greenland

- Svartenhuk Peninsula, basalts: Clarke, D. B. 02063

Gulf Coastal Plain

- Central, depositional history, summary: Rainwater, E. H. 09324
 Eastern, stratigraphy: Toulmin, Lyman D. 10350
 Eocene delta system: Fisher, W. L. 09315
 Northern, Eocene, stratigraphy, environments cf. Holocene: New Orleans Geological Society. 08128

Gulf of Mexico

- Base of Pliocene, foraminiferal biostratigraphy: Beard, John H. 09326

Idaho

- Palynomorphs, Eocene, Oligocene, conifer pollen: Ting, William S. 07632
 Silver City area, Miocene-Pliocene stratigraphy: Asher, R. R. 03164
 Snake River basin, flora, basin evolution: Axelrod, Daniel I. 01890
 Weiser area, paleobotany, Miocene-Pliocene: Shah, Syed Mohammad Ibrahim. 06559

Kansas

- Trego County, Vertebrata, Pliocene, WaKeeney local fauna: Wilson, Richard Leland. 06938

Kentucky

- Jackson Purchase region, clay deposits, Eocene: Olive, Wilds W. 10329

Louisiana

- Cephalopoda, new, Claiborne, Jackson and Claiborne Groups: Allen, James E. 02974
 Foraminifera, Miocene, *Globorotalia fohsi*, type locality: Barker, R. Wright. 09351
 Southwestern, Frio Formation: Paine, William R. 00305
 Wilcox Group, depositional systems: Galloway, William E. 09334

Mammalia

- Artiodactyls, early Eocene, evolution of tarsus: Guthrie, Daniel A. 11292
Hyopsodus, Eocene: Gazin, C. Lewis. 06025
Hyracodon, dentition, evolution: Hanson, C. Bruce. 06997
 Primates, new finds, review: Simons, Elwyn L. 06506
Ramapithecus, earliest hominid: Pilbeam, David. 03916

Maryland

- Brightseat Formation, biostratigraphy: Hazel, J. E. 08952
 Calvert Formation, Mammalia, new whale: Kellogg, Remington. 05585
 Calvert Formation, Mammalia, new whale: Kellogg, Remington. 05586
 Calvert Formation, Mammalia, whale: Kellogg, Remington. 05587
 Calvert Formation, Mammalia, whales: Kellogg, Remington. 05615
 Ostracoda, Brightseat Formation, Paleocene: Hazel, Joseph E. 01131
 Southern, Coastal Plain, stratigraphy: Atlantic Coastal Plain Geol. Assoc. 08017

Tertiary—Continued

Mexico

- Baja California, Comondú Group, Concepcion Bay area: McFall, C. Carew. 02556
 Baja California, Mammalia, provincial ages, correlation: Morris, William J. 09150
 Baja California, Mollusca, Cirripedia, Tepetate Formation: Perrilliat Montoya, Maria del Carmen. 09131
 Baja California, Punta Prieta-Rancho Rosarito deposits, Mammalia: Morris, William J. 08996
 Guanajuato, Ocote area, Mammalia, Pliocene: Mooser, O. 01637
 Mexico City area, stratigraphy: Schlaepfer, Carmen J. 06713

Mississippi

- Pascagoula River basin, water-bearing formations: Newcome, Roy, Jr. 02458
 Protozoa, new tintinnids, Eocene, Moodys Branch Formation: Tappan, Helen. 06032
 Vicksburg area, Vicksburg Group, Oligocene: Simpson, Lloyd W. 08892
 Wilcox Group, depositional systems: Galloway, William E. 09334

Mississippi Valley

- Embayment, palynology, Cretaceous boundary: Tschudy, Robert H. 10796

Montana

- Deer Lodge Valley, stratigraphy: Konizeski, R. L. 04376
 Jefferson River basin, stratigraphy: Kuenzi, W. David. 10239
 McCarty's Mountain, Mammalia, ischyromyid rodents, Oligocene: Black, Craig C. 02848
 Southwestern, Bozeman Group, correlation: Kuenzi, W. David. 11071
 Sweet Grass County, Mammalia, picrodonts, evolution: Szalay, Frederick S. 03870
 Western, gymnosperms, cones, Oligocene: Miller, Charles N., Jr. 00384
 Western, gymnosperms, new pine: Miller, C. N. 02306

Nebraska

- Correlations, interstate, problems: Schultz, C. Bertrand. 02470
 Mammalia, cricetine rodents, Oligocene, cf. Europe: Alker, Julius. 09034
 Mammalia, Oligocene, hyracodontids: Tanner, Lloyd G. 02474
 Marsland Formation, stratigraphy: Stout, Thompson M. 02473
 Norden Bridge, Mammalia, Valentine Formation, rodents: Klingener, David. 02810
 Vertebrata, seasonal growth evidence: Voorhies, M. R. 11049

Nevada

- Cedar Mountain area, Mammalia, Esmeralda Fm.: Mawby, J. E. 08066
 Cedar Mountain area, Mammalia, Esmeralda Fm., horses: Mawby, J. E. 08062
 Currant area, Horse Camp formation, Miocene tectonics: Moores, E. M. 00530
 Fernley area, Insecta, Pliocene, new pine weevil: Sleeper, Elbert L. 04179
 Lincoln County, Kane Wash Tuff: Noble, Donald C. 06818
 Mammalia, Esmeralda Formation, Miocene-Pliocene: Mawby, John E. 10020
 Nye and Esmeralda Counties, volcanics, K-Ar ages: Kistler, Ronald W. 06796
 Nye County, igneous rocks: Anderson, R. Ernest. 06807

Tertiary—Continued

Nevada—Continued

- Nye County, Oligocene ignimbrites, stratigraphy: Cook, Harry E. 06495
 Nye County, Silent Canyon caldera, Belted Range Tuff, Miocene: Noble, Donald C. 06808
 Pahute Mesa, Silent Canyon volcanics: Orkild, Paul P. 06815
 Palynomorphs, Eocene, Oligocene, conifer pollen: Ting, William S. 07632
 Reno area, Mammalia, Truckee Formation: Lintz, Joseph, Jr. 08297
 Silver Peak region, volcano-sedimentary stratigraphy: Robinson, Paul T. 06578
 Southern, Thirsty Canyon Tuff, new members: Noble, Donald C. 02715
 Southern, Timber Mountain Tuff: Byers, F. M., Jr. 06816
 Southern, volcanics: Ekren, E. B. 06822
 Southern, volcanics, fault systems, age: Ekren, E. B. 06795
 West-central, Vertebrata, Esmeralda Fm.: Mawby, John Evans. 07193
 White Pine County, Cherry Creek and Egan Ranges, deformation: Fritz, William H. 08917

New Mexico

- Cebolla quadrangle, Miocene stratigraphy: Doney, Hugh H. 08015
 Magnetic field, intensity: Kono, M. 05341
 Mogollon-Datil volcanic province: Elston, Wolfgang E. 10224
 Rio Arriba County, stratigraphy: Bingler, Edward C. 07897
 San Juan basin, Mammalia, Nacimiento Fm., Paleocene: Gazin, C. Lewis. 07024
 Sangre de Cristo Mts. area, volcanics: Johnson, Ross B. 11070
 Southwestern, ash-flow stratigraphy: Elston, Wolfgang E. 02654
 Tusas Mountains, sedimentation: Bingler, Edward C. 10208

North America

- Amber, localities, infrared spectra, botanical sources: Langenheim, Jean H. 04786
 Aves, Pliocene rails: Feduccia, J. Alan. 03091
 Correlation, Europe, Miocene insectivores, rodents: Wilson, Robert. 04815
 Foraminifera, planktonic, taxonomy: Berggren, W. A. 03011
 Mammalia, chalicotheres, distribution: Skinner, Morris F. 03872
 Mammalia, Oligocene, hedgehog: Gawne, Constance Elaine. 02990
 Paleocene-Eocene, biostratigraphy, cf. Europe: Mohler, H. P. 10326
 Sea-level changes, symposium: Tanner, William F. 04015
 Southeastern, angiosperms, Eocene palms: Dilcher, D. L. 09375

North Carolina

- Belgrade area, paleoecology, Oligocene: Lawrence, David R. 07929
 Belgrade area, Pelecypoda, paleoecology: Lawrence, David R. 08540
 Ostracoda, Waccamaw Formation: Swain, Frederick M. 00262
 Paleoecology, Miocene, Foraminifera: Gibson, Thomas G. 03850
 Paleoecology, Miocene, Foraminifera: Leutze, Willard P. 03849

Tertiary—Continued

North Dakota

- Dickinson area, Insecta, Paleocene clay: Fennah, R. G. 00325
 Western, Tongue River, Sentinel Butte Formations: Royse, Chester Franklin, Jr. 02041

Northwest Territories

- Cornwallis Island area, Eureka Sound Formation: Thorsteinsson, R. 06570
 Ellesmere Island, fold belt tectonics: Trettin, H. P. 00005
 Somerset Island, Idlorak Formation, flora, Pisces: Dineley, D. L. 02724

Nova Scotia

- Continental slope, Oligocene-Miocene sediments, Foraminifera: Bartlett, Grant A. 09353
 The Gully, submarine canyon, stratigraphy, Oligocene-Miocene: Marlowe, J. I. 10323

Oklahoma

- Beaver County, diatoms, Ogallala Formation: Wilson, L. R. 05270
 Beaver County, Porifera, Laverne Formation: Branson, Carl C. 05141

Oregon

- Anthozoa, Cowlitz Formation: Blake, D. Bryan. 00556
 Cascade Mountains, western, angiosperms, Oligocene: Klucking, Edward Paul. 03031
 Coos Bay area, stratigraphy, revisions: Baldwin, Ewart M. 09589
 Eastern, John Day Formation: Fisher, Richard V. 02575
 Horse Heaven district, John Day Formation, base: Swanson, Donald A. 05188
 Linn County, fossil wood, popular account: Gregory, Irene. 09263
 Mammalia, John Day Formation, gophers: Rensberger, John Marshall. 04549
 Mammalia, Talpidae: Hutchison, J. Howard. 06922
 Northwestern coast, Siletz River Volcanic Series, oceanic extent: Emilia, David A. 10961
 Ochoco Mountains, Pisces, Clarno Formation: Cavender, Ted M. 10970
 Oregon Coast Range, Tyee Formation, paleogeography: Lovell, J. P. B. 00011
 Pisces, new, Pliocene: Dalzell, Bonnie. 08259
 Southeastern basins, Mammalia, Miocene: Shotwell, J. Arnold. 07300
 Southwestern, Tyee Formation, biostratigraphy: Bird, Kenneth John. 02026
 Southwestern, Umpqua Formation, biostratigraphy: Thoms, Richard Edwin. 07204

Pacific Ocean

- Deep-sea cores, Radiolaria, trissocyclids: Goll, R. M. 06006
 Mammalia, geographic distribution, migration to Arctic Ocean: Mitchell, Edward. 07871
 Northern, paleoclimatology, floras: Chaney, R. W. 04692

Paleoclimatology

- Cooling trend, causes: Hamilton, Warren. 04170

Protista

- Calcareous nannoplankton, worldwide, stratigraphic markers: Bukry, David. 06348

Puerto Rico

- Arecibo quadrangle, stratigraphy: Briggs, Reginald P. 04762
 Naranjito-Aguas Buenas area, stratigraphy: Pease, Maurice H., Jr. 01109
 Northwestern, Aguada Limestone: Monroe, Watson H. 04775

Tertiary—Continued

Puerto Rico—Continued

- Oligocene-Miocene limestone complex: Monroe, Watson H. 08812
 Puerto Rico Trench, Eocene or Miocene age: Monroe, Watson H. 01071

Reptilia

- Crocodylid genera, cf. fossil and modern forms: Wassersug, Richard J. 11185

Rocky Mountains

- Middle, paleobotany, Eocene: MacGinitie, H. D. 10834
 Northern, palynology: Tschudy, Robert H. 10796

South Carolina

- Coastal plain, kaolin deposits: Buie, B. F. 10286
 Coastal plain, stratigraphy, sea-level changes: Colquhoun, D. J. 04009
 Cooper Marl, relations to Hawthorne Formation, Oligocene: Heron, S. Duncan, Jr. 10307
 Horry County, correlation: DuBar, J. R. 03196
 Ostracoda, Waccamaw Formation: Swain, Frederick M. 00262

South Dakota

- Big Badlands, Mammalia, tapiroids, Oligocene: Bjork, Philip R. 03669
 Mammalia, Oligocene, Chadron Formation: Clark, John. 01144
 Southwestern, Batesland Formation, Miocene: Harksen, J. C. 10519
 Southwestern, Mammalia, Sharps Formation: Green, Morton. 07000
 Todd County, Rosebud Formation, Miocene: Macdonald, J. R. 10520
 Turtle Butte, stratigraphy, paleontology: Skinner, Morris F. 11351
 Western, Tongue River and Sentinel Butte Formations: Royse, Chester F., Jr. 01192

Tennessee

- Hardeman County, Foraminifera, Clayton Formation: Herrick, Stephen M. 02721

Texas

- Bastrop County, angiosperms, Wilcox Group: Stuessy, Tod F. 05652
 Coastal plain, Claiborne Group, correlation: Eargle, D. H. 10688
 Coastal plain, Pisces, Paleocene evolution: Slaughter, Bob H. 00485
 Coastal Plain, stratigraphy, shoreline positions: Wilson, John A. 04007
 Milam County, palynomorphs, Rockdale lignite: Elsik, William C. 07631
 Rockdale lignite, palynology, Paleocene: Elsik, William. 07367
 San Jacinto County, stratigraphy, aquifers: Sandeen, W. M. 04217
 South-central, stratigraphy: Rives, John S. 04317
 Southern, Gueydan Formation: McBride, E. F. 00346
 Trans-Pecos, Vieja Group, age, Vertebrata: Wilson, John Andrew. 02443
 Western, Blanco Fm., Mammalia: Dalquest, Walter W. 08051
 Wilcox Group: Fisher, William L. 01674
 Wood County, stratigraphy: Broom, M. E. 03190

Trinidad

- Correlation, Cipero section, calcareous nannoplankton: Bramlette, M. N. 09129
 Foraminifera, Eocene: Cordey, W. G. 02924

United States

- Atlantic coast, shoreline displacements, tectonic control: Richards, Horace G. 04010

Tertiary—Continued

United States—Continued

- Continental margin, northeastern, stratigraphy: Gibson, Thomas G. 05234
 Great Basin, northern, intra-Pliocene volcanic sequence: Avent, Jon C. 09965
 Great Basin, volcanism, absolute age: Armstrong, Richard L. 08607
 Great Plains, Oligocene-Miocene, Aves: Cracraft, Joel. 02980
 Gulf and east coasts, Pelecypoda, venericards, evolution: Heaslip, William Graham. 04377
 High Plains, correlation, regional standard needed: Schultz, C. Bertrand. 02470
 Northwestern, Gastropoda, new genus: Terry, Judith S. 03195
 Northwestern, Steens Basalt: Avent, Jon. 08233
 Paleocene, Mammalia, insectivore: McKenna, Malcolm C. 02991
 Southeastern, gastropods: Olsson, Axel A. 02401
 Southeastern, gymnosperms, sequoia, Eocene: Dilcher, D. L. 02308
 Southeastern, sea-level changes: Tanner, William F. 04008
 Western, Mammalia, stenomyline camels, Miocene genera: Frick, Childs. 05717

Utah

- Central, Green River Formation, sedimentation: Baer, J. L. 10887
 Gunnison Plateau, Colton Formation, stratigraphy, lithofacies: Mercantel, Emily L. 11040
 Northeastern, Green River Formation: Picard, M. Dane. 03569
 Northeastern, lower, conformity with Cretaceous: Catocinos, Paul A. 00266
 Sanpete County, Gastropoda, Flagstaff Formation: Baldy, Mark B. 00919
 Tracks and trails, Green River Formation: Moussa, Mounir T. 06007
 Uinta Basin, Duchesne River Formation, sedimentation: Warner, Mont M. 09168
 Uinta Basin, Green River Formation, Mammalia: Dawson, Mary R. 02849
 Uinta Basin, Mammalia, primates, Eocene: Robinson, Peter. 02806
 Uinta Basin, Mammalia, rodent, Uinta Formation: Black, C. C. 10948

Virginia

- Chuckatuck area, Yorktown Formation, coquina facies: Bowman, John R. 06158

Washington

- Central, Yakima Basalt, Ellensburg Formation, unconformity: Holmgren, Dennis A. 11061
 King County, Paleogene biostratigraphy: Wolfe, Jack A. 00532
 Kitsap County, Blakeley Formation: McLean, Hugh. 00400
 Lake Tapps quadrangle, stratigraphy: Gard, Leonard M., Jr. 00313
 Northwestern, Miocene strata, palynology: Hopkins, William S., Jr. 01885
 Northwestern, pteridophytes and gymnosperms, Chucanut Formation: Pabst, Marie B. 02582
 Northwestern, stratigraphy: Danner, W. R. 09085
 Rock Island area, gymnosperms, Miocene: Ganders, F. R. 02307
 Seattle area, Blakeley Formation, type section, Oligocene: Fulmer, C. V. 07733
 South-central, Yakima Basalt, correlation, magnetization: Rietman, Jan D. 10836
 Stevens County, igneous rocks, absolute age: Yates, Robert G. 05201

Tertiary—Continued

Washington—Continued

- Vantage area, angiosperms, gymnosperms, Columbia basalts: Prakash, U. 02549
 Western, palynology, Lower: Sparks, Dennis M. 08043
 Western, sedimentation, Paleogene: Vine, James D. 08022
 Yakima County, Mammalia, Ellensburg Formation: Bryant, Laurie J. 06802

West Indies

- Barbados Ridge, cores, stratigraphy, Foraminifera: Ramsay, A. T. S. 07978
 Radiolaria, trissocyclids: Goll, R. M. 06006

Worldwide

- Continental drift, global tectonics: Niini, Aarno. 04998
 Sea-level changes, glacial control: Bandy, Orville L. 04016

Wyoming

- Badwater Creek area, Mammalia, primates, Eocene: Robinson, Peter. 02806
 Beaver Divide area, diatoms, Wagon Bed Formation: Lohman, Kenneth E. 02435
 Big Horn basin, Willwood Formation, Paleocene-Eocene: Neasham, John W. 08821
 Carbon County, Mammalia, microdonts, evolution: Szalay, Frederick S. 03870
 Lance area, palynology, Lance-Fort Union Formations: Leffingwell, Harry A. 07933
 Mammalia, Bridger Fm., insectivores, Marsh collection: Robinson, Peter. 07576
 Northwestern, Wapiti Formation, Trout Peak Trachyandesite: Nelson, Willis H. 00432
 Owl Creek Mountains, eastern, Eocene stratigraphy, faulting: Ferris, C. S., Jr. 07577
 South-central, Paleocene, Mammalia, apatemyid origins: Szalay, Frederick S. 05993
 Southwestern, Green River Formation, Tipton Shale Member redefined: Roehler, Henry W. 05714
 Vertebrata, seasonal growth evidence: Voorhies, M. R. 11049
 Wind River basin, south-central, Wind River Formation: Soister, Paul E. 02436
 Wind River basin, stratigraphy: Paape, Donald W. 02141

*Texas**Absolute age*

- Trans-Pecos area, Vieja Group, K-Ar: Twiss, Page C. 10090
 Trans-Pecos area, Vieja Group, K-Ar: Wilson, John Andrew. 02443
 Trinity River terraces, carbon-14: Thurmond, John T. 08338
 Western, pluvial lake dolomite, carbon-14: Reeves, C. C., Jr. 10082

Areal geology

- Anadarko basin: Totten, Robert B. 03421
 Apache Mountains area: Wood, John W. 01647
 Apache Mountains, guidebook: SEPM Permian Basin Section. 08003
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 Central, Hog Creek watershed, guidebook: Baylor Geological Society. 08927
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Texas—Continued

Areal geology—Continued

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 Guadalupe Mountains, guidebook: West Texas Geological Society. 10164
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 Osage Plains province, history: Farris, Jim. 11206
 Rustler Hills area, field trip: Bishop, S. W. 08008
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Economic geology

- Construction materials, oyster shells, exploration: Scott, Alan J. 07443
 Gravel, southern, central, northern, occurrence: Stanley, Roy. 09017
 Helium, Amarillo area, occurrence: Jodry, R. L. 03443
 Lignite, clays, limestone, coastal plain, exploration: McGowen, J. H. 07445
 Limestone, Coastal Plain, sources: Eifler, G. K., Jr. 07451
 Mineral resources, west-central: Mattis, Lynn. 11428
 Natural gas, Anadarko basin, western: Totten, Robert B. 03421
 Natural gas, Bethel field, occurrence: Krusekopf, H. H., Jr. 02158
 Natural gas, Carthage field, occurrence: Rogers, Robert E. 02160
 Natural gas, Collegeport field, occurrence: Fleming, Curtis C. 02119
 Natural gas, Fashing field, occurrence: Keahey, Robert A. 02155
 Natural gas, Fort Worth basin: Blanchard, K. S. 03423
 Natural gas, Gulf Coast, Eocene producing trend: Hardin, George C., Jr. 02114
 Natural gas, Gulf Coast, resources, possibilities: Halbouty, Michel T. 02113
 Natural gas, Hidalgo County, McAllen-Pharr field area, occurrence: Collins, J. W. 11017
 Natural gas, Hugoton-Panhandle field: Mason, John W. 03422
 Natural gas, Marietta syncline: Bakker, D. 03425
 Natural gas, Mustang Island-Red Fish Bay area, occurrence: Corpus Christi Geological Society. 02112
 Natural gas, New Hope field, occurrence, Smackover reservoir: Chisholm, L. R. 02162
 Natural gas, northeastern, occurrence: Nichols, P. H. 02156
 Natural gas, Opelika field, occurrence: Brogdon, D. R. 02157
 Natural gas, Permian basin: Salisbury, Gerald P. 03812
 Natural gas, Port Acres and Port Arthur fields, occurrence: Halbouty, Michel T. 02120
 Natural gas, Red River-Electra arch: Reutinger, C. A. 03424

Texas—Continued

Economic geology—Continued

- Natural gas, Sheridan field, occurrence: Lofton, Coleman L. 02116
 Natural gas, South Liberty Dome, possibilities: Craig, Jack W. 02117
 Natural gas, southern, deep Edwards trend, occurrence: Beebe, B. W. 02154
 Natural gas, southern, occurrence, post-Eocene: Corpus Christi Geological Society. 02111
 Natural gas, Trawick field, occurrence: Townsend, John V. 02159
 Natural gas, Val Verde and Delaware basins, occurrence: Hills, John M. 03431
 Natural gas, West Bernard area, occurrence: Cooke, W. F., Jr. 02118
 Natural gas, Worsham field: Winn, Vernard. 03430
 Nitrogen gas, Jurassic oil and gas fields, occurrence: Lokke, Donald H. 02163
 Petroleum and natural gas, Anadarko basin, exploration, gravity: Scott, R. L. 00947
 Petroleum and natural gas, Anadarko basin, surface evidence of structures: Trollinger, William V. 01646
 Petroleum and natural gas, Cooke and Grayson Counties, Marietta basin: Henry, Gary E. 05575
 Petroleum and natural gas, eastern, Jurassic fields: Rinehart Oil News Company. 06164
 Petroleum and natural gas, offshore operations, legal aspects: Stone, Oliver L. 05111
 Petroleum and natural gas, Panhandle-Hugoton field, traps: Pippin, L. 00416
 Petroleum and natural gas, Refugio County, Tom O'Connor field: Mills, H. G. 01181
 Petroleum and natural gas, Rio Grande embayment, Vicksburg fault zone: Stanley, Thomas B., Jr. 01197
 Petroleum and natural gas, south-central, occurrence: Rives, John S. 04317
 Petroleum, East Texas field, Cretaceous, Woodbine Sandstone reserves: Hudnall, James S. 01221
 Petroleum, Hardeman basin, evaluation: Thornton, John E. 11361
 Petroleum, Hugoton Embayment, exploration, trend analysis: Schramm, Martin W., Jr. 03781
 Petroleum, Karnes County, northwestern, genesis, exploration: Tucker, Delos R. 03884
 Petroleum, multipay fields, common source: Coester, B. B. 00100
 Petroleum, natural gas, Old Ocean field, occurrence, reserves: Halbouty, Michel T. 02115
 Petroleum, natural gas, Wilcox Group, occurrence, potential: Fisher, William L. 01674
 Petroleum, natural gas, Willow Springs field, occurrence, reserves: Loetterle, G. J. 02161
 Petroleum, Palo Duro basin, occurrence: Soderstrom, Glen S. 00058
 Petroleum, Pecos County, Yates field, production history: Craig, D. H. 01233
 Petroleum, Pennsylvanian and Wolfcamp reservoirs: Chuber, Stewart. 00057
 Petroleum, Permian basin, composition, relation to stratigraphy: Holmquest, Harold J., Jr. 00106
 Petroleum, Permian basin, Yesso shelf deposits cf. basin: Rodgers, Elton E. 00098
 Petroleum, Runnels County, Palo Pinto Limestone: Doss, A. K., Jr. 00070

Texas—Continued

Economic geology—Continued

- Petroleum, Shelder field, exploration, production: Barber, Thomas D. 01323
- Petroleum, western, Horseshoe atoll, production: Vest, E. L., Jr. 01204
- Sulfur, Rustler Springs district, occurrence: Bishop, S. W. 08005
- Uranium, coastal plain, discoveries and exploration: Eargle, D. H. 05614
- Uranium, Coastal Plain, genesis: Eargle, D. H. 08991
- Uranium, exploration, development, possibilities: Flawn, Peter T. 06728
- Uranium, Karnes area, Tertiary tuffaceous sediments: Weeks, Alice D. 06692

General

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- Bibliography, speleology: Reddell, James R. 08921
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Geochemistry

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- Buchanan granite massif, radioactive elements, distribution: Cook, Beverly Gatlin. 07462
- Coastal water systems, C-13:C-12, pollution index: Calder, John A. 01774
- Delaware basin, Castile Formation, anhydrite, chemical variations: Dean, Walter E., Jr. 08657
- Enchanted Rock batholith, analyses: Ragland, Paul C. 08029
- Guadalupe River sediments, Sr, Cs, sorption, release: Clanton, Uel S., Jr. 06545
- Llano uplift, Enchanted Rock batholith, mobile elements, trends: Ragland, Paul C. 08098
- Sawtooth Mountain, Fe-Ti oxide minerals: Radke, Frank, Jr. 11342
- Sawtooth Mountain, Fe-Ti oxide minerals, temperature, oxygen fugacity: Radke, Frank, Jr. 10081
- Sediments, Holocene, offshore, sulfur: Laseter, J. L. 08777
- Soils, sodium adsorption: Thomas, Grant W. 05080
- Terlingua district, mercury, geochemical prospecting: Geddes, Richard W. 11283
- Uranium, Karnes area, Tertiary tuffaceous sediments: Weeks, Alice D. 06692
- Western, Pennsylvanian and Wolfcamp crude oils, classification: Chuber, Stewart. 00057
- Western, pluvial lakes, dolomite: Parry, W. T. 10078

Geomorphology

- Anadarko basin area, photogeologic clues to deep structure: Trollinger, William V. 01646
- Caves, distribution: Smith, A. Richard. 00806
- Kirschberg Evaporite, karstification, drip pockets in gypsum: Quinlan, James F. 07750
- Sabine County, "Potato Hills," origin, processes: VanSiclen, DeWitt C. 09082
- Stockton Plateau, caves: Kunath, Carl E. 08158
- West-central, landform description: Watts, Jerry. 11207

Geophysical observations

- Geothermal gradient, salt domes: Heroy, William B. 01116

Geophysical surveys

- Anadarko basin, gravity, structural interpretations: Scott, R. L. 00947

Texas—Continued

Geophysical surveys—Continued

- Atascosa County, soils mapping, radioactivity: Foote, R. S. 06381
- Central Basin platform-Delaware basin, gravity: Hamill, Gilmor S. 10402
- Central, magnetotelluric: Word, Darrell R. 11378
- Central, southeastern, gravity, basement rock, crustal structure: Case, J. E. 09339
- Coastal shale diapirs, electrical logging, interpretation: Gilreath, J. A. 03375
- Delaware basin, electric logs: Horst, G. F. 10179
- Delaware basin, exploration, summary: Miller, S. T. 10178
- Delaware basin, magnetic: Steenland, Nelson C. 10180
- Grapevine area, seismic noise analysis: Der, Zoltan A. 10540
- Gulf Coast, sand, radioactivity: Adams, John A. S. 08594
- Mexia-Talco fault zone, gravity: Crosby, Gary W. 10661

Hydrogeology

- Ground-water resources, water plan: Peckham, Richard C. 00196
- Gulf Coastal Plain, northwestern, ground-water levels: Howard, James W. 00164
- Houston area, aquifer transmissibility cf. specific capacity: Gabrysch, R. K. 02746
- Liberty County, ground-water resources: Anders, R. B. 00815
- Nueces and San Patricio Counties, ground-water resources: Shafer, George H. 01534
- Nueces River valley, lower, hydraulic continuity with flood-plain alluvium: Garza, Sergio. 01533
- Polk County, ground-water resources: Tarver, George R. 04216
- San Jacinto County, ground-water resources: Sandeen, W. M. 04217
- Tyler County, ground-water resources: Tarver, George R. 01535
- Upton County, Trinity Sand: White, D. E. 01773
- West-central, ground-water resources: Farris, Jim. 11211
- Wood County, ground-water resources: Broom, M. E. 03190

Maps, geologic

- Apache Mountains: SEPM Permian Basin Section. 08003
- Apache Mountains area: Wood, John W. 01647
- Beaumont sheet: Texas University Bur. Econ. Geology. 02076
- Big Bend National Park: Maxwell, Ross A. 01499
- Davis Mountains, central: Anderson, Jay Earl, Jr. 02570
- Houston sheet: Texas University Bur. Econ. Geology. 02077
- Plainview sheet: Texas University Bur. Econ. Geology. 02078

Maps, ground water

- Gulf Coastal Plain, northwestern: Howard, James W. 00164
- Liberty County: Anders, R. B. 00815
- Nueces and San Patricio Counties: Shafer, George H. 01534
- Nueces River valley, lower: Garza, Sergio. 01533
- San Jacinto County: Sandeen, W. M. 04217
- Upton County: White, D. E. 01773
- Wood County: Broom, M. E. 03190

Texas—Continued

Maps, oil and gas

Anadarko basin, western: Stevens, Curtis. 02930

Maps, structure

Wood County, structure contour: Broom, M. E. 03190

Mineralogy

Clay minerals, lake sediments, High Plains: Parry, W. T. 03561

Na-montmorillonite, Fayette County, particle morphology: Roberson, H. E. 05569

Natroalunite, north-central, Cretaceous sediments: Ross, Clarence S. 06597

Sepiolite, Mound Lake, occurrence, genesis: Parry, W. T. 06444

Paleoclimatology

Quaternary, southwestern, Amistad Reservoir area, palynology: Bryant, Vaughn M., Jr. 10067

Paleomagnetism

Igneous rocks: Spall, Henry R. 10085

Paleontology

Algae, Cretaceous, Buda Limestone: Johnson, J. Harlan. 00917

Algae, Cretaceous, pre-Buda Limestone: Johnson, J. Harlan. 00918

Amphibia, Permian, disorophid, paleoecology, evolution: DeMar, Robert. 05708

Angiosperms, Eocene, Wilcox Group, leaves: Stuessy, Tod F. 05652

Annelida, Holocene, serpulid reef ecology and structure: Behrens, E. William. 06308

Cephalopoda, Cretaceous, Albian, Trans-Pecos, ammonite zone: Young, Keith. 00496

Foraminifera, Cretaceous, Kemp Clay, index species: Esker, George C., 3d. 04406

Foraminifera, Cretaceous, Taylor Marl: Esker, George C., 3d. 04405

Foraminifera, Permian, Clyde Formation, Coleman County, fusulinid: Myers, Donald A. 00781

Foraminifera, Permian, Heuco Formation, Franklin Mts.: Stewart, Wendell J. 02190

Fossils, problematic, Permian, western, burrows: Bain, Roger John. 10203

Graptolithina, Ordovician, Fort Pena Formation, Marathon region: Bulman, O. M. B. 02258

Invertebrata, Cretaceous, Woodbine-Eagle Ford transition zone: Powell, J. Dan. 07780

Mammalia, Cretaceous, Albian, marsupials: Slaughter, Bob H. 03823

Mammalia, Cretaceous, Lower, earliest eutherians, premolars: Slaughter, Bob H. 09081

Mammalia, Pleistocene, Blanco beds, Cita Canyon, sloth: Hirschfeld, Sue E. 08054

Mammalia, Pleistocene, Friesenhahn Cave, mice, species analysis: Martin, Robert A. 05566

Mammalia, Tertiary, Blanco Fm., dog: Dalquest, Walter W. 08051

Mollusca, Quaternary, alluvial deposits, Rio Grande valley, El Paso area: Metcalf, Artie L. 11047

Mollusca, Vertebrata, Cretaceous, Woodbine Fm.: McNulty, C. L., Jr. 07769

Ostracoda, Cretaceous, Austin Group, correlation: Paulson, Oscar L., Jr. 03857

Palynomorphs, Cretaceous, Lower, Glen Rose Formation: Kessler, L. G., 2d. 10946

Palynomorphs, Paleocene, Rockdale lignite: El-sik, William. 07367

Texas—Continued

Paleontology—Continued

Palynomorphs, Paleocene, Rockdale lignite, Milam County: Elsik, William C. 07631

Pelecypoda, Pennsylvanian, Gaptank Formation, Marathon basin: Bird, Samuel O. 01640

Permian, reefs, Glass Mountains: Bain, Roger J. 09177

Pisces, Cretaceous, Austin Chalk, north-central, holostean: Bardack, David. 05697

Pisces, Cretaceous-Paleocene, evolution: Slaughter, Bob H. 00485

Pisces, Permian, Lueders Formation, Baylor County, dipnoans: Berman, David S. 03208

Pisces, Permian, Wichita Group, rhipidistian, vertebral structure: Thomson, Keith Stewart. 07337

Protista, Cretaceous, coccolithophores: Bukry, John David. 03024

Protista, Cretaceous, coccolithophorids, coastal plain: Gartner, Stefan, Jr. 09385

Protista, Cretaceous, Navarro Group, Austin area and Frio County: Zaitzeff, James Boris. 01753

Pteridophytes?, Permian, Belle Plains Formation, noeggerathiales: Mamay, Sergius H. 10957

Reptilia, Cretaceous, Lake Waco Formation, McLennan County, new plesiosaur: Thurmond, John T. 05695

Reptilia, Permian, Upper, Caseidae: Olson, Everett C. 00809

Reptilia, Pleistocene, Houston area, box turtle: McClure, William L. 11186

Trilobita, Cambrian, Wilberns Formation, ptychaspid bioterm: Longacre, Susan Ann Burton. 05507

Vertebrata, Tertiary, Vieja Group, Trans-Pecos: Wilson, John Andrew. 02443

Petrology

Buchanan granite massif, crystallization: Cook, Beverly Gatlin. 07462

Davis Mountains, central, Tertiary, igneous rocks: Anderson, Jay Earl, Jr. 02570

Davis Mountains, welded tuff, textures, alteration: Anderson, Jay Earl, Jr. 11252

Enchanted Rock batholith, zoning by multiple injection: Ragland, Paul C. 08029

Llano County, Badu Hill pegmatite, genesis: King, Elbert A., Jr. 10667

Llano County, metamorphism, mineral assemblages, wollastonite: Workman, William Edward. 06560

Southern, Gueydan Formation: McBride, E. F. 00346

Sedimentary petrology

Apache Mountains, Permian, Guadalupian: Wilde, Garner L. 07969

Austin chalk, thermoluminescence, anomalies: Waite, Jerry M. 01462

Central, Cretaceous rocks, caliche profiles: Am-sbury, David L. 08599

Coastal Plain, phosphorite buds: Owen, D. E. 07857

Colorado River, granitic gravel, size, abrasive effects: Bradley, William C. 10211

Delaware basin, Castile Anhydrite, variations: Dean, Walter Edward, Jr. 01726

Delaware basin, Permian deep-sea fans: Jacka, Alonzo D. 08004

Edwards Formation, dolomite depositional models: Rodda, Peter U. 08857

El Paso area, El Paso Group, carbonate mounds: Ham, William E. 07954

Texas—Continued

Sedimentary petrology—Continued

- Franklin Mountains, El Paso Group, lithofacies: Lucia, F. J. 10172
- Franklin Mountains, Ordovician highlands, associated facies: LeMone, David V. 11015
- Gonzales County, white bentonite: Chen, Pei-Yuan. 06544
- Grand Saline salt dome, petrofabrics: Muehlberger, William R. 11332
- Guadalupe Mountains, Permian reefs, cf. modern Florida: Klement, Karl W. 08902
- Gulf Coast embayment, Buckner Formation: Dickinson, Kendall A. 03524
- Hopkins County, Wills Point Formation, phosphate nodules: Milton, Charles. 00798
- Lignite: Traverse, Alfred. 09720
- Llano County, soils, genesis: Goss, D. W. 02256
- Marathon region, Caballos Novaculite, genesis: McBride, Earle F. 08794
- Marathon region, Maravillas Formation: McBride, Earle F. 10077
- Northeastern, Jurassic mudstones, clay-mineral facies: Dickinson, Kendall A. 01238
- Southern, Gueydan Formation, sedimentary volcanic features: Freeman, P. S. 03352
- Tarrant County, Woodbine-Eagle Ford transition, Tarrant Member: Powell, J. Dan. 07780
- Trans-Pecos area, Marathon Formation, boulder beds: Young, Leonard M. 10095
- Trans-Pecos, Marathon Formation, lithofacies: Young, Leonard Maurice. 06561
- Trinity River, sediments, suspended, variation, statistical study: Wang, Kung Teh. 09861
- West-central, Pennsylvanian-Permian boundary, sedimentation: Rezaie-Moayed, Yadi. 11209
- Western, pisolite genesis, Permian: Thomas, Carroll. 07998

Stratigraphy

- Cambrian-Recent, Permian basin: Mear, Charles E. 00096
- Cenozoic, El Paso area, Mesilla and Hueco bolsons: Strain, William S. 10175
- Cenozoic, San Jacinto County: Sandeen, W. M. 04217
- Cretaceous, Austin Group, correlation, ostracodes: Paulson, Oscar L., Jr. 03857
- Cretaceous, Davis Mountains, central: Anderson, Jay Earl, Jr. 02570
- Cretaceous, eastern, environmental synthesis, oil and gas possibilities: Bushaw, Dewey J. 09346
- Cretaceous, El Paso area, Cerro de Muleros, new formations: Strain, William S. 10174
- Cretaceous, Glen Rose Formation, Paluxy Valley, cycles and facies: Nagle, J. Stewart. 03175
- Cretaceous, Karnes County, northwestern: Tucker, Delos R. 03884
- Cretaceous, Trinity sands, central: Boone, Peter A. 07066
- Cretaceous, Upper, western, biostratigraphy: Wolleben, James A. 09325
- Cretaceous, Woodbine Fm., members, field trip: Dodge, Charles F. 07768
- Cretaceous, Woodbine Fm., members, field trip: McNulty, C. L., Jr. 07769
- Cretaceous, Woodbine Fm., members, field trip: Powell, J. Dan. 07770
- Cretaceous, Woodbine Fm., Tarrant County: Dodge, Charles F. 07767
- Cretaceous, Woodbine Fm., Tarrant County: Geological Society of America. 07771
- Cretaceous, Woodbine Fm., Tarrant County, nomenclature: Dodge, Charles F. 07751

Texas—Continued

Stratigraphy—Continued

- Cretaceous, Woodbine-Eagle Ford transition, Tarrant Member: Powell, J. Dan. 07780
- Cretaceous-Tertiary, south-central, relation to buried volcanic domes: Rives, John S. 04317
- Devonian, western, Tobosa basin: McGlasson, E. H. 11324
- Eocene, Claiborne Group, correlation, coastal plain: Eargle, D. H. 10688
- Eocene, Wilcox Group, depositional systems: Fisher, William L. 01674
- Eocene, Wood County, sections: Broom, M. E. 03190
- Jurassic, Buckner Formation, Gulf Coast embayment: Dickinson, Kendall A. 03524
- Jurassic, northeastern, Upper: Dickinson, Kendall A. 01693
- Jurassic-Cenozoic, northeastern: Nichols, P. H. 02156
- Mississippian-Pennsylvanian, Anadarko basin, western, correlations: Swanson, Donald C. 00415
- Mississippian-Pennsylvanian, Marietta basin, deeper portion: Bradfield, H. H. 00412
- Ordovician, El Paso Group, Franklin Mts.: LeMone, David V. 10173
- Ordovician, Maravillas Formation, Marathon region: McBride, Earle F. 10077
- Paleozoic, Permian basin field area, paleogeography: Hills, John M. 01012
- Pennsylvanian, Marietta basin, Gordonville trough: Bradfield, H. H. 00105
- Pennsylvanian, Strawn-Canyon boundary, north-central, biostratigraphy: Echols, Joan. 09297
- Pennsylvanian-Permian boundary, west-central: Allen, Phillip. 11210
- Pennsylvanian-Permian, Cretaceous, west-central: Allen, Phillip. 11208
- Pennsylvanian-Permian, Hueco Mts.: Seewald, Kenneth O. 10169
- Permian, Apache Mts., Guadalupian: SEPM Permian Basin Section. 08003
- Permian, Apache Mts., Guadalupian, correlation: Wilde, Garner L. 07969
- Permian, salt deposits, western: Adams, John Emery. 01013
- Permian, salt-bearing beds, Permian basin: Mear, Charles E. 01031
- Permian, Yeso Formation, shelf deposits cf. basin: Rodgers, Elton E. 00098
- Pleistocene, lacustrine sediments, Lake Lomax basin: Frye, J. C. 03978
- Precambrian, Franklin Mountains, Fusselman Canyon area: McNulty, W. N., Jr. 10171
- Tertiary, Gueydan Formation, southern: McBride, E. F. 00346
- Tertiary, shoreline positions: Wilson, John A. 04007
- Tertiary, Vieja Group, Trans-Pecos: Wilson, John Andrew. 02443
- Tertiary-Holocene, Jackson Group and alluvium, measured sections: Corpus Christi Geological Society. 06758
- Structural geology*
- Central, joints, patterns: Boyer, Robert E. 10064
- Davis Mountains, central: Anderson, Jay Earl, Jr. 02570
- Delaware basin, subsurface and surface expression: Trollinger, William V. 10177
- Duval County, Palangana salt dome: Hofrichter, Erich. 01103
- Eastern, salt domes: Atwater, Gordon I. 01036

Texas—Continued

Structural geology—Continued

Grand Saline salt dome, internal structure: Muehlberger, William R. 11332

Gulf of Mexico margin, upper mantle: Shurbet, D. H. 04254

Jeff Davis County, Sawtooth Mtn., quartz microsyenite, emplacement: Anderson, Jay Earl, Jr. 10061

Karnes County, northwestern, faulting: Tucker, Delos R. 03884

Ouachita geosyncline, faulting, role in subsidence: Shelton, John W. 00912

Permian basin, tectonics: Galley, John E. 00101

Rio Grande embayment, Vicksburg fault zone: Stanley, Thomas B., Jr. 01197

Salt domes, mechanics: Muehlberger, William R. 01104

Sierra Madera, central uplift, deformation pattern: Wilshire, H. G. 04305

Sierra Madera, central uplift, shatter cones: Howard, Keith A. 11306

Sierra Madera, cryptoexplosion structure: Wilshire, H. G. 11129

South-central, buried volcanic domes, faults: Rives, John S. 04317

Southern, mud diapirs, related features: Freeman, P. S. 03352

West-central, Bend arch: Watts, Jerry. 11207

Weathering

Western, pisolite genesis, Permian: Thomas, Carroll. 07998

Thermal methods*Experimental studies*

Shallow aquifer detection, thermal prospecting: Cartwright, Keros. 06121

Thermal properties*Olivine*

Conductivity, 20 to 50 kb, 400° to 1300°K: Fujisawa, Hideyuki. 02331

Spinel

Conductivity, 20 to 50 kb, 400° to 1300°K: Fujisawa, Hideyuki. 02331

Thermal springs*California*

Brines, Salton Sea area: White, Donald E. 04224

Mercury: Joralemon, Peter. 04240

Mercury deposition: Moiseyev, Alexis N. 01884

Geochemistry

Silica content, estimation of underground temperature: Fournier, Robert O. 07726

Nevada

Steamboat Springs, hydrology, activity, heat flow: White, Donald E. 00724

Steamboat Springs, rock alteration: Schoen, Robert. 09161

New Mexico

Temperature ranges, exploration, geothermal energy possibilities: Summers, W. K. 09139

United States

Sulfuric acid, bacterial origin, western: Schoen, R. 11050

Utah

Midway area: Baker, C. H., Jr. 05178

Thermal surveys*Illinois*

Central, shallow alluvial aquifers: Cartwright, Keros. 06121

Thermodynamic properties*Activity*

Cryptotile, product constant: Hostetler, P. B. 01978

Nickel olivine in Mg-Ni olivine: Campbell, F. E. 02199

Thermodynamic properties—Continued*Activity*—Continued

Product constant at 24°C, 1 atm: Roberson, C. E. 06683

Alkali feldspar

Synthetic, high-temperature: Waldbaum, D. R. 02517

Aragonite-calcite transformation

Impurities, effects: Subba Rao, G. V. 09249

Calorimetry

Albite, Virginia: Waldbaum, D. R. 02517

CaO-Al₂O₃-SiO₂

35 kb, 1100-1500° C: Hays, James Fred. 07961

Carbonate rocks

Deterioration, ordered water: Dunn, James R. 08176

Diffusion, isotopic exchange with CO₂: Anderson, Thomas F. 07747

Clinoestatite

Synthesis, stability, hydroxylated: Sclar, C. B. 08872

Cryolite

Melting point: Foster, Perry A., Jr. 09248

Dissociation constants

KSO₄ from 10°-50°C: Truesdell, A. H. 03925

Electrochemical

Calcium, magnesium, activity coefficients: Kramer, James R. 07921

Fe-reducing environment, equilibrium, Eh: Doyle, Roger Whitney Stevens. 04535

Iron solutions, O-free ferrous, Eh conditions: Doyle, Roger W. 08667

Enthalpy of fusion

Feldspar, alkali: Waldbaum, D. R. 09246

Enthalpy of transformation

Albite: Holm, J. L. 02200

Equations of state

Mie-Gruneisen equation: Weaver, J. Scott. 10601

Feldspar

Alkali, calorimetric data: Waldbaum, D. R. 09947

Free energy

Aluminum, hydroxy-Al polymers in water: Hem, John D. 03749

Bunsenite, Ni-olivine: Campbell, F. E. 02199

Clay minerals, experimental study: Reesman, A. L. 06583

Metastable sequences, unary 4-phase, binary 5-phase systems: Zen, E-an. 09744

MgO-FeO-SiO₂: Nafziger, R. H. 07861

Fugacity

Brines, California, Salton Sea geothermal system: Keith, Terry E. C. 07537

Copper ore, Haiti: Kesler, Stephen E. 10956

Oxygen and water in basalt magma, Nevada: LeMasurier, Wesley E. 02695

Oxygen, basalt, Hawaii: Peck, Dallas L. 07837

Oxygen, Fe-Mg olivine, subsolidus stability: Fisher, G. W. 07720

Oxygen, Fe-Ti oxides in volcanics: Lindsley, D. H. 00970

Oxygen in H₂-H₂O mixtures: Presnall, D. C. 01588

Oxygen, magmas, calc-alkalic, Si-enriched, pyroxene crystallization: Best, Myron G. 07824

Oxygen, manganese oxides: Hueber, J. Stephen. 10723

Oxygen, skarn: Burt, D. M. 04136

Sulfur: Hall, H. T. 01907

Thermodynamic properties—Continued*General*

Elements and minerals at 298.15°K, 1 atm.:
Robie, Richard A. 02434

Feldspar-silica liquid, structural characteristics:
Flood, H. 10969

Gold-quartz veins: Helgeson, Harold C. 04125

Mercury, solubility: Moiseyev, Alexis N. 01884

Heat of formation

Brochantite: Heald, Emerson F. 07962

Mantle minerals: Gaffney, E. S. 10485

Serpentinization, ultramafic rocks, California:
Page, Norman J. 10696

Jadeite

Redetermination: Hlabse, T. 06784

Lattice defects

Mineral exploration: McDougall, David J. 09430

Lithium

Melting curves to 80 kb: Luedemann, H. D.
00570

Muscovite-calcite-quartz

Upper stability limits, feldspar segregation:
Hewitt, David A. 11238

Nitrogen

Solubility, aqueous NaCl: O'Sullivan, Thomas D.
07856

Partial pressure

CO₂, mantle: Kennedy, George C. 04229

Sulfur, measurement: Giletti, B. J. 04137

Quartz

Lambda transition: Klement, William, Jr. 01129

Rubidium

Melting curves to 80 kb: Luedemann, H. D.
00570

Sanidine

Mixing properties: Thompson, J. B., Jr. 07519

Mixing properties: Waldbaum, D. R. 07520

Sodium

Melting curves to 80 kb: Luedemann, H. D.
00570

Soils

Freezing point depression, heat capacity: Low,
Philip F. 00386

Solubility

Calcite, 200°, 300° C, 500, 1000 bars: Dickson,
F. W. 08663

Chrysotile: Hostetler, P. B. 08739

Gibbsite, diasporite, stability relations: Apps,
John A. 08606

Magnesite, 150°, 200°, 250°C, 100, 500, 1000
bars: Dickson, F. W. 08662

Stibnite, realgar, orpiment, alkaline solutions:
Raab, W. J. 08848

Spinel

Ferromagnesian, lattice parameters, pressure
dependence: Mao, Ho-kwang. 02973

Sulfide minerals

Stoichiometry: Barnes, H. L. 11257

Theoretical studies

Anomalous fluid pressure from source layer,
persistence: Hanshaw, Bruce B. 10596

Nonhydrostatic, theory and application: Ku-
mazawa, Mineo. 10587

Thermoluminescence*Applications*

Age determination, crystal defects, guide lines
for use: Townsend, P. D. 03984

Age determination, lava flows, historic, evalua-
tion: Aitken, M. J. 03971

Age determination, pottery, clay minerals:
Siegel, Frederic R. 03954

Thermoluminescence—Continued*Applications—Continued*

Age determination, technique, new: Zeller, Ed-
ward J. 03970

Carbonate rocks, hydrothermal ores, explora-
tion tool: MacDiarmid, Roy A. 03950

Geochronology, thermoluminescent dosimetry
method: Johnson, Noye M. 03949

Geochronology, thermoluminescent dosimetry
method: Tite, M. S. 04892

Geologic problems, radiation effects, mineral
defects: Levy, Paul W. 03983

Mineral exploration: McDougall, David J. 09430

Paleoclimatology, relative thermoluminescence:
Ronca, Luciano B. 04012

Paleothermometry, magma temperatures, from
wall rock: Johnson, Noye M. 03960

Radiation damage detection, cf. electron spin
resonance: Zeller, Edward J. 03969

Bibliography

Geological materials: Grogler, Norbert. 09389

Calcite

Experimental studies, effects of ultraviolet illu-
mination: Vaz, J. E. 03974

Growth curves, 600°K peaks: Medlin, W. L.
03973

Chalk

Variation, Austin chalk, Texas: Waite, Jerry M.
01462

Clay minerals

Changes when fired: Siegel, Frederic R. 03954

Experimental studies

Calcite, dolomite, halite, effect of grinding:
Lewis, D. R. 03963

Calcite, effects of ultraviolet illumination: Vaz,
J. E. 03974

Calcite, growth curves, 600°K peaks: Medlin, W.
L. 03973

Carbonate and other minerals, trapping and
emission processes: Medlin, W. L. 03965

Dating of pottery: Ralph, Elizabeth K. 03972

Geological materials, Univ. Wisconsin, research
review: Daniels, Farrington. 03982

Halite, nuclear test-sites, stress effects: Roach,
Carl H. 03951

Ice, glacial, relation to stress and flow history:
Ronca, L. B. 03967

Limestone, syenite, effects of pressure:
Morency, Maurice. 03966

Limestone-dolomite systems, geologic applica-
tions: Lewis, D. R. 03968

Lithium fluoride, annealing characteristics,
mechanisms: Cameron, John R. 03961

Lithium fluoride, supralinearity: Zimmerman, D.
W. 03962

Silicate rocks, proton-excited efficiencies,
mineral phases: Nash, Douglas B. 03958

Fluorescence

General: Casperson, William Clement. 10911

General

Geologic materials, NATO Advanced Research
Research Inst. conference: McDougall, David
J. 03981

Halite

Low-temperature, stress effects, nuclear test-
sites: Roach, Carl H. 03951

Instruments

Design, special features: Lewis, D. R. 09422

Interpretation

Glaciated areas, effect of deglaciation, solar
radiation: Zeller, Anke N. 04011

Igneous rocks, associated ore deposits: McDou-
gall, David J. 03959

Thermoluminescence—Continued*Limestone*

Saturation, effect in dating: Medlin, W. L. 05292

Methods

Geologic materials, trapping parameters, determination: Braunlich, P. 03985

Rock outcrop sampling, microclimatic variations effect: Zeller, Anke N. 04013

Sample preparation, effect of grinding on results: Lewis, D. R. 03963

Soils

Gamma irradiated, time effect: Nishita, H. 04989

Thorium*Abundance*

Precambrian shield rocks, Canada: Shaw, D. M. 08026

River sediments, United States: Scott, Martha R. 02814

Soil, Colorado, Adams County: Bunker, Carl M. 00789

Soils: Hansen, R. O. 00343

Analysis

Gamma-ray spectrometry, field and laboratory compared, California: Bunker, C. M. 02707

Appalachians

Resources, review: Adams, John W. 01364

Geochemistry

Distributions, terrestrial samples, fission-track method: Fleischer, Robert L. 04709

Greenland

Ilimaussaq intrusion, exploration: Lovborg, Leif. 01860

Isotopes

Th-228, sea water: Moore, Willard S. 00020

North Carolina

Resources, review: Adams, John W. 01364

Ontario

Northern, occurrence, production: Robertson, James A. 07916

Resources

Nuclear fuel, long-range importance: Nininger, Robert D. 05616

Tin*Abundance*

Geographical distribution, belts around Atlantic Ocean: Schuiling, R. D. 07651

Alaska

Serpentine-Kougarok area, cassiterite in gold placers: Sainsbury, C. L. 01421

Seward Peninsula, Lost River lodes, occurrence, exploration: Sainsbury, C. L. 07650

Seward Peninsula, York Mountains, occurrence, genesis: Sainsbury, C. L. 05360

Appalachians

Resources, review: Sainsbury, C. L. 01366

British Columbia

Cassiar district, skarn, in silicates: Mulligan, R. 03462

Colorado

Lake George area, exploration, occurrence: Hawley, C. C. 03998

Genesis

Lode deposits: Sainsbury, C. L. 07650

Geochemistry

Content in biotite of granites: Schuiling, R. D. 07651

Titanium*Abundance*

Biotite and muscovite, metamorphic grade indicator, Ontario: Kwak, Teunis A. P. 05366

Titanium—Continued*Analysis*

Electron probe, in andradites: Isaacs, Thelma. 05094

Appalachians

Resources, review: Herz, Norman. 01367

Florida

Bone Valley Fm., potential: Stow, Stephen H. 07688

Geochemistry

Iron ores, solid solution: Hagni, Richard D. 01883

Quebec

LaBlache Lake deposit, geochemistry, genesis: Anderson, A. T. 04432

Trace elements*Abundance*

Wallrock holes, Idaho, Coeur d'Alene district: Clark, Allen LeRoy. 06546

Analysis

Emission spectroscopy, water, thioacetamide-precipitation: Mallory, Edward C., Jr. 03750

Geochemistry

United States, eastern, sphalerite, wallrocks: Jolly, Janice L. 05981

Trace-element analyses*Aluminum phosphate minerals*

Utah, Fairfield area, variscite deposits, scandium: Frondel, Clifford. 06773

Andesite

Average, range, cf. granitic, basaltic rocks: Taylor, S. R. 08031

Apatite

Fossil bone, X-ray, infrared, chemical: Brophy, Gerald P. 05970

Basalt

Greenland, Svartenhuk Peninsula, magma evolution: Clarke, D. B. 02063

Mohole, lanthanides: Masuda, Akimasa. 03218

Oceanic, magma origin: Gast, Paul W. 04866

Billingsleyite

Utah, East Tintic district, new mineral: Frondel, Clifford. 07541

Biotite

California, Cartridge Pass pluton: Dodge, F. C. W. 00797

Texas, Enchanted Rock batholith: Ragland, Paul C. 08029

Carbonaceous chondrites

Cr, Mn, X-ray fluorescence: Yates, Ann M. 06999

Carbonate mud

Gulf of Mexico, Alacran Reef, Mg, Sr: Hoskin, Charles M. 05724

Carbonate rocks

Oklahoma, Foraker Formation: Mogharabi, Ataolah. 00158

Chondrites

Abundances, volatile elements cf. Earth's crust: Anders, Edward. 04345

Chromium ore

Variation with geographic location: Kramer, Henry H. 04706

Coal

Alaska: Rao, P. Dharma. 11046

Coal-bearing strata

Depositional environment: Nicholls, G. D. 05872

Copper ore

Nevada, Lander County, X-ray fluorescence: Clement, Stephen C. 04237

Trace-element analyses—Continued

- Coral*
Ag, Co, U, cf. sea water: Veeh, H. Herbert. 02537
- Diabase*
North Carolina Piedmont: Ragland, Paul C. 07069
- Diabase-granophyre suite*
Pennsylvania, Dillsburg area: Gottfried, David. 03928
- Evaporites*
New Mexico, Salado Formation, GNOME shaft: Gard, Leonard M., Jr. 04059
- Feldspar*
Metamorphic rocks, strontium partition: Virgo, D. 03451
Texas, Enchanted Rock batholith: Ragland, Paul C. 08029
- Foraminifera*
Cenozoic, modern planktonic forms: Lipps, Jere H. 11317
- Gneiss*
Wyoming, Laramie Range: Condie, Kent C. 00008
- Granitic rocks*
Texas, Enchanted Rock batholith: Ragland, Paul C. 08029
Wyoming, Laramie Range: Condie, Kent C. 00008
- Graywacke*
Utah, northern, Precambrian: Condie, Kent C. 08582
- Ground water*
California, coastal area, northern: California Dept. Water Resources. 01154
North Carolina, Kings Mountain-Charlotte area, rock types: Price, Van. 00924
- Igneous rocks*
Neutron activation data: Gordon, Glen E. 11290
Sc contents, cf. rare earths and Fe: Norman, Jack C. 00293
- Iron*
United States, western: Radtke, Arthur Sears. 00861
- Iron formations*
Minnesota, Biwabik and Trommald composites: Lepp, Henry. 07812
- Jasperoid*
United States, ore deposits, relations to gold content: Lovering, T. G. 00773
- Lake waters*
California, High Sierras: Bradford, G. R. 04472
- Loellingite*
Electron-probe study: Radcliffe, Dennis. 11243
- Manganese ores*
Nevada, spectroscopic: Hewett, D. F. 04221
- Marine organisms*
Metals: Boyle, R. W. 04234
- Marine sediments*
California, off southern coast, interstitial waters: Brooks, R. R. 01594
- Meteorites*
Metal phases of chondrites, distribution: Smales, A. A. 08045
Smithonia iron, Georgia: Berkey, E. 11228
- Natural gas*
United States, helium: Moore, B. J. 04106
- Olivine*
Distribution: Simkin, Tom. 08001
- Ore deposits*
Mississippi Valley, spectrographic: Hall, Wayne E. 04122

Trace-element analyses—Continued

- Ore-forming fluids*
Fluid inclusions, brines: White, Donald E. 04224
- Plankton*
Bahamas, marine population, preferential variation: Szabo, B. J. 07334
- Pyrite*
Colorado, Slick Rock district, Mancos Shale: Shawe, Daniel R. 02720
- River water*
Ag, Sb, Cr, Co, Rb, Cs, Se, Mo, content: Kharkar, D. P. 01956
- Rocks*
Pd, Pt, Rh, fire assay and emission spectrography: Haffty, Joseph. 02278
- Safflorite*
Electron-probe study: Radcliffe, Dennis. 11243
- Sea water*
Atlantic Ocean, rare earths, neutron activation: Hogdahl, Ove T. 03666
Atlantic Ocean, strontium, barium: Andersen, Neil R. 03665
- Sedimentary rocks*
Sc contents, cf. rare earths and Fe: Norman, Jack C. 00293
- Sediments*
Alaska, Livengood gold placer district: Foster, R. L. 02818
Deep-sea, iodine content: Bennett, J. H. 00651
Pennsylvania, fluvial, metals: Dahlberg, Eric C. 07756
- Silicates*
Tantalum and hafnium, neutron activation: Greenland, L. Paul. 03010
- Soils*
Alaska, Fairbanks area, geochemical prospecting: Heiner, L. E. 09835
Wisconsin, Saint Croix-Pierce Counties, molar ratios: Foss, J. E. 02267
- Sphalerite*
Canada, Pb-Zn in carbonate rock: Sangster, D. F. 02908
Canada, western: Evans, T. L. 04222
Quebec, electron microprobe: Campbell, F. A. 06975
United States, central, eastern: Jolly, Janice L. 05981
- Standard rock samples*
S-1, G-2, GSP-1, AGV-1, NBS-70, Rb, Sr contents: Duchesne, J. C. 01127
- Stream sediments*
Alaska, metals: Burand, W. M. 03743
- Sulfide schists*
Canada: Boyle, R. W. 06978
- Sulfides*
British Columbia, Slocan district, statistical treatment: Sinclair, A. J. 03603
Hawaii, basalt, electron probe: Desborough, George A. 04124
- Surface water*
California, coastal area, northern: California Dept. Water Resources. 01154
Kansas, Kansas River basin: Galle, O. Karmie. 06369
- Syenite standard*
X-ray emission and fast-neutron activation: Volborth, A. 04749
- Tektites*
Georgia, Massachusetts: Cuttitta, Frank. 10702
- Tellurides*
Electron-probe: Cabri, L. J. 03756

Trace-element analysis—Continued

Tungsten ore

Idaho, metals, precious and base: Leonard, B. F. 00525

Ultramafic rocks

California, Burro Mountain: Burch, Stephen H. 01124

Water

California, central coastal area, ground and surface: California Dept. Water Resources. 02935

California, southern, surface and ground water: California Dept. Water Resources. 02937

Kansas, Kansas River basin: Angino, Ernest E. 10062

Lake Erie, chemical composition: Weiler, R. R. 07094

Zeolites

Lanthanons, DTPA-arsenazo III method: Marsh, William W., Jr. 06742

Zircon

Nevada, Mount Wheeler mine area: Lee, Donald E. 05195

Tracks and trails

Bergaueria sp.

Cambrian, Alberta, Banff area, Gog Group: Arai, Mary Needler. 00487

Burrows

Annelid, polychaete borings, Devonian, New York: Cameron, Barry. 03209

Holocene, depth, nearshore-offshore relations: Rhoads, Donald C. 08052

Permian, Wellington Formation, Oklahoma: Carlson, Keith J. 05679

Quaternary, Florida, Bahamas, crustaceans, anthozoan: Shinn, Eugene A. 05767

Climactichnites

Cambrian, Potsdam Sandstone, cf. *Mystichnis pacificus*, ocean floor: Farquhar, O. C. 11153

Connecticut

Triassic, East Berlin Formation, Rocky Hill: Ostrom, John H. 05925

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Dinosaurs

Utah, Vermilion Cliffs: Spendlove, Earl. 03713

New York

Ordovician, Black River Group: Walker, Kenneth Russell. 01206

Nova Scotia

Cambrian(?), Goldenville Formation, worm mounds, burrows: Harris, I. McK. 04399

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Paleozoic, North America, distribution, worm burrows: Conkin, James E. 04329

Spider

Permian, Coconino Formation, Arizona: Alf, Raymond M. 02510

Texas

Permian, Leonardian rocks, western: Bain, Roger John. 10203

Utah

Eocene, Green River Formation, bird, mammal, insect: Moussa, Mounir T. 06007

Worm tubes(?)

Cambrian, Harkless Formation, California, Wheeler Canyon, cf. Europe: Lipps, Jere H. 02192

Worm tubes

Pogonophora, oldest living animals: Engemann, Joseph G. 03660

Tracks and trails—Continued

Worm tubes—Continued

Tennessee, Warsaw Limestone: McKinney, Frank K. 04100

Triassic

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Jasper region, Sulphur Mtn. and Whitehorse Formations: Gibson, D. W. 02678

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Nomenclature, Spray River Group, Jasper region: Gibson, D. W. 02678

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Conodonts

Platform types, evolution, North America, Europe: Mosher, L. Cameron. 05672

General

Paleosalinity, reduction, faunal crisis: Fischer, A. G. 04675

Triassic—Continued

Greenland

Cape Stosch area, fauna: Birkelund, Tove. 01857

Idaho

Southeastern, Foraminifera, Thaynes Formation: Schroeder, Marvin L. 00936
Southern, Albion Range: Armstrong, Richard Lee. 03865

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Origin of therians, molar evolution: Crompton, A. W. 04779

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Limestone conglomerate, Eocene: Dennis, John V. 00819

Massachusetts

Mount Tom Range, volcanic plugs: Foose, Richard M. 04280

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Stratigraphy: Carlson, C. E. 11230

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Dan River, Davie County basins, sedimentation: Thayer, Paul Arthur. 02044
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Piedmont, diabase dikes: Ragland, Paul C. 07069

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Southwestern, Echinoidea, new miocidarid genus: Kier, Porter M. 05675
Uinta Mountain area, Gartra Member of Popo Agie Formation: McCormick, C. D. 02487

Triassic—Continued

Utah—Continued

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Virginia

Buckingham quadrangle, sedimentary and igneous rocks: Ern, Ernest H. 03194
Limestone conglomerate, Eocene: Dennis, John V. 00819

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Western, Foraminifera, Thaynes Formation: Schroeder, Marvin L. 00936

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Pennsylvanian, Nebraska, biometrics, growth pattern: Pabian, Roger K. 07399

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Mexico, Oaxaca, Tinu Fm., new: Robison, Richard A. 03232
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Newfoundland, New World Island: Kay, Marshall. 04443
Northwest Territories, Lower, Ellesmere Island: Cowie, J. W. 03888
Northwest Territories, Mackenzie, Middle faunule: Norford, B. S. 03718
Texas, Wilberns Formation, ptychaspid bioterm: Longacre, Susan Ann Burton. 05507
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Vermont, northwestern, Gorge Formation, descriptions: Clark, Mary Gilman. 05768

Centropleura sp.

Cambrian, Nevada, Lander County: Palmer, Allison R. 00490

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Oklahoma, Turkey Creek limestone, cf. Europe: Ormiston, Allen R. 05705

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Asaphidae, Ordovician, Iowa, eye growth: Rose, J. N. 06646

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Sexual dimorphism, lower Paleozoic: Hu, Chung-Hung. 05519

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Ontogeny

Polychaete origin: Hu, Chung-Hung. 05519

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Paleozoic

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Trinidad**Paleontology**

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Protista, Tertiary, Cipero section, nannoplankton, zonation: Bramlette, M. N. 09129

Sedimentary petrology

Central, soils, Montserrat series: Ahmad, N. 01094

Northern Range, soils, Maracas series: Ahmad, N. 01095

Tritium**Abundance**

Ground water, bomb produced, Florida: Kohout, F. A. 08416

Ground water, Florida, verification of C-14 dates: Hanshaw, Bruce B. 08418

Tsunamis**Alaska**

1788, Aleutian Islands, Sanak-Kodiak: Solov'yev, S. E. 07054

General

Literature to 1966, index: Adams, William Mansfield. 09826

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Big Creek district, associated silver-rich sulfides: Leonard, B. F. 00525

Tungsten—Continued

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Mackenzie, Flat River area, occurrence: Blusson, S. L. 08055

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Black Hills area, Harney Peak dome, occurrence, possibilities: Kernaghan, James S. 05873

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Unconformities

Arizona

Tertiary, middle, porphyry copper: Livingston, Donald E. 00541

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Classification

Criteria: Freeman, Tom. 01210

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Paleozoic, Idaho, southern: Armstrong, Richard Lee. 03865

Interpretation

Stratigraphic map diagrams, regional: Melton, Frank A. 00308

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Devonian, Louisville area: Freeman, Tom. 10103

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Oligocene, Frio Formation, southwestern: Paine, William R. 00305

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Pennsylvanian, Jurassic, Cretaceous, Hatfield Mtn. quadrangle: Skipp, Betty. 00996

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Oklahoma

Devonian, ostracod faunal evidence: Lundin, Robert F. 06322

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Ravinements, coastal erosion: Swift, Donald J. P. 03894

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United States

Absolute age

Atlantic shelf, sea levels, past 35,000 yrs, C-14: Milliman, John D. 04870

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Mineral deposits, midcontinent, general: Snyder, Frank G. 05385

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United States—Continued

Economic geology—Continued

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- Mineral resources, continental shelf, potential: McKelvey, V. E. 11325
- Mineral resources, ore deposits, general: Ridge, John D. 05427
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- Petroleum, natural gas, discovery status, ultimate reserves: Hubbert, M. King. 11307
- Petroleum, reservoirs, estimates vs. production, case histories: Keplinger, C. H. 11223
- Petroleum, resources, estimates, effects on mineral policy: Flawn, Peter. 11218
- Petroleum, western, occurrence, selected papers: Warner, M. A. 09485
- Phosphate, Atlantic and Gulf Coastal Plains, occurrence, possibilities: Cathcart, J. B. 10982
- Silver, southwestern, hypogene manganese veins, possibilities: Hewett, D. F. 00136
- Sodium sulfate, Great Plains, genesis: Grossman, I. G. 01653
- Uranium, exploration developments, geochemistry: Griffith, John William. 09565
- Uranium, exploration, review: U.S. Bureau of Mines. 04881
- Uranium, types of deposits: Little, H. W. 11145
- Western, mineral belts: Clark, K. F. 04226
- Western, mineral belts, genesis: Landwehr, W. R. 07687

Engineering geology

- Earthquakes, micro, ground conditions in aseismic design: Tanaka, Teiji. 07049
- Gas storage, water sands, technique: Ball, Douglas. 03393
- Terrain evaluation, history, cf. England, South Africa, Australia: Aitchison, G. D. 11005

General

- Bibliographic information, international exchange: Routhier, Pierre. 05244
- Bibliography, hydrology and sedimentation, 1959-62: Bradberry, Carroll E. Associates. 11091
- Bibliography, salvage archeology: Petsche, Jerome E. 09493
- Catalog, aerial photographs: Denny, Charles S. 02291
- Deep-drilling program, Mohole project: Mekhtiev, Sh. F. 11154
- Eastern, continental margin, 19th century exploration: Schopf, Thomas J. M. 05867

United States—Continued

General—Continued

- Education, earth science in secondary schools: Matthews, William H., 3d. 08144
- Education in water resources: Smith, Stephen C. 05596
- Geologic mapping, 1967, review: Kinney, Douglas M. 00003
- Geology buildings, new, colleges: Snyder, John. 08143
- Geoscience library, information network, model: Weinstock, Melvin. 09734
- International Geological Congress, founding committee, 1876: Thurston, William. 00340
- Potomac Basin development plans, history, future: Christy, Francis T., Jr. 08944
- U.S. Geological Survey, open file maps, reports, 1967: Weld, Betsy A. 02593

Geochemistry

- Bauxite, standard sample 69A, analyses, method: Langmyhr, F. J. 06739
- Coals and carbonaceous materials, X-ray diffraction studies: Ergun, Sabri. 07012
- Eastern estuaries, suspended material, salt flocculation: Meade, Robert H. 07357
- Equisetum*, metal absorption, geochemical prospecting: Cannon, Helen L. 01034
- Hydrothermal ores, carbonate rocks, thermoluminescent prospecting: MacDiarmid, Roy A. 03950
- Natural gas, analyses, helium: Moore, B. J. 04106
- Natural gas, helium distribution: Voronov, A. N. 08922
- Phosphorites, marine, oxygen isotope composition: Longinelli, A. 04525
- River sediments, Th, U abundance; isotope ratios: Scott, Martha R. 02814
- River water, Ag, Sb, Cr, Co, Rb, Cs, Se, Mo: Kharakar, D. P. 01956
- Silicate rocks, samples G-2 and W-1, analysis technique, new: Langmyhr, F. J. 06738
- Susquehanna River, trace-element transport: Kharakar, D. P. 10907
- Volcanics, gallium contents: Noble, Donald C. 10989
- Western, comendite, pantellerite, major-element variation: Noble, Donald C. 02674
- Western, Green River Formation, organic compounds: Burlingame, A. L. 01098
- Western, iron ores, trace elements: Radtke, Arthur Sears. 00861
- Western, jasperoid, ore-related, gold content: Lovering, T. G. 00773
- Western, obsidian, trace element patterns: Jack, R. N. 08745
- Western, volcanic glass, iron: Noble, Donald C. 09151

Geomorphology

- Atlantic coast, crescentic landforms: Dolan, Robert. 00122
- Atlantic Coast, northern, sea levels, Holocene: Newman, Walter S. 11007
- Atlantic coast, Tertiary shorelines, tectonic control: Richards, Horace G. 04010
- Basin and Range province, trend-surface analysis: Lustig, Lawrence K. 08788
- Coastal areas, changes of level, variations: Hicks, Steacy D. 09204
- Continental margin: Emery, K. O. 05502
- East coast, submarine canyons: Uchupi, Elazar. 07060

United States—Continued

Geomorphology—Continued

- Eastern, continental shelf, Cretaceous-Cenozoic development: Garrison, Louis Eldred. 04536
 Great Basin, playas, desiccation polygons, giant: Neal, James T. 00542
 Gulf of Mexico coast, shore features, infrared space photos: Anson, Abraham. 02373
 Landforms, aerial photographs, catalog: Denny, Charles S. 02291
 Midcontinent, eolian features, loess: Frye, John C. 02340
 Midcontinent, eolian features, loess: Schultz, C. Bertrand. 02339
 Northeastern, continental rise, submarine canyons: Pratt, Richard M. 11043
 Northeastern, post-glacial submergence, isomesobaths: Bloom, Arthur L. 07988
 Regional geography: Griffin, Paul F. 10945
 River gradient changes, lithology differences, relations: Ganser, Robert W. 09301
 Rivers, slope-discharge relations: Carlston, Charles W. 05231
 Southeastern, marine terraces, Cenozoic: Alt, David. 04014
 Southern, airphoto interpretation, Gemini space flights: U.S. Natl. Aeronaut. and Space Adm. 11366
 Western, alp slopes, processes, photointerpretation: Thompson, Will F. 04999
 Western, arid regions, ephemeral stream channels, erosion: King, Norman J. 09898

Geophysical surveys

- Basement rocks, electrical: Lahman, H. S. 10662
 Central, geodetic, geoid profiles: Rice, Donald A. 10856
 Continental margin, eastern, aeromagnetic, interpretation: Taylor, Patrick. 03805
 Continental margin, eastern, magnetic: Zietz, Isidore. 10663
 Continental margin, Washington to California, magnetic: Emilia, David A. 02689
 Crustal studies, eastern, seismic: James, David E. 00650
 Eastern, continental margin, aeromagnetic, implications: Zietz, Isidore. 09866
 Eastern, continental margin, seismic: Lewis, B. 02789
 Eastern, continental shelf, seismic data: Knott, S. T. 08959
 Heat flow, data: Roy, Robert F. 03225
 Heat flow, provinces, plutonic rocks: Roy, Robert F. 04526
 Idaho-Oregon-Tufts Abyssal Plain, gravity, seismic: Dehlinger, P. 03623
 Midcontinent gravity high: Korompai, A. E. 10444
 Midcontinent gravity high, structural interpretation: Steenland, Nelson C. 05860
 Midwestern, basement complex: Patton, J. B. 10114
 Northeastern, buried valleys, seismic: Murphy, V. J. 09806
 Northwestern, gravity: Bonini, William E. 10398
 Pacific coast, San Francisco to Strait of Juan de Fuca, magnetic: Berg, Joseph W., Jr. 08237
 Pacific high voltage direct current intertie, study opportunities: Keller, George V. 10842
 Radar, sidelooking, summary of coverage: Kover, Allan N. 09414
 Selected areas, gravity data, geological, geophysical parameters: Strange, W. E. 09824

United States—Continued

Geophysical surveys—Continued

- Selected areas, magnetotelluric: Vozoff, K. 10477
 Selected areas, radioactivity, airborne, correlation with areal geology: Pitkin, James A. 05866
 Soils, properties, radioactivity, gamma-ray: Williamson, A. N. 06385
 Southwestern, seismic, crust, upper mantle, profiles: Warren, David H. 02385
 Transcontinental, 35-39° N., 87-100° W., seismic, crust and mantle, profiles: Warren, David H. 02943
 Transcontinental, 35-39° N., 74-87° W., seismic profiles: Warren, David H. 02370
 Transcontinental, 35-39° N., 100-112° W., seismic, profiles: Warren, David H. 02386
 Transcontinental, aeromagnetic, experimental: Zietz, Isidore. 04262
 Western, aeromagnetic anomalies, relations to ore deposits: Zietz, I. 06864
 Western, Army Map Service gravity program: Nilsen, Tor H. 10394
 Western, heat flow, progress report: Sass, J. H. 10652
 Western, magnetic deep sounding: Porath, H. 10405
 Western, transcontinental strip, magnetic: Zietz, Isidore. 07986
Geothermal energy
 Potential sources: Whiting, Robert L. 04263
Hydrogeology
 Earthquake effects, Alaskan, March 1964: Vorhis, Robert C. 06468
 Great Basin, ground water, quality: Feth, J. H. 08269
 Metropolitan areas, data: Schneider, William J. 02439
 Mississippi embayment, Tertiary aquifers: Hosman, R. L. 01694
 Northeastern, drought, hydrologic effects: O'Bryan, Deric. 09811
 Northeastern, resources, drought effect: Thomas, H. E. 09552
 Northeastern, resources, effects of 1961-67 drought: Barksdale, Henry C. 06967
 Southeastern, crystalline rocks, hydrology: LeGrand, H. E. 08541
 Southeastern, seismic seiches, Alaska earthquake: Vorhis, Robert C. 10352
 Southwestern, ground-water levels, 1961-65: U.S. Geological Survey. 04470
 Susquehanna River basin, aquifers, statistical analysis: Seaber, Paul R. 08076
 Water use, 1965 data, ground and surface: Murray, C. Richard. 06027
 Western, ground-water depletion by vegetation: Robinson, Thomas W. 05491
 Western, stream-aquifer systems, models, computer simulation: Bittinger, Morton Wayne. 07182
Maps, absolute age
 Transcontinental, 35-39° N.: Marvin, Richard F. 02380
Maps, bathymetric
 Transcontinental, 35-39° N., 63-74° W.: Zietz, Isidore. 09490
 Transcontinental, 35-39° N., California coast to 133° W.: Lattimore, Robert K. 02939
Maps, geologic
 Basement rocks: Bayley, Richard W. 01698
 Midcontinent, Permian, Wolfcamp, Leonard, Guadalupe Series: Rascoe, Bailey, Jr. 07264

United States—Continued

Maps, geologic—Continued

- Transcontinental, 35-39° N., 100-112° W.: Carlson, John E. 02941
 Transcontinental, 35-39° N., 87-100° W.: Willden, Ronald. 02942
 Transcontinental, 35-39° N., 112° W. to California coast: Carlson, John E. 02940
 Transcontinental, 35-39° N., east coast to 87° W.: Willden, Ronald. 02945

Maps, gravity

- Southwestern: U.S. Air Force. 02394
 Transcontinental, 35-39° N., 100-112° W.: U.S. Air Force. 02395
 Transcontinental, 35-39° N., 87-100° W.: U.S. Air Force. 02396
 Transcontinental, 35-39° N., 74-87° W.: U.S. Air Force. 03889
 Transcontinental, 35-39° N., California coast to 133° W.: Lattimore, Robert K. 02939

Maps, ground water

- Mississippi embayment, Tertiary aquifers: Hosman, R. L. 01694

Maps, isopach

- North-central, Devonian: Collinson, Charles. 03185
 Rocky Mountains and Plains, northern, Devonian strata: Sandberg, Charles A. 03183
 Southwestern, Devonian strata: Poole, F. G. 03184

Maps, magnetic

- Southwestern: Zietz, Isidore. 02366
 Transcontinental, 35-39° N., 110-112° W.: Zietz, Isidore. 02367
 Transcontinental, 35-39° N., 87-100° W.: Zietz, Isidore. 02368
 Transcontinental, 35-39° N., 74-87° W.: Zietz, Isidore. 02369
 Transcontinental, 35-39° N., 63-74° W.: Zietz, Isidore. 09490
 Transcontinental, 35-39° N., California coast to 133° W.: Lattimore, Robert K. 02938

Maps, magnetic surveys, index

- Airborne, shipborne, ground coverage: Zietz, Isidore. 04262

Maps, mineral resources

- Barite: Brobst, Donald A. 10676

Mineralogy

- Chevkinite, perrierite, allanite, western: Izett, G. A. 07538
 Concretions, ferruginous, southeastern: Finney, V. L. 10300
 Zeolites, western, Tertiary volcanics, genesis: Sand, L. B. 09928

Paleoclimatology

- Pennsylvanian-Permian, western, wind directions: Runcorn, S. K. 04684
 Pleistocene, Great Basin: Major, Jack. 02089
 Pleistocene, moraines, eastern: Sirkin, Leslie A. 08188

Paleomagnetism

- Cenozoic, western, reversals, absolute age: Dalrymple, G. Brent. 10697
 Columbia Plateau, basalt, correlation with petrology: Larson, E. E. 03905
 Columbia Plateau, basalt, correlation with petrology: Watkins, N. D. 03907
 Columbia Plateau, basalt, correlation with petrology: Wilson, R. L. 03906
 Paleozoic, lower strata, remagnetization: Creer, K. M. 03127

Paleontology

- Algae, Paleozoic, limestones, central and western: Wray, John L. 05628

United States—Continued

Paleontology—Continued

- Asterozoa, Mississippian, central, ophiuroids: Bjork, Philip R. 06901
 Aves, Oligocene-Miocene, Great Plains: Cracraft, Joel. 02980
 Brachiopoda, Silurian-Devonian, Upper-Lower, central: Amsden, T. W. 02828
 Bryozoa, Cenozoic, southeastern, *Floridina* s.s.: Schager, Sten A. N. 11395
 Bryozoa, Ordovician, Middle, cryptostome, zoecial boundary: Karklins, Olgerts L. 11389
 Conodonts, Mississippian-Pennsylvanian, western: Dunn, David Lawrence. 02031
 Devonian-Mississippian boundary, cratonic margin: Gutschick, R. C. 02877
 Fauna, Miocene, Pleistocene, Holocene, North Carolina-Georgia strandlines: Colquhoun, Donald J. 01232
 Fauna, Permian, Phosphoria Formation, western, facies, paleoecology: Yochelson, Ellis L. 09100
 Fauna, Permian, Phosphoria rock complex, western: Yochelson, Ellis L. 00126
 Foraminifera, Ostracoda, Cretaceous-Pleistocene, off northeastern: Gibson, Thomas G. 05234
 Gastropoda, Cretaceous, Western Interior, assemblages, paleoecology: Sohl, Norman F. 10875
 Gastropoda, northwestern, new genus: Terry, Judith S. 03195
 Gastropoda, Pennsylvanian, midcontinent, species convergence, statistics: Eldredge, Niles. 00488
 Gastropoda, Tertiary, southeastern, distribution: Olsson, Axel A. 02401
 Gymnosperms, Eocene, southeastern, sequoia: Dilcher, D. L. 02308
 Invertebrata, Cretaceous, Colorado Group, western, paleoecology: Kauffman, Erle G. 10877
 Mammalia, Cretaceous-Tertiary, western, origin of primates: Szalay, Frederick S. 01093
 Mammalia, Eocene, western, *Hyopsodus*: Gazin, C. Lewis. 06025
 Mammalia, Miocene, western, stenomyline camels: Frick, Childs. 05717
 Mammalia, Paleocene, insectivore, dentition: McKenna, Malcolm C. 02991
 Mammalia, Pleistocene, southern, rodent distribution, climate: Martin, Robert A. 09032
 Mollusca, Quaternary, northeastern, faunas: Richards, Horace G. 08202
 Palynomorphs, Pennsylvanian, structures, central: Darrah, Elsie Louise. 00937
 Pelecypoda, Tertiary, Gulf and east coasts, alticostate venericards: Heaslip, William Graham. 04377
 Pisces, Cretaceous, Niobrara Formation, actinopterygian: Schaeffer, Bobb. 05716
 Reptilia, Cretaceous, Upper, eastern coastal provinces, turtle: Gaffney, Eugene S. 01145
 Reptilia, Pliocene-Holocene, green salamander, distribution, Blue Ridge embayment role: Bruce, Richard C. 11187

Petrology

- Comendite, pantellerite glasses: Noble, Donald C. 02674
 Great Basin, silicic volcanic terranes, genetic relations: Christiansen, Robert L. 07789
 Midwestern, basement complex: Patton, J. B. 10114

United States—Continued

Petrology—Continued

Western, volcanics, textures, flow directions:
Smith, Eugene I. 11352

Sedimentary petrology

Allegheny Plateau, northwestern, Pleistocene till
sheets: White, G. W. 05655

Black Warrior basin sediments, Pennsylvanian,
provenance: Ehrlich, Robert. 08672

Columbia River, graywacke-type sediments:
Whetten, John T. 08348

Eastern, Ordovician reefs, evolution: Pitcher,
Max Grow. 02608

Eastern, submarine canyon, sediments: Trum-
bull, James V. A. 09943

Eastern, Taconic allochthon, shelly beds,
provenance: Bird, J. M. 07987

Great Basin, Precambrian-Cambrian, lithofa-
cies: Stewart, John H. 09164

Illinois basin, Mississippian sedimentation:
Lineback, Jerry A. 10111

Midcontinent, Pennsylvanian-Permian, cyclic
sedimentation: Elias, Maxim K. 10071

Northeastern, continental shelf, sediments:
Trumbull, James V. A. 08974

Northeastern, Tioga Bentonite: Dennison, John
M. 07759

Northwestern, continental margin, geosynclinal
environment: McManus, Dean A. 07878

Phosphorites, Atlantic Coastal Plain, mineral
constituents: Cathcart, J. B. 10982

Southeastern, beach, dune sands, carbonate
fraction: Morton, Robert W. 08547

Southeastern, beach, river, shelf, detrital feld-
spar: Field, Michael E. 06035

Southeastern, beach, river, shelf, iron-stained
quartz: Judd, James B. 06034

Southeastern, carbonate shelf sediments, round-
ness: Estes, E. L. 10299

Southeastern, continental shelf, carbonate sedi-
mentation: Pilkey, Orrin H. 11039

Southeastern, Paleozoic shales, oriented fossils,
paleocurrent indicators: Jones, Michael L.
08754

Southeastern, soils, erodibility factors: Barnett,
A. P. 09901

Southern, continental shelf, sedimentation:
Doyle, Larry J. 10297

Western Interior, Colorado Group, lithofacies:
Kauffman, Erle G. 10877

Western, northern, basal Sauk clastics,
paleocurrents: Seeland, David Arthur. 09463

Stratigraphy

Appalachian and Ouachita Mts., continuity:
Thomas, William A. 10348

Cambrian, carbonate rocks, Cordilleran region,
regional relations: Palmer, Allison R. 09153

Cretaceous, western interior, correlation with
Europe: Jeletzky, J. A. 01798

Cretaceous-Tertiary, submarine canyons off
northeastern: Gibson, Thomas G. 05234

Devonian, Great Basin, diachronism, conodonts:
Clark, David L. 02897

Devonian, midcontinent, southern: Amsden, T.
W. 11013

Devonian, north-central, Illinois and central
Iowa basins: Collinson, Charles. 03185

Devonian, Rocky Mountains and Plains,
northern: Sandberg, Charles A. 03183

Devonian, southwestern: Poole, F. G. 03184

Devonian, Tioga Bentonite, northeastern:
Dennison, John M. 07759

United States—Continued

Stratigraphy—Continued

Devonian-Mississippian boundary, cratonic mar-
gin: Gutschick, R. C. 02877

Midcontinent, sedimentary basins, analysis,
computer: Harbaugh, John W. 02562

Miocene, Pleistocene, Holocene, strandline fa-
cies, North Carolina-Georgia: Colquhoun,
Donald J. 01232

Mississippian, regional integration, Cordilleran
region: Schleh, E. E. 06038

Mississippian, western: Schleh, E. E. 03860

Mississippian, Williston basin, relation to
western Canada: Proctor, Richard M. 04509

Mississippian-Pennsylvanian boundary, midcon-
tinent, correlation with Europe: Sullivan, Her-
bert J. 10088

Mississippian-Pennsylvanian, western, conodont
biostratigraphy: Dunn, David Lawrence.
02031

Paleozoic, upper, Illinois basin, Mississippi em-
bayment, Ouachita orogenic belt, paleogeog-
raphy: Mann, C. John. 09329

Permian, Phosphoria rock complex, western,
biostratigraphy: Yochelson, Ellis L. 00126

Permian, Wolfcamp-Leonard-Guadalupe Series,
midcontinent: Rascoe, Bailey, Jr. 07264

Pleistocene, Allegheny Plateau, northwestern,
till sheets: White, G. W. 05655

Pleistocene, loess deposits, correlation, midcon-
tinent: Frye, John C. 02340

Pliocene, volcanic sequence, Great Basin,
northern: Avent, Jon C. 09965

Precambrian, Mount Rogers Volcanic Group,
southeastern: Rankin, D. W. 10336

Quaternary, alluvial materials, southwestern:
Haynes, C. V., Jr. 03980

Tertiary, High Plains, correlation, regional stan-
dard needed: Schultz, C. Bertrand. 02470

Tertiary, sea-level changes, southeastern:
Tanner, William F. 04008

Tertiary, Steens Basalt, northwestern: Avent,
Jon. 08233

Transcontinental, 35-39° N., 100-112° W., sec-
tion: Carlson, John E. 02941

Transcontinental, 35-39° N., 87-100° W., sec-
tion: Willden, Ronald. 02942

Transcontinental, 35-39° N., 112° W. to Calif.
coast, section: Carlson, John E. 02940

Transcontinental, 35-39° N., east coast to 87°
W., section: Willden, Ronald. 02945

Structural geology

Appalachian and Ouachita Mts., continuity:
Thomas, William A. 10348

Basin and range, faulting, evolution: Roberts,
Ralph J. 10257

Basin and Range province, faulting, analysis:
Sales, John Keith. 02626

Basin and Range province, rift system: Cook,
Kenneth L. 08254

Basin and Range, tectonics: Slemmons, David B.
08328

Blue Ridge Mountains, deformation plan, dated
by slickensides: Cloos, Ernst. 07980

Central, Nemaha ridge, fault blocks: Gammill,
E. R. 10072

Continental margin, shallow structure: Emery,
K. O. 05502

Cordilleran orogen, bilateral symmetry, tec-
tonics: Burchfiel, B. C. 06113

Crustal thickness, central: Fernandez, Luis M.
00954

United States—Continued

Structural geology—Continued

Crust-upper mantle relations, gravity effect: Woollard, George P. 04657

Eastern, crust, seismic studies: James, David E. 00650

Great Basin, eastern, Mesozoic evolution: Hose, Richard K. 08738

Gulf Basin, northern rim, influences: Woods, R. D. 11131

Idaho-Oregon-Tufts Abyssal Plain, subcrustal: Dehlinger, P. 03623

Midcontinent region, tectonic history: Snyder, Frank G. 02478

Rocky Mountains and Plains, northern, Devonian strata: Sandberg, Charles A. 03183

Southeastern, isostasy, Cretaceous to Miocene: Tanner, William F. 04008

Southeastern, Mount Rogers Volcanic Group: Rankin, D. W. 10336

Southwestern, Devonian strata: Poole, F. G. 03184

Southwestern, mining districts, axial trends: Baker, Arthur, 3d. 08234

Southwestern, tectonics, Cenozoic: Cook, Kenneth L. 10655

Western, basin-range structure, genesis: Roberts, Ralph J. 02480

Western, concordant intrusions, depth control, magma pressure: Mudge, Melville R. 01087

Western, overthrust belts, gravity sliding: Crosby, Gary W. 07795

Western, tectonic history, Mississippian, Late: Schleh, E. E. 03860

Western, tectonics, Cenozoic, relation to Pacific basin: Hamilton, Warren B. 04027

Western, tectonics, Cordilleran: Sales, John K. 04513

Volcanology

Western, Alaska, Hawaii, collected papers: Coats, Robert R. 06498

Uplifts

Alaska

Mendenhall Valley, regional, current rate: Barnwell, William W. 00373

Canada

Hudson Bay area, postglacial, rate: Wagner, Frances J. E. 01423

Colorado

San Juan Mountains, Cretaceous, volcanism: Dickinson, Robert G. 05157

Treasure Mountain: Mutschler, Felix Ernest. 07196

Erosion

Colorado Plateau, evolution, review: Badoux, Heli. 04729

Georgia

Tallulah Falls dome, structure: Livingston, John L. 10321

Idaho

Albion Range, gneiss domes: Armstrong, Richard Lee. 03865

Kentucky

Rough Creek complex, petroleum possibilities: Rehn, E. E. 03243

Missouri

Ozark uplift, east flank, faulting: Tikrity, Sammi. 11068

Nevada

Timber Mountain, resurgent dome, fault systems: Carr, W. J. 06817

Uplifts—Continued

New Mexico

Pajarito Mountain, Laramide dome: Kelley, Vincent C. 04296

Pederal uplift, Pennsylvanian-Permian history: Kottowski, Frank E. 01173

Sangre de Cristo uplift, tectonics: Baltz, Elmer H. 10204

Northwest Territories

Boothia Arch, Prince of Wales Island area: Broad, D. S. 03134

Postglacial, variability, cause: Andrews, J. T. 03892

Texas

West-central, Bend arch: Watts, Jerry. 11207

Utah

Upheaval Dome, Paradox Basin: Mattox, Richard B. 09428

Wyoming

Bighorn Mountains, east flank, drainage evidence: Nelson, Robert S. 06948

Uranium

Abundance

Precambrian shield rocks, Canada: Shaw, D. M. 08026

River sediments, United States: Scott, Martha R. 02814

Soil, Colorado, Adams County: Bunker, Carl M. 00789

Soils: Hansen, R. O. 00343

Terrestrial, cf. chondrites: Bennett, J. H. 08500

Analysis

Activation, fission-track, distribution in meteorites: Fleischer, R. L. 03902

Activation, natural waters: Edwards, Kenneth W. 04326

Gamma-ray spectrometry, field and laboratory compared, California: Bunker, C. M. 02707

Paper chromatography: Plamondon, J. 00483

Polarographic, in plutonium: Plock, C. E. 03435

Appalachians

Resources, review: Butler, Arthur P., Jr. 01365

Arizona

Garnet Ridge, breccia dike: Gavasci, Anna T. 07634

Monument Valley-White Canyon districts, occurrence, genesis: Malan, Roger C. 05392

Canada

Exploration developments, geochemistry: Griffith, John William. 09565

Exploration, production, reserves, 1967: Williams, R. M. 09598

Colorado

Uravan mineral belt, occurrence, genesis: Motica, J. E. 05393

Colorado Plateau

Genesis, occurrence: Fischer, R. P. 05389

Exploration

Radiometric technique, integral and differential spectrometer: Pemberton, Roger. 05343

Radon emanations: Dyck, Willy. 01882

Radon-222 in surface waters: Dyck, Willy. 05342

Well logging, application, gamma-ray and others: Hawkins, William K. 11299

Geochemistry

Corals, control of deposition in skeleton: Veeh, H. Herbert. 02537

Distributions, terrestrial samples, fission-track method: Fleischer, Robert L. 04709

Ultrabasic rocks, carbonatites, analyses: Becker, V. 03797

Uranium—Continued

Greenland

Ilímaussaq intrusion, exploration: Lovborg, Leif. 01860

Isotopes

Disequilibrium, Florida, Floridan aquifer: Kaufman, M. I. 08415

Pb:U, zircon, Guatemala: Gomborg, David N. 03846

Ratios, ground water, Florida: Rydell, H. S. 10342

U-238, spontaneous fission, Sr-89, Sr-90: Arino, H. 02579

U-234, U-238, ground water, isotope dilution approach: Osmond, J. K. 04077

Kansas

Reconnaissance, 1951-56: U.S. Atomic Energy Commission. 08995

Mexico

Oaxaca, composition, metallurgy: Acevedo C., Alberto. 10914

Nebraska

Reconnaissance, 1951-56: U.S. Atomic Energy Commission. 08995

New Brunswick

Southeastern, stream sediments, geochemical anomalies: Smith, A. Y. 09073

New Mexico

Burro Mountains, occurrence, genesis: Gillerman, Elliot. 01915

Grants region, occurrence, genesis: Kelley, Vincent C. 05390

Laguna district, genesis: Nash, J. Thomas. 06991
San Juan basin mineral belt, genesis: Granger, Harry C. 01655

North America

Deposits, types, classification: Little, H. W. 11145

Oklahoma

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Ontario

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Bancroft area, exploration, radon-222 in waters: Dyck, Willy. 01081

Elliot Lake area, reserve estimation: Hart, R. C. 05330

Elliot Lake area, Townships 149 and 150, occurrence: Robertson, J. A. 01769

Northern, occurrence, production: Robertson, James A. 07916

Pennsylvania

Resources, review: Butler, Arthur P., Jr. 01365

Resources

Automatic data processing, predictions: Bostick, N. H. 06831

Nuclear fuel, long-range importance: Nininger, Robert D. 05616

Ore reserves shortage: Robertson, David S. 09559

Saskatchewan

Beaverlodge area, Eldorado mine, reserve estimation, grade control: Peebles, G. A. 05313

Beaverlodge area, mineralization, history, absolute age: Koepfel, V. 02056

Beaverlodge district, Precambrian deposits: Trigg, Charles Murray. 09567

Beaverlodge district, production history: Stephens, Fred H. 09566

Beaverlodge mining area, occurrence: Tremblay, L. P. 01688

Uranium—Continued

Saskatchewan—Continued

Exploration, lake water sampling: Macdonald, J. A. 01084

South Dakota

Black Hills area, Edgemont district, genesis: Bowles, C. Gilbert. 05868

Black Hills area, occurrence, genesis: Hart, Olin M. 05395

Southwestern, occurrence, genesis: Harshman, E. N. 05394

Tennessee

Sligo Bridge quadrangle, content in Chattanooga Shale: Wilson, Charles W., Jr. 05537

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Texas

Coastal plain, discoveries and exploration: Earle, D. Hoye. 05614

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Exploration developments, geochemistry: Griffith, John William. 09565

Exploration, occurrence, review: U.S. Bureau of Mines. 04881

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Utah

Emery County, San Rafael Swell, occurrence: Hawley, C. C. 00941

Kane Creek, genesis, occurrence: Davidson, Donald M., Jr. 09371

Lisbon Valley area, occurrence, genesis: Wood, Hiram B. 05391

Marysville area, occurrence, genesis: Kerr, Paul F. 05373

Monument Valley-White Canyon districts, occurrence, genesis: Malan, Roger C. 05392

Wyoming

Black Hills area, Edgemont district, genesis: Bowles, C. Gilbert. 05868

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Central, genesis, exploration: Rackley, R. I. 09455

Exploration, review: Grutt, E. W., Jr. 00023

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Powder River basin, occurrence, genesis: Mrak, Vernon A. 05396

Production: Flanagan, Phillip E. 05917

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Shirley Basin, occurrence, genesis: Harshman, E. N. 05397

Shirley basin, solution mining: Anderson, J. S. 09570

Wyoming basin, occurrence, genesis: Harshman, E. N. 05394

*Utah**Absolute age*

Basement rocks, Precambrian: Stacey, J. S. 06945

Bingham, rocks, ore: Moore, W. J. 04239

Cottonwood area, intrusive rocks: Crittenden, M. D., Jr. 08258

Northeastern, potassic igneous rocks: Best, Myron G. 06576

Northern, Precambrian geochronology: Damon, Paul E. 10883

Utah—Continued

Absolute age—Continued

Uncompahgre Plateau, Precambrian events: Hedge, Carl E. 02685

Areal geology

Dinosaur National Monument: White, Theodore E. 04796

Emery County, San Rafael Swell: Hawley, C. C. 00941

Paradox Basin, salt anticline field area: Mattox, Richard B. 01040

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Earthquakes

1950-July 1964: Cook, Kenneth L. 08255

Economic geology

Beryllium, Spor Mountain district: Shawe, Daniel R. 05379

Clays, Lehi area, pyrophyllite-bearing, occurrence, properties: Henderson, G. V. 01630

Coal, Carcass Canyon area, Kaiparowits Plateau: Doelling, Hellmut H. 06325

Coal, Gunsight Butte quadrangle, NE quarter: Peterson, Fred. 09907

Coal, Gunsight Butte quadrangle, NW quarter: Peterson, Fred. 09906

Coal, Gunsight Butte quadrangle, SE quarter: Peterson, Fred. 11057

Coal, Nipple Butte quadrangle, NE quarter: Waldrop, H. A. 09903

Coal, Nipple Butte quadrangle, NW quarter: Waldrop, H. A. 09902

Coal, Nipple Butte quadrangle, SE quarter: Waldrop, H. A. 09904

Coal, Nipple Butte quadrangle, SW quarter: Waldrop, H. A. 09905

Copper, Bingham Canyon, open pit, geologic mapping: Smith, W. H. 06885

Copper-lead-zinc, Bingham district: Rubright, R. D. 05483

Gems, jet, properties, Wayne County: Traverse, Alfred. 00119

Iron, Iron Springs district: Mackin, J. Hoover. 05372

Metals, Emery County, San Rafael Swell, occurrence: Hawley, C. C. 00941

Metals, Park City district: Garrett, Robert G. 04233

Metals, Tintic district: Shepard, W. M. 05485

Metals, Tintic mining district: Morris, Hal T. 05374

Metals, western: Hewitt, William Paxton. 05482

Mineral belts, fault trends, exploration guide: Stokes, William Lee. 06985

Natural gas, Four Corners region: Picard, M. Dane. 03427

Natural gas, Lisbon field: Parker, John M. 03429

Natural gas, Uinta basin, occurrence: Osmond, John C. 02108

Natural gas, Uinta basin, production: Folsom, L. W. 02109

Natural gas, Wasatch Plateau, occurrence, potential: Walton, Paul T. 02152

Petroleum, Circle Cliffs area, possibilities, impregnated sandstones: Ritzma, Howard R. 06130

Salt, Great Salt Lake: Straesser, Manfred. 06993

Silver-lead-zinc, Park City district: Barnes, Marvin P. 05376

Uranium, Emery County, San Rafael Swell, occurrence: Hawley, C. C. 00941

Utah—Continued

Economic geology—Continued

Uranium, Kane Creek, occurrence: Davidson, Donald M., Jr. 09371

Uranium, Lisbon Valley area: Wood, Hiram B. 05391

Uranium, Marysvale area: Kerr, Paul F. 05373

Uranium, Monument Valley-White Canyon district: Malan, Roger C. 05392

Engineering geology

Coal mine bumps, Sunnyside district: Osterwald, F. W. 07855

Landslides, slide-prone formations: Shroder, John Ford, Jr. 00864

General

Catalog, samples for geologic research, index: Byrd, William D. 11412

Catalog, samples for geologic research, index: Kayser, Robert B. 10678

Geochemistry

Bear Lake, eutrophication trends, effect on zooplankton: Nyquist, David. 05509

Bingham district, sulfur isotope variations: Field, Cyrus W. 08584

Fairfield area, variscite deposit, scandium content: Frondel, Clifford. 06773

Lead, isotopes, ore deposits: Stacey, J. S. 06945

Northern, Precambrian subgraywacke, analyses: Condie, Kent C. 08582

Park City district, trace chemical data, trend-surface analysis: Nackowski, M. P. 10999

San Juan County, Moses Rock kimberlite, compositional relations: McGetchin, Thomas R. 10775

Geomorphology

Canyons, mesas, popular description: Foushee, Eugene. 03098

Great Salt Lake, fluctuations in size: Straesser, Manfred. 06993

Lake Bonneville, history: Bissell, Harold J. 11442

Landslides, distribution, types, landforms: Shroder, John Ford, Jr. 00864

Sevier River basin, Yuba Dam region, fault-aligned sinkholes: Bjorklund, L. J. 00073

Streams, reservoirs, sediments, basic data: Mundorff, J. C. 02605

Geophysical surveys

Gravity studies, since 1955: Cook, Kenneth L. 10400

Heat flow, selected areas: Costain, John K. 10651

Iron Springs district, Hurricane fault area, gravity: Cook, Kenneth L. 08583

Jordan Valley, fill thickness, seismic: Arnow, Ted. 00791

Midway area, heat flow, thermal springs: Baker, C. H., Jr. 05178

Wasatch Range, canyons, seismic refraction: Mattick, Robert E. 05203

Hydrogeology

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Midway area, thermal springs: Baker, C. H., Jr. 05178

Sevier desert, ground-water resources: Mower, R. W. 04469

Sevier River basin, Yuba Dam region, ground-water flow: Bjorklund, L. J. 00073

Utah—Continued

Hydrogeology—Continued

Skull Valley, ground-water resources, reconnaissance: Hood, J. W. 02431

Uinta Basin, Green River Formation, ground-water resources: Feltis, R. D. 00729

Maps, geologic

Emery County, Delta Mine area and Chinle Formation: Hawley, C. C. 00941

Gunsight Butte quadrangle, NE quarter: Peterson, Fred. 09907

Gunsight Butte quadrangle, NW quarter: Peterson, Fred. 09906

Gunsight Butte quadrangle, SE quarter: Peterson, Fred. 11057

Hatch Point quadrangle, northeast quarter: Hinrichs, E. N. 00333

Juab County, Desert Mountain intrusives: Kattelman, Donald F. 06139

Lehi area, Clinton clay deposit: Henderson, G. V. 01630

Monte Cristo property, Kane Creek: Davidson, Donald M., Jr. 09371

Nipple Butte quadrangle, NE quarter: Waldrop, H. A. 09903

Nipple Butte quadrangle, NW quarter: Waldrop, H. A. 09902

Nipple Butte quadrangle, SE quarter: Waldrop, H. A. 09904

Nipple Butte quadrangle, SW quarter: Waldrop, H. A. 09905

Scipio, Little, and Mills Valleys, Yuba Dam region: Bjorklund, L. J. 00073

Sevier Desert: Mower, R. W. 04469

Maps, ground water

Sevier Desert: Mower, R. W. 04469

Maps, isopach

Cordilleran miogeosyncline: Armstrong, Richard Lee. 01871

Emery County, Chinle Formation: Hawley, C. C. 00941

Maps, mineral resources

Carcass Canyon area, Kaiparowits Plateau, coal: Doelling, Hellmut H. 06325

Mineral production: Stokes, William Lee. 06985

Maps, structure

Emery County, San Rafael Swell: Hawley, C. C. 00941

Mineralogy

Beryl, Topaz Mountain, cause of red color: Nassau, K. 06459

Billingsleyite, East Tintic district, new mineral: Frondel, Clifford. 07541

Braitschite, Grand County, new: Raup, Omer B. 06787

Clay minerals, Kane Creek, uranium-bearing veins: Davidson, Donald M., Jr. 09371

Collecting, southern, concretions, ironstone and limonite: Doelling, Hellmut H. S. 06129

Meta-aluminite, Temple Mtn., Fuenrole mine: Frondel, Clifford. 06574

Montgomeryite, Fairfield area, formula: Mead, Cynthia W. 05232

Pyrophyllite, Lehi area, Manning Canyon Shale: Henderson, G. V. 01630

Sterettite, Fairfield, variscite deposit: Frondel, Clifford. 06773

Paleontology

Annelida, Algae(?), Cambrian, Spence Shale, Wasatch Mts.: Robison, Richard A. 07354

Utah—Continued

Paleontology—Continued

Brachiopoda, Ordovician, Garden City Formation, north-central: Ross, Reuben James, Jr. 02901

Brachiopoda, Ordovician, Pogonip Group, Millard County: Jensen, Ronald G. 10235

Cephalopoda, Ordovician, Garden City limestone, Whiterock nautiloids: Flower, Rousseau H. 01778

Cephalopoda, Ordovician, Lehman limestone: Flower, Rousseau H. 01775

Conodonts, Devonian, western, correlation, Nevada: Clark, David L. 02897

Conodonts, Pennsylvanian, Desmoinesian rocks: Stone, Dwayne David. 07129

Crinoidea, Pennsylvanian, Quirrh Formation, Utah County: Washburn, Alan T. 06141

Echinoidea, Triassic, southwestern, new miocidarid genus: Kier, Porter M. 05675

Fauna, Permian, Phosphoria rock complex, biostratigraphy: Yochelson, Ellis L. 00126

Gastropoda, Ordovician, new genus: Yochelson, Ellis L. 05863

Gastropoda, Paleocene, Flagstaff Formation, Sanpete County: Baldy, Mark B. 00919

Mammalia, Eocene, Green River Formation, Powder Wash rodents: Dawson, Mary R. 02849

Mammalia, Eocene, Uinta Basin, primates: Robinson, Peter. 02806

Mammalia, Eocene, Uinta Formation, Uinta Basin, ischryomyid rodent: Black, C. C. 10948

Palynomorphs, Cretaceous, Straight Cliffs Sandstone, Garfield County: Orlansky, Ralph. 00858

Pisces, Devonian, Water Canyon Fm., Dipnoi: Denison, Robert H. 02833

Pisces, Permian, Halgaito Shale, new rhipidistian: Thomson, Keith Stewart. 07337

Porifera, Triassic, Thaynes Limestone, Wasatch Mts.: Rigby, J. Keith. 10805

Reptilia, dinosaur tracks, Vermilion Cliffs: Spindlove, Earl. 03713

Reptilia, Eocene, crocodylid genus: Wassersug, Richard J. 11185

Reptilia, Jurassic, Dinosaur Natl. Monument: White, Theodore E. 04796

Tracks and trails, Eocene, Green River Formation: Moussa, Mounir T. 06007

Petrology

Juab County, Desert Mountain intrusives: Kattelman, Donald F. 06139

Northeastern, igneous rocks, potassic-silica poor: Best, Myron G. 06576

Northeastern, igneous rocks, silica-poor, associations: Henage, L. F. 10232

Sedimentary petrology

Canyonlands National Park, White Rim Sandstone, structures, environment: Baars, D. L. 08229

Central, Green River Formation, cyclic sediments, environments: Baer, J. L. 10887

East-central, Panther Sandstone, ball-and-pillow structures: Howard, James D. 10309

Fluvial sediments, basic data, 1905-65: Munderhoff, J. C. 02605

Green River Formation, northeastern, cyclic patterns: Picard, M. Dane. 03569

Gunnison Plateau, Colton Formation, lithofacies: Mercantel, Emily L. 11040

Paradox basin, salt: Jones, C. L. 01025

Utah—Continued

Sedimentary petrology—Continued

- Park City mining district, Humbug and Deseret Formations, breccias: Garmoe, W. J. 05377
- San Rafael Swell, Ferron Sandstone, coprolite structures: Stokes, William Lee. 07355
- Shale, siltstone, alluvium, mineral composition: Whelan, J. A. 11371
- Southwestern, Pogonip Group, reef-like structures: Roberts, Harry H. 10256
- Uinta Basin, Duchesne River Formation: Warner, Mont M. 09168
- Uinta Mountain area, Gartra Member of Popo Agie Formation, sedimentary structures: McCormick, C. D. 02487
- Uinta Mountain Group, lithofacies: Crittenden, Max D., Jr. 09984

Stratigraphy

- Cambrian, northern allochthon, cf. Ogden Canyon autochthon: Rigo, Richard J. 06136
- Cambrian, Silver Island Mountains, revision: Robison, Richard A. 00052
- Cambrian-Triassic, Cordilleran miogeosyncline: Armstrong, Richard Lee. 01871
- Carboniferous, Chainman Formation, western, biostratigraphy: Sadlick, Walter. 08065
- Cenozoic, ignimbrites, Sevier Plateau: Rowley, Peter DeWitt. 06557
- Cretaceous, Quaternary, Nipple Butte quadrangle, SE quarter, section: Waldrop, H. A. 09904
- Cretaceous, Quaternary, Nipple Butte quadrangle, SW quarter, section: Waldrop, H. A. 09905
- Cretaceous, Straight Cliffs Formation, coal beds, south-central: Peterson, Fred. 07840
- Cretaceous-Tertiary, Uintah County, conformable relations: Catacosinos, Paul A. 00266
- Eocene, Colton Formation, boundaries, Gunnison Plateau: Mercantel, Emily L. 11040
- Eocene, Green River Formation, Uinta Basin, cyclic patterns: Picard, M. Dane. 03569
- Mesozoic, Quaternary, Gunsight Butte quadrangle, NE quarter, section: Peterson, Fred. 09907
- Mesozoic, Quaternary, Gunsight Butte quadrangle, SE quarter, section: Peterson, Fred. 11057
- Mesozoic, Quaternary, Nipple Butte quadrangle, NW quarter, section: Waldrop, H. A. 09902
- Ordovician, Pogonip Group, Millard County, new reference section: Hintze, L. F. 08732
- Ordovician-Permian, Samaria Mountain area: Beus, Stanley S. 03861
- Ordovician-Silurian, Laketown Dolomite, northeastern: Budge, David R. 08580
- Paleozoic, Grouse Creek area, metamorphosed section: Compton, Robert R. 10830
- Paleozoic-Mesozoic, Paradox basin: Peterson, James A. 01018
- Pennsylvanian, salt deposits, Paradox Basin: Hite, Robert J. 01029
- Pennsylvanian, salt-bearing beds, Paradox basin: Jones, C. L. 01025
- Permian, Lower, western: Barosh, Patrick James. 02638
- Precambrian, Pilot Range, correlation: Woodward, Lee A. 08353
- Precambrian-Cambrian, Beaver Mts., correlation: Woodward, Lee A. 03778
- Precambrian-Cambrian, Huntsville area: Crittenden, Max D., Jr. 10221

Utah—Continued

Stratigraphy—Continued

- Quaternary, Lake Bonneville, sediments: Bissell, Harold J. 11442
- Structural geology*
- Basin and Range, tectonics: Eardley, A. J. 02479
- Central, Laramide tectonics: Weiss, Malcolm P. 10196
- Confusion Range trough: Hose, Richard K. 08285
- Flaming Gorge area, monocline, plunging: Threet, Richard L. 09167
- Grouse Creek area, Paleozoic sequence, metamorphosed: Compton, Robert R. 10830
- Northwestern, Mesozoic orogenic activity: Misch, Peter. 08306
- Ogden Canyon area, thrust faulting, Cambrian strata: Rigo, Richard J. 06136
- Paradox basin, salt anticline: Shoemaker, Eugene M. 01021
- Paradox Basin, Upheaval Dome: Mattox, Richard B. 09428
- Soldier Summit area, Flagstaff Formation, gravity sliding: Moussa, Mounir T. 06138
- Toquerville area, Hurricane Cliffs, faulted anticline: Watson, Robert A. 06137
- Wasatch and House Ranges, antithetic faults: Hintze, Lehi F. 10004
- Wasatch area, southern, Laramide thrusting: Hintze, Lehi F. 10832
- Western, miogeosyncline, orogenic belt, evolution: Armstrong, Richard Lee. 01076

Vanadium*Abundance*

- Meteorites, irons and sulfide nodules: Linn, T. A., Jr. 01979

Analysis

- Electron probe, in presence of titanium: Snetsinger, Kenneth G. 07552

Arizona

- Garnet Ridge, breccia dike: Gavasci, Anna T. 07634

Colorado

- Uraivan mineral belt, occurrence, genesis: Motica, J. E. 05393

Colorado Plateau

- Genesis, occurrence: Fischer, R. P. 05389

Geochemistry

- Magnetite, contents: Collins, Lorence G. 01900

Quebec

- Chibougamau area, Dore Lake complex, occurrence, exploration: Allard, Gilles O. 03609

Veins*Colorado*

- Boulder County, telluride ore, thermometry: Kelly, William C. 07911

General

- Structure, Greenland, Vesterland: Watterson, Juan. 07646

Genesis

- Manganese, Nevada, Nye County: Hewett, D. F. 04221
- Strontium isotopes: Reesman, R. H. 06990

Gold-quartz

- Genesis: Helgeson, Harold C. 04125

Mexico

- Pachuca-Real del Monte district, exploration: Gayne, Arturo R. 04882

Mineralogy

- Ontario, Cobalt district: Petruk, William. 09450

Veins—Continued*Mineralogy—Continued*

Ontario, Cobalt-Gowganda area: Petruk, William. 04130

Ontario

Northern, Precambrian, uranium deposits: Robertson, James A. 07916

Radioactive

Greenland, Ilimaussaq area, mineralogy: Hansen, John. 05024

Structure

Colloform texture, interpretation: Roedder, Edwin. 04230

Systems

Colorado, San Juan Mountains, relations to doming, collapse: Schwarz, Frederick P. 10261

Uranium bearing

Utah, Kane Creek: Davidson, Donald M., Jr. 09371

Wallrock alteration

Idaho, Coeur d'Alene district, Galena mine: Clark, Allen LeRoy. 06546

Zoning

New Mexico, Burro Mountains: Gillerman, Elliot. 01915

Vermont*Areal geology*

Collinsville quadrangle, field trip: Stanley, Rolfe S. 05998

Darling State Park, popular account: Dodge, Harry W., Jr. 09885

Plattsburgh-Rouses Point (N.Y.) quadrangles: Fisher, Donald W. 10515

Waterbury and Thomaston quadrangles, field-trip road log: Gates, Robert M. 05999

Economic geology

Copper, Orange County: Jenks, William F. 00835

Geochemistry

Metamorphic rocks, calcite-dolomite, C-O isotopic ratios: Sheppard, Simon M. F. 10800

Geomorphology

Steep gradient stream, flash flood, erosion: Johnson, Martin L. 08420

Geophysical surveys

Magnetic: Griscom, Andrew. 07207

Glacial geology

Brandon-Ticonderoga quadrangles: Connally, G. Gordon. 11136

Mount Mansfield quadrangle: Connally, G. Gordon. 09762

Southern, deglaciation history: Shilts, William W. 09685

Hydrogeology

Ottawaquechee-Saxtons River basin, ground-water resources: Hodges, Arthur L., Jr. 07624

Wells-Ompompanoosuc River basin, ground-water resources: Hodges, Arthur L., Jr. 07623

West-Deerfield River basin, ground-water resources: Hodges, Arthur L., Jr. 07621

White River basin, ground-water resources: Hodges, Arthur L., Jr. 07622

Maps, geologic

Plattsburgh-Rouses Point (N.Y.) quadrangles: Fisher, Donald W. 10515

Maps, ground water

Ottawaquechee-Saxtons River basin: Hodges, Arthur L., Jr. 07624

Wells-Ompompanoosuc River basin: Hodges, Arthur L., Jr. 07623

West-Deerfield River basin: Hodges, Arthur L., Jr. 07621

White River basin: Hodges, Arthur L., Jr. 07622

Vermont—Continued*Mineralogy*

Collecting localities: Grant, Raymond W. 04339
Vesuvianite, Lowell County, absorption spectra of octahedrally bonded Fe³⁺: Manning, P. G. 02174

Paleontology

Trilobita, Cambrian, Gorge Formation: Clark, Mary Gilman. 02206

Trilobita, Cambrian, Gorge Formation, northwestern: Clark, Mary Gilman. 05768

Trilobita, Ordovician, Chazy Group, Champlain Valley: Shaw, Frederick C. 07019

Petrology

Giles Mountain Formation, plagioclase equilibria: Crawford, Maria Luisa. 08225

Metamorphic rocks, facies: Albee, Arden L. 07252

Ultramafic plutons, structural features: Chidester, Alfred H. 07253

Stratigraphy

Cambrian, Gorge Formation, Highgate Falls: Shaw, Alan B. 02205

Cambro-Ordovician, paleogeography, continental margin: Rodgers, John. 07133

Ordovician, Chazy Group, Champlain Valley, correlation: Shaw, Frederick C. 07019

Pleistocene, problems in development of sequence: Stewart, David P. 09937

Structural geology

Collinsville quadrangle, nappes, field trip: Stanley, Rolfe S. 05998

Hoosick Falls area, thrust sheets, Taconic sequence: Potter, Donald B. 08208

Southeastern, rotated garnets, Paleozoic deformation: Rosenfeld, John L. 07241

Vertebrata*Atlas*

Illustrated, selected specimens: Case, Gerard R. 04347

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Collecting

Beaches and banks, popular account: Thomas, M. C. 09184

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Cretaceous

Manitoba, Vermilion River Formation, Boyne and Pembina Members: Bardack, David. 02177

Mexico, Baja California, El Gallo Formation: Morris, William J. 10024

Devonian

Old Red Sandstone and equivalents, distribution: Allen, J. R. L. 03187

Evolution

Diversity: McCoy, C. J., Jr. 08152

Origin of Amphibia, aqueous-terrestrial transition: Schmalhausen, I. I. 04888

Skeletal development, delamination principle: Jollie, Malcolm. 08935

Skeletal tissues, bone origin, processes: Moss, Melvin L. 08942

General

California, southern, popular guide: Downs, Theodore. 07895

Coal-bearing strata: Westoll, T. S. 05871

Developments, trends, outlooks: Moore, Raymond C. 06031

Microscopic teeth, measurement of angles: Slaughter, Bob H. 05698

Relict and legendary forms, popular account: Ley, Willy. 11200

Vertebrata—Continued*Geographic distribution*

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 North America, midcontinent, Quaternary: Schultz, C. Bertrand. 02329
 Terrestrial, paleoclimatic significance: Colbert, E. H. 04679

Mesozoic

- General, associated with dinosaurs: Kurten, Bjorn. 06166

Morphology

- Comparative odontology, textbook: Peyer, Bernhard. 11199

Permian

- Oklahoma, Early, summary: Olson, Everett C. 11171

Quaternary

- California, Plio-Pleistocene, faunal succession: Downs, Theodore. 05061
 Kentucky, Pleistocene, Big Bone Lick and general: Jillson, Willard Rouse. 09411

Taxonomy

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Tertiary

- Alabama, Graham Ferry Formation(?), Pliocene, Mobile area: Lamb, George. 08162
 Collections, analysis, seriation: Johnson, LeRoy, Jr. 06313
 Kansas, Trego County, WaKeeney local fauna: Wilson, Richard Leland. 06938
 Nebraska, Wyoming, seasonal growth evidence: Voorhies, M. R. 11049
 Nevada, Esmeralda Formation, Pliocene: Mawby, John Evans. 07193
 Texas, Viejia Group, Trans-Pecos: Wilson, John Andrew. 02443

Virginia*Absolute age*

- Amelia area, Rutherford and Morefield pegmatites, discordant ages: Laughlin, A. W. 10507
 Blacksburg area, tectonic events, K-Ar, Rb-Sr: Dietrich, Richard V. 08664
 Petersburg Granite, Precambrian, weathering effects: Bottino, Michael L. 04497

Areal geology

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Earthquakes

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 Mineral resources, Lincoln and Bluemont quadrangles: Parker, Pierre E. 02951
 Petroleum and natural gas, production, 1967: Young, David M. 01136
 Zinc, Austinville-Ivanhoe district: Brown, W. Horatio. 05423

Engineering geology

- Dams, John W. Flannagan Dam: Ern, Ernest H. 08223
 Highways, Scott Run basin, stream erosion during construction: Vice, Raymond B. 00056
 Tunnels, Big Walker Mtn.: Cooper, Byron N. 08001

Virginia—Continued*General*

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Geochemistry

- Central, soils, Frederick, Iredell, Lloyd series: Plaster, Rodger W. 06117
 Emporia area, granite, Rb-Sr ratios, weathering effects: Bottino, Michael L. 07809
 York River estuary, amino acids: Webb, Kenneth L. 09732

Geomorphology

- Barrier islands, evolution: Fisher, John J. 08688
 Chesapeake Bay, erosion, sedimentation: Schubel, J. R. 10966
 Continental shelf, quantitative analysis: Fisher, John J. 07619
 Lee County, Gilley Cave: Baroody, Roger. 07873
 Mountain Lake, history: Marland, Frederick Charles. 01363
 Natural Bridge, origin: Spencer, Edgar W. 00950
 Scott County, Rye Cove, karst and caves, drainage: Holsinger, John R. 07872
 Southeastern, terrace-formation concept, erroneous: Coch, Nicholas K. 07981
 Southwestern, caves, summary: Holsinger, John R. 08954
 Suffolk area, terraces, Pleistocene sea levels: Coch, Nicholas K. 05573
 Wachapreague lagoon and barrier islands, genesis: Newman, Walter S. 04551

Geophysical surveys

- Leesburg quadrangle, magnetic: Toewe, E. Clayton. 01139

Hydrogeology

- Accomack and Northampton Counties, ground-water resources: Sinnott, Allen. 03140
 Central, river basins west of Fall Line, ground water: DeBuchananne, George D. 02074
 Coastal Plain, ground-water resources: DeBuchananne, George D. 02567
 Gilley Cave, drainage systems: Baroody, Roger. 07873
 Ground-water levels, fluctuations, factors: Gathright, Thomas M. 03521
 Princess Anne County, Nansemond Formation, aquifers, levels: Rogers, W. S. 02526
 Scott County, Rye Cove, subterranean drainage: Holsinger, John R. 07872

Maps, geologic

- Arnold Valley quadrangle: Spencer, Edgar W. 00950
 Bennis Church quadrangle: Coch, Nicholas K. 05573
 Bramwell (W.Va.) area: Englund, Kenneth J. 04205
 Buchanan quadrangle: Spencer, Edgar W. 00950
 Buckingham quadrangle: Ern, Ernest H. 03194
 Chuckatuck quadrangle: Coch, Nicholas K. 05573
 Coastal Plain: DeBuchananne, George D. 02567
 Lincoln and Bluemont quadrangles: Parker, Pierre E. 02951
 Martinsville West quadrangle: Conley, James F. 05572
 Natural Bridge quadrangle: Spencer, Edgar W. 00950
 Smithfield quadrangle: Coch, Nicholas K. 05573

Virginia—Continued*Maps, geologic—Continued*

Sugarloaf Mountain quadrangle: Spencer, Edgar W. 00950

Windsor quadrangle: Coch, Nicholas K. 05573

Maps, ground water

Central, river basins west of Fall Line: DeBuchananne, George D. 02074

Coastal Plain: DeBuchananne, George D. 02567

Maps, magnetic

Leesburg quadrangle: Toewe, E. Clayton. 01139

Mineralogy

Amelia area, Rutherford pegmatites: Sinkankas, John. 05971

Rare-earth phosphates, Amherst County, pegmatite: Mitchell, Richard S. 04890

Paleoclimatology

Norfolk area, Pleistocene: Ray, Clayton E. 03172

Paleontology

Conodonts, Ordovician, Martinsburg Formation, southwestern: Rust, Claude Charles. 06558

Conodonts, Ordovician, Whistle Creek Limestone, Lexington: Curran, H. Allen. 08518

Fossils, problematic, Precambrian, Mount Rogers Group: Kopp, Otto C. 09080

Trilobites, Ordovician, Arvonian Slate, Buckingham County: Tillman, C. G. 10349

Vertebrata, Pleistocene, Kempsville Formation, Norfolk area: Ray, Clayton E. 03172

Petrology

Amelia area, Rutherford pegmatites, zoning: Sinkankas, John. 05971

Augusta County, nepheline syenite: Milton, Charles. 10806

Blue Ridge province, Precambrian-Paleozoic magma series: Rankin, D. W. 08849

Buckingham County, basic intrusions: Ern, Ernest H. 10298

Loudoun County, Triassic pyroclastic rocks: Toewe, E. Clayton. 08562

Sedimentary petrology

Big Walker Mountain, Ordovician-Silurian formations: Cooper, Byron N. 08001

Chuckatuck area, Yorktown Formation, coquina facies, bar origin: Bowman, John R. 06158

Harrisonburg area, Edinburg Limestone, slump folding: Lowry, W. D. 11082

James River, White Shoal area, fecal pellets in suspension: Haven, Dexter S. 04990

Northern, limestone conglomerate, description: Dennis, John V. 00819

Princess Anne County, Nansemond Formation, lithofacies: Rogers, W. S. 02526

Rappahannock Estuary, sediment transport: Nichols, Maynard M. 08963

Rockbridge County, Antietam Sandstone, stylolites: Lowry, W. D. 08543

Rockbridge County, central, Middle Ordovician limestones, lithology: Carson, Robert J., 3d. 05059

Stratigraphy

Bramwell (W. Va.) area, new names: Englund, Kenneth J. 04205

Cambrian-Ordovician, Lee County, L. S. Bales well, log: Harris, Leonard D. 09630

Cenozoic, Suffolk area, Yorktown to Sand Bridge formations: Coch, Nicholas K. 05573

Devonian, Millboro Shale, type area, correlation, Romney Group: Hasson, Kenneth O. 10303

Virginia—Continued*Stratigraphy—Continued*

Ordovician, Middle limestones, Rockbridge County, central: Carson, Robert J., 3d. 05059

Paleozoic, Salem synclinorium: Tillman, C. G. 08124

Paleozoic, variations, structural control, Appalachians: Cooper, Byron N. 02477

Pleistocene, late, Virginia Beach area, Mears Corner pit: Luebke, William C. 06159

Precambrian-Cambrian, Lincoln and Bluemont quadrangles: Parker, Pierre E. 02951

Precambrian-Devonian, Botetourt-Rockbridge Counties, boundary area: Spencer, Edgar W. 00950

Tertiary, Yorktown Formation, Chuckatuck area, coquina facies: Bowman, John R. 06158

Structural geology

Appalachians, folds, faults, Paleozoic development: Cooper, Byron N. 02477

Atlantic coast, subsidence, Holocene: Newman, Walter S. 04551

Botetourt-Rockbridge Counties, boundary area: Spencer, Edgar W. 00950

Buchanan County, coal beds, faulting influence: Jeran, Paul W. 08747

Gilley Cave, faults, overturned anticline: Baroody, Roger. 07873

Grayson County, Striped Rock pluton, emplacement level: Riecken, Charles C. 08555

Iron Mountain-Holston Mountain thrust, Ordovician(?) age: Cooper, Byron N. 10851

Lee County, L. S. Bales well, thrust fault: Harris, Leonard D. 09630

Princess Anne County, possible Triassic basin, subsurface: Rogers, W. S. 02526

Roanoke area, Read-Coyner Mtn. fenster, nappe: Hazlett, William H., Jr. 10305

Southeastern, tectonics, post-Miocene: Oaks, Robert Q., Jr. 08206

Southwestern, Bland window: Webb, Fred, Jr. 08566

Southwestern, Salem synclinorium: Tillman, C. G. 08124

Weathering

Petersburg Granite, effects on Rb-Sr ratios: Bottino, Michael L. 04497

Volcanism*Causes*

Viscous heating, dip-slip fault zone, island arcs: Turcotte, D. L. 06332

Experimental studies

Volcanoes, eruptions, repose period patterns: Wickman, Frans E. 05861

Exploration

Infrared methods, line-scanning techniques: Friedman, Jules D. 06389

Mechanism

Ash flows, air-layer lubrication: Shreve, Ronald L. 01164

Pyroclastic flows, types, Lesser Antilles: Sabine, P. A. 07308

Resurgent caldrons, formation stages: Smith, Robert L. 06497

Volcanoes*Alaska*

Augustine Volcano, 1963 eruption: Dettnerman, Robert L. 02704

Mount Katmai and Novarupta, 1912 events: Curtis, G. H. 06496

Saint Augustine Island, color airphoto interpretation: Sobieralski, V. Ralph. 02374

American Samoa

Manu'a Islands: Stice, Gary D. 11380

Volcanoes—Continued

British Columbia

Cascade cones, lavas, compositional variations: McBirney, Alexander R. 07734

California

Big Alkali caldera, Mono County, Bodie Hills: Chesterman, Charles W. 06493

Cascade Range, Cenozoic history and nature, summary: Macdonald, G. A. 02963

Death Valley, Ubehebe Crater, energy of formation: Roddy, David J. 08858

Colorado

San Juan cauldron complex, central: Steven, Thomas A. 11078

San Juan Mountains, cauldron development: Burbank, Wilbur S. 10212

Costa Rica

Poas, 1953 activity: Fernandez Peralta, Ricardo. 09031

Craters

Wall, rim rocks, structural criteria: Seeger, C. Ronald. 11245

Experimental studies

Repose period patterns, stochastic model: Wickman, Frans E. 05861

General

Calderas, tectonic setting, lunar analogs: Elston, Wolfgang E. 07712

Microearthquakes, event counter for seismometer: Decker, R. W. 04823

Guatemala

Pacaya caldera, history, recent activity: Andrews, James Crandall. 05555

Hawaii

Kilauea, 1959-60 eruption, popular account: Herbert, Don. 03151

Kilauea, 1959 eruption, tilting: Eaton, J. P. 08262

Kilauea, eruption rate, survival number function: Wickman, Frans E. 05861

Kilauea, March 1965 eruption: Wright, Thomas L. 00980

Kilauea, particles in fume, 1967 eruption: Cadle, Richard D. 02333

Kilauea Volcano, eruption, December 1965: Fiske, R. S. 02427

Maui, Haleakala Volcano, basalt differentiation: Macdonald, Gordon A. 02001

Mauna Loa, deformation measurements: Decker, R. W. 06524

Puu Hou littoral cones, evolution: Fisher, Richard V. 10921

Waianae, activity span, lavas, absolute ages: Funkhouser, John G. 02531

Mexico

Mexico City area, general: Cserna, Zoltan de. 04885

Sonora, Pinacate Mountains, craters, general description: Townsend, Robert. 03735

Nevada

Esmeralda County, Silver Peak caldera: Robinson, Paul T. 10038

New Mexico

Mount Taylor, peripheral stumps, columnar jointed: Hernandez, F. Louis. 09138

Valles caldera as resurgent cauldron: Smith, Robert L. 06497

Oregon

Andesitic, conference papers: Dole, Hollis M. 07744

Cascade cones, lavas, compositional variations: McBirney, Alexander R. 07734

Volcanoes—Continued

Oregon—Continued

Cascade Range, geophysical data: Blank, H. Richard, Jr. 07747

Mount Hood, debris-flow fan, evolution: Wise, William S. 10837

Mount Hood, general description: Wise, William S. 07742

Mount Mazama, ash-fall volume, caldera genesis: Williams, Howel. 07746

Mount Mazama, lava, compositional variation: McBirney, Alexander R. 07743

Newberry caldera, field trip: Higgins, Michael W. 07741

Pacific Ocean

Circumferential belt, popular account: Heintze, Carl. 06017

Submarine eruptions, detection by Sofar: Norris, Roger A. 00022

United States

Western, Hawaii, and Alaska, collected papers: Coats, Robert R. 06498

Washington

Cascade cones, lavas, compositional variations: McBirney, Alexander R. 07734

Cascade Range, Glacier Peak, history: Tabor, R. W. 10047

*Washington**Absolute age*

Glacier Peak-Lake Chelan area, plutons, K-Ar: Cater, Fred W. 07785

Island County, Pleistocene drift, wood and shells: Easterbrook, Don J. 05044

Juan de Fuca Strait, Pleistocene sediments: Anderson, Franz E. 07649

Okanogan Range, granitic rocks: Hawkins, James W., Jr. 05261

Pasayten River area, intrusions, emplacement: Tabor, R. W. 02713

Stevens County, igneous rocks, plutonic, volcanic events: Yates, Robert G. 05201

Three Springs Bar archeological site, carbon-14: Daugherty, Richard D. 09889

Areal geology

Cascade Range: Grant, Alan R. 09573

Cascade Range, central and southern: McKee, Bates. 07218

Cascade Range, northern: McKee, Bates. 07226

Columbia Plateau, northwestern: McKee, Bates. 07213

Flattery Rocks, Quillayute Needles, Copalis National Wildlife Refuges: Weissenborn, A. E. 00011

Lake Tapps quadrangle: Gard, Leonard M., Jr. 00313

Mount Rainier National Park, popular account: Kirk, Ruth. 03526

Okanogan County, northern, magnesite deposits: Fox, Kenneth F., Jr. 04112

Earthquakes

1952-1967, time lapse presentation: Cramer, Chris H. 10459

Pasco basin, seismicity: Brown, Randall E. 00813

Puget Sound area, changes of level, observation program: Bostrom, R. C. 01522

Economic geology

Bauxite, construction materials, Grays River quadrangle: Wolfe, Edward W. 04889

Gold-silver, Republic area, Knob Hill mine: Taylor, Charles Mosser. 05501

Gold-silver, Republic mining district: Full, Roy P. 05355

Washington—Continued

Economic geology—Continued

- Lead-zinc, Metaline district: McConnel, Roger H. 05354
 Lead-zinc, Van Stone mining district: Cox, Manning W. 05357
 Magnesite, Okanogan County, northern: Fox, Kenneth F., Jr. 04112
 Mineral resources, Cascade Range, exploration potential: Grant, Alan R. 09573
 Mineral resources, Flattery Rocks, Quillayute Needles, Copalis areas: Weissenborn, A. E. 00011

Engineering geology

- Columbia estuary, estuarine improvement: Bessey, Roy F. 02588
 Dams, Cascade border, site geology: Cary, Allen S. 07221
 Dams, Chief Joseph, Columbia River: Twelker, Neil H. 07215
 Dams, Columbia River, Howard A. Hanson dam: Ward, T. E. 07222
 Dams, George Culmback (Sultan) dam: Coombs, Howard. 07223
 Dams, Grand Coulee, areal geology: Vehrs, Robert. 07216
 Dams, Skagit River sites: Coombs, Howard. 07228
 Guidebook, Seattle area: Association Eng. Geologists. 07212
 Highways, Seattle freeway, landslide problems: Anderson, Roy. 07224
 Irrigation project, Columbia basin, problems: Neff, George. 07217
 Landslides, Lower Baker River slide: Olmsted, Terry. 07227
 Landslides, Seattle-Tacoma freeway, Military Road slide: Cary, Allen S. 07225
 Landslides, Wenatchee area, Stemilt Creek basin: Pilz, Hugo A. 07214
 Waste disposal, Spokane Valley, sewage field, test-drilling: Crosby, James W., 3d. 04570

Geochemistry

- Cascade Range, lavas, compositional variations: McBirney, Alexander R. 07734
 Continental shelf, sediments: White, Stanton Moore. 03034
 Okanogan Range, compositional trends, relations to crustal evolution: Hawkins, James W., Jr. 08724
 Southwestern, soils, Al exchange capacity, drying effects: Westfall, Dwayne Gene. 04448

Geomorphology

- Columbia River valley, glacial floods, channelled scablands: Howell, Paul. 09587
 Continental terrace, topography: McManus, Dean A. 08801
 Juan de Fuca submarine canyon, evolution: Carson, Bobb. 08641
 King County, sediment transport: Williams, R. C. 00076
 Mount Rainier, erosion, mass wasting: McKee, Bates. 07219
 Mount Rainier, glacier outburst floods: Richardson, Donald. 05181
 North Cascade Range, rock glaciers: Libby, Willard G. 08295
 Palouse Hills, effect of basalt surface below loess: Ringe, Louis Don. 09854
 Palouse Hills, evolution: Fryxell, Roald. 07731
 Pasco basin, landslides, Pleistocene flooding: Brown, Randall E. 00813
 Puget Sound-Strait of Juan de Fuca, tidal channels, bed roughness: Sternberg, R. W. 03802

Washington—Continued

Geomorphology—Continued

- Sultan dam site, Pleistocene drainage changes: Coombs, Howard. 07223
 Wenatchee River below Leavenworth, preglacial levels, gravels: Long, William A. 00407

Geophysical observations

- Stevens Pass, earth tides, laser interferometer: Vali, V. 02982

Geophysical surveys

- Cascade Mountains, gravity: Aiken, C. 11251
 Continental shelf, seismic: Bennett, Lee C., Jr. 08457
 Gray's Harbor area, continental shelf, seismic: Grim, Muriel S. 08458
 Lake Washington, seismic: Schwarz, Sigmund D. 04848
 Stevens Pass, laser interferometer, earth strains: Vali, V. 09241
 Western, gravity: Danes, Z. F. 10395

Glacial geology

- Blue Glacier, deformation: Fletcher, R. C. 10615
 Blue Glacier, deformation: Kamb, Barclay. 10614
 Blue Glacier, ice, crystal growth: LaChapelle, E. 02544
 Blue Glacier, ice crystals, 3-dimensional shape: Rigby, George P. 02541
 Cascade Range, Ingalls Creek valley: Hopkins, Kenneth D. 08283
 Island County: Easterbrook, Don J. 05044
 Juan de Fuca Strait-Puget Sound area, Vashon ice terminus: Anderson, Franz E. 07649
 Mount Daniel, moraines: Long, William A. 00408
 Mount Olympus, Blue Glacier, cyclic folding: Raymond, Charles F. 11002
 Mount Rainier, Emmons Glacier, P-wave velocity: Ruter, H. 10693
 Mount Rainier, Nisqually Glacier, kinematic wave steepening: Johnson, James N. 00735
 Puget lowland, ice advances: McKee, Bates. 07220
 Tolt River area, drift sheets: Knoll, Kenneth M. 00405

Hydrogeology

- Ground-water levels, 1961-65: U.S. Geological Survey. 02411
 Island County, ground-water quality: Van-Denburgh, A. S. 05046
 Island County, ground-water resources: Anderson, Henry W., Jr. 05045
 King County, water resources: Richardson, Donald. 00075
 Odessa area, ground-water levels: Garrett, A. A. 04777
 Odessa-Lind area, ground-water resources, levels: Luzier, J. E. 04778
 Pasco Basin, ground-water levels, interarea relations: Brown, Randall E. 08579
 Pierce County, central, ground-water resources: Walters, Kenneth L. 09484
 Pullman-Moscow basin, ground-water resources, problems: Crosby, James W., 3d. 04325
 Spokane area, Rathdrum Prairie aquifer, water balance: Pluhowski, E. J. 05180
 Spokane Valley, sewage drain field, soil moisture distribution: Crosby, James W., 3d. 04570

Maps, geologic

- Chevelah Mountain quadrangle: Clark, Lorin D. 07057

Washington—Continued

Maps, geologic—Continued

Coastal area, Cape Flattery to Grays Harbor: Weissenborn, A. E. 00011

Eagle Mountain area, mines: Clark, Lorin D. 07057

Grays River quadrangle: Wolfe, Edward W. 04889

Greenacres quadrangle: Weis, P. L. 04203

Lake Tapps quadrangle: Gard, Leonard M., Jr. 00313

Okanogan County, northern: Fox, Kenneth F., Jr. 04112

Okanogan Range, northwestern: Hawkins, James W., Jr. 05261

Pierce County, central: Walters, Kenneth L. 09484

Maps, ground water

Island County: Anderson, Henry W., Jr. 05045

Island County, quality: VanDenburgh, A. S. 05046

Odessa area: Garrett, A. A. 04777

Pierce County, central: Walters, Kenneth L. 09484

Mineralogy

Clay minerals, Columbia River reservoirs: Knebel, H. J. 03564

Continental shelf, sediments: White, Stanton Moore. 03034

Gold-silver ores, Republic area, Knob Hill mine, electron-probe study: Taylor, Charles Mosser. 05501

Plagioclase, northern, Skagit Gneiss: Misch, Peter. 02516

Siderite, southwestern, Wilkes Formation, coprolite-like bodies, origin: Danner, Wilbert R. 03614

Paleoclimatology

Miocene, subsurface strata, Whatcom basin: Hopkins, William S., Jr. 01885

Paleomagnetism

Neogene lava flows, intensity, stability: Irving, E. 02727

Tertiary, Columbia River basalt: Reitman, Jan D. 08375

Tertiary, Yakima Basalt, south-central: Rietman, Jan D. 10836

Paleontology

Angiosperms, gymnosperms, Miocene, Columbia basalts, Vantage area: Prakash, U. 02549

Angiosperms, Paleogene, Green River Canyon flora, descriptions, biostratigraphy: Wolfe, Jack A. 00532

Angiosperms, Tertiary, Coleman Creek, Latah florule: Klucking, Edward P. 00404

Gymnosperms, Miocene, Rock Island area: Ganders, F. R. 02307

Mammalia, Pliocene, Ellensburg Formation, new mustelid: Bryant, Laurie J. 06802

Mollusca, Quaternary, Lower Grand Coulee: Landye, James J. 00406

Palynology, Tertiary, Lower, western: Sparks, Dennis M. 08043

Palynomorphs, Miocene, Whatcom basin strata: Hopkins, William S., Jr. 01885

Pteridophytes, gymnosperms, Tertiary, Chuckanut Formation, northwestern: Pabst, Marie B. 02582

Petrology

Carlton area, Methow Valley intrusions: McKee, Bates. 00399

Cascade Mountains, Skagit Gneiss, non-anatectic migmatization: Misch, Peter. 02516

Washington—Continued

Petrology—Continued

Cascade Range, Glacier Peak, volcan, batholithic rocks compared: Tabor, R. W. 10047

Cascade Range, volcanics: Smith, A. L. 10778

Cloudy Pass batholith, early eruptive history: Crowder, D. F. 11273

Coast crystalline belt, petrogenesis: White, William H. 09086

Dry Falls area, flood basalts, lava ponding hypothesis: Lefebvre, Richard H. 07932

Dry Falls area, lava-flow correlation: Lefebvre, Richard H. 08542

Ferry County, Boulder Creek Formation, metamorphism: Lyons, David James. 01349

Grays River area, basalts, glass beads, refractive indices: McKee, Edwin H. 02711

Jove Peak, gabbroic orbiculite, igneous origin: VanDiver, Bradford B. 09724

Jove Peak Orbiculite, igneous-metamorphic genesis: VanDiver, Bradford B. 00275

Lake Tapps quadrangle, volcanics, intrusives: Gard, Leonard M., Jr. 00313

Mount Olympus, prehnite-pumpellyite facies metamorphism: Hawkins, James W., Jr. 08276

Mount Pilchuk, quartz monzonite, plagioclase zoning: Wiebe, Robert A. 04499

North Cascade Range, Devore Peak Granodiorite: Libby, Willard G. 08294

Northwestern, metamorphic rocks, aragonite in low-grade facies: Vance, Joseph A. 01041

Okanogan Range, metamorphic rocks: Hawkins, James W., Jr. 05261

Okanogan Range, metamorphic rocks, migmatite genesis: Hawkins, James W., Jr. 10002

Okanogan Range, pre-Mesozoic basement rocks: Menzer, Fred J., Jr. 10023

Pasayten River area, quartz-diorite, granite intrusions: Tabor, R. W. 02713

San Juan Islands, metamorphism, prehnite-pumpellyite facies: Vance, Joseph A. 08343

Wenatchee Mountains, Yakima Basalt, stratigraphy: Rosenmeier, Frederick J. 00397

Yakima River canyon, Yakima River Basalts, stratigraphy: Diery, Hassan D. 00427

Sedimentary petrology

Cascade Range, volcanoclastics, graded beds, turbidity current origin: Swanson, Donald A. 10046

Eastern, western, forest soils, physical properties, erodibility: Balci, A. N. 02269

Gravels, preglacial river, Wenatchee River: Long, William A. 00407

King County, stream sediments, suspended and bedload: Williams, R. C. 00076

Kitsap County, Blakeley Formation: McLean, Hugh. 00400

Offshore, abyssal environments, Quaternary sedimentation, controls: Duncan, John R. 08482

Permian eugeosynclinal rocks, chert, genesis: Danner, Wilbert R. 08653

Soils, northeastern, volcanic ash content: Smith, Henry W. 05622

Western, Paleogene coal-bearing rocks, environment: Vine, James D. 08022

Stratigraphy

Cenozoic, Cascade Range, central and southern: McKee, Bates. 07218

Devonian, northern: Danner, Wilbert R. 03182

Devonian-Quaternary, northwestern: Danner, W. R. 09085

Washington—Continued*Stratigraphy—Continued*

- Eocene-Oligocene, nonmarine rocks, biostratigraphy, King County: Wolfe, Jack A. 00532
 Greenacres quadrangle, sections: Weis, P. L. 04203
 Miocene-Holocene, Pierce County, central: Walters, Kenneth L. 09484
 Miocene-Pliocene, Yakima Basalt, Ellensburg Formation, unconformity: Holmgren, Dennis A. 11061
 Oligocene, Blakeley Formation, Seattle, type area: Fulmer, C. V. 07733
 Oligocene-Miocene, Blakeley Formation, Kitsap County: McLean, Hugh. 00400
 Pleistocene, Island County: Easterbrook, Don J. 05044
 Pleistocene, sediments, Juan de Fuca Strait, paleoecology: Anderson, Franz E. 07649
 Quaternary, glacial sequence, Leavenworth area, revision: Long, William A. 10017
 Quaternary, Three Springs Bar archeological site: Daugherty, Richard D. 09889
 Tertiary-Quaternary, Grays River quadrangle: Wolfe, Edward W. 04889

Structural geology

- Cascade Range, southern: Hammond, Paul E. 00428
 Continental shelf: Bennett, Lee C., Jr. 08457
 Ferry County, Boulder Creek metamorphic terrane: Lyons, David James. 01349
 Gray's Harbor area, continental shelf: Grim, Muriel S. 08458
 Joints, Yakima Basalt: Holmgren, Dennis A. 00430
 Lake Wenatchee area, gneiss, basification by faulting: VanDiver, Bradford B. 08028
 Olympic-Wallowa lineament: McKee, Bates. 10022
 Pasco basin, faults, secondary to folding: Brown, Randall E. 00813
 Wenatchee Mountains, faults: Rosenmeier, Frederick J. 00397

Volcanology

- Yakima Basalt, flow velocities: Shaw, H. R. 08879

Weathering*Andesite*

- California, Cascade Range, geochemistry: Hendricks, D. M. 01073
 California, Cascade Range, mineralogy: Hendricks, D. M. 01072

Arctic climate

- Frost action, rock cracking, Greenland: Malaurie, Jean. 07856
 Northwest Territories, Cornwallis Island, Resolute area: Hannell, F. G. 01517

Arid climates

- General: Smith, H. T. U. 08151
 Rates, California, Mojave Desert: Warnke, Detlef A. 08564

Arizona

- Southeastern, semiarid alluvial deposits, soil genesis: Smith, B. R. 01839

California

- Monterey-Carmel submarine canyons: Martin, Bruce D. 07942
 San Rey Luis watershed, tonalite grus, soil development: Nettleton, Wiley D. 06077

Chemical

- Humid climate, degree from silica-to-alumina ratio: Ruxton, Bryan P. 04431

Weathering—Continued*Clinochlorite*

- Experimental studies, and dissolution: Ross, G. J. 03651

Connecticut

- Western, pre-Wisconsin, field trip: Schafer, J. P. 05943

Cuba

- Limestone areas, crust and coating formation: Panos, Vladimir. 02827

Experimental studies

- Vermiculite, hydrolustite, genesis, Montana: Boettcher, A. L. 07753

Feldspar

- Perthitic, chemical, experimental: Manus, Ronald Warren. 09848
 Relative stability, paleoclimate indicator: Todd, Thomas W. 03542

Florida

- Okeechobee County, soil genesis, deep profile studies: Fiskell, J. G. A. 06950
 Western, Magnolia and Greenville soils, genesis: Caldwell, R. E. 06951
 Western, Marlboro and Faceville soils, genesis: Dantzman, C. L. 06964

Frost action

- Rocks and concrete, geologic factors in damage: Winkler, Erhard M. 04807

Geochemistry

- California, serpentinite: Wildman, W. E. 06756
 Deep-sea sediments, Sr isotopes, established in continental profiles: Dasch, E. Julius. 07770
 Desert varnish, electron probe analysis: Yang, Houn-Yi. 11133
 Great Lakes region, mineral-water equilibrium, aluminosilicates: Sutherland, Jeffrey Clark. 07203
 Maryland, Baltimore area, schist, silicate-water interaction: Bricker, Owen P. 04307
 Mineral-water equilibria in silicates: Kramer, James R. 06053
 Nevada, copper ore: Clement, Stephen C. 04237
 Organic materials, chelating and sequestering agents, exogenic cycle: Pauli, F. W. 04711
 Pegmatite phosphates, phase relations: Leavens, Peter B. 07931
 Radionuclides, short-lived, role over long time periods: McCrone, Alistair W. 01461
 Soils, mineral desilication, reverse leaching: Jackson, M. L. 07434
 Virginia, granite, effects on Rb-Sr ratios: Bottino, Michael L. 07809

Glacial drift

- Iowan drift, age evidence, Iowa, Illinois: Leighton, Morris M. 03449

Granite

- Massachusetts, Virginia, effects on Rb-Sr ages: Bottino, Michael L. 04497

Granitic rocks

- Biotite, role, California, Sierra Nevada: Clark, Malcolm M. 08644

Hawaii

- Soil sequences, influence of rainfall and age: Sherman, G. Donald. 05108

Iowa

- Adair and Harrison Counties, loess watersheds, soil formation: Ruhe, R. V. 07440
 Cary drift areas, hillslope models, soil formation: Walker, P. H. 07438
 Southeastern, tills, profiles: Milling, Marcus Eugene. 06555

Weathering—Continued

Limestone

Florida, Keys, subaerial crusts: Multer, H. G. 00465

Loess

Iowa-Missouri, montmorillonite: kaolinite, Mg distribution: Protz, R. 05965

Maryland

Baltimore-Aberdeen area, Piedmont, Coastal Plain rocks: Cleaves, Emery T. 11233

Mineralogy

Canada, soils, clay minerals: Brydon, J. E. 07431

Soils, salt-affected: Rabie, Farida Hamed. 07147

Missouri

Rolla quadrangle, stone accumulation: Schroeder, Walter A. 08140

New Hampshire

Silicate minerals, chemical, rate: Johnson, Noye M. 01984

New Jersey

Pensauken Formation, lateritic: Bowman, James F., 2d. 07976

Triassic argillite and shale, clay mineralogy: Lodding, William. 07030

North Carolina

Coastal plain, soil catenas, fragipan formation, geomorphic surfaces: Nettleton, W. D. 04218

Coastal plain, soil catenas, fragipan genesis: Nettleton, W. D. 04191

Slate Belt, mica, soil-parent material, relations: Goss, Don Woodson. 07181

Ohio

Western, Celina and Morley soils, argillic horizons, genesis: Smeck, Neil E. 04193

Youngstown area, drift, pre-Wisconsin: Totten, Stanley M. 10195

Oklahoma

Muskogee area, Boggy Formation: Stiegler, Jim. 05271

Wellington Formation, soil products: Culver, James R. 05140

Ontario

Manitoulin Island, soils: Hoffman, Douglas W. 05242

Oregon

Eastern, John Day Formation, lower member: Fisher, Richard V. 02575

Products

Canada, soils, clay minerals: Brydon, J. E. 07431

Leached outcrops, ore guides: Blanchard, Roland. 03143

Oklahoma, diabase dikes, clay minerals: Nichols, Clayton R. 02501

Puerto Rico, quartz diorite, embryo tors?: Cunningham, Frank F. 07333

Red beds, genesis of hematite: Schmalz, Robert F. 00551

Red beds, genesis of hematite: Walker, Theodore R. 00550

Saprolite, pedogenic alteration: Flach, K. W. 07418

Soils, climatic zonation, other factors, concepts: Harris, Stuart A. 07435

Soils, gold content as index: Yassoglou, N. J. 04819

Solodic soils, montmorillonite alteration, Montana: Klages, M. G. 05262

Puerto Rico

Cordillera Central, volcanics: Ehlmann, Arthur J. 10070

Weathering—Continued

Quebec

Saint Hyacinthe County, St. Jude soil: Ledoux, Robert. 06932

Sakami Lake area, greenstone, pseudo-pillows formation: Anderson, Jay Earl, Jr. 00524

Semiarid climate

Arizona, alluvial deposits, soil genesis, clay horizons: Smith, B. R. 01839

Serpentinite

California, soils, montmorillonite formation: Wildman, W. E. 05960

Silicates

Chemical, rate, New Hampshire: Johnson, Noye M. 01984

Mineral-water equilibria: Kramer, James R. 06053

Oxygen controls, acidity and polarization: Kramer, Kenneth Francis. 01734

Soils

Podzolized, amorphous compounds of Fe and Al, analysis: Bernier, B. 02051

Texas

Western, pisolite genesis, Permian: Thomas, Carroll. 07998

Tropical climate

Soils: Saenz Maroto, Alberto. 10517

Ultramafic rocks

Georgia, Cobb County, dike: Grant, Willard H. 08532

Wisconsin

Devils Lake area: Black, Robert F. 02281

Jefferson County, soils, clay accumulation: Allan, R. J. 02263

Jefferson County, soils, silicate genesis: Borchardt, G. A. 02262

Saint Croix-Pierce Counties, glacial drift, profiles: Foss, J. E. 02267

Well logging

Acoustical

Automatic data processing, programs: Dawson-Grove, G. E. 05947

Carbonate reservoir, cf. core data, Montana, Williston basin: Marchant, L. C. 07276

Elastic waves, velocity and attenuation in sand: Gardner, G. H. F. 07277

Interpretation, Michigan, Jacobsville Sandstone: Bacon, L. O. 07817

Interpretation, micro-seismogram log, lithology determination: Spalding, Joe S. 06522

Measurements through casing: Fons, Lloyd. 05952

Volcanics, related to porosity, time-average formula: Carroll, Roderick D. 05553

Automatic data processing

Computer evaluation: Jeffries, F. 06343

Caliper

Interpretation, volcanic rocks, Nevada, Pahute Mesa: Snyder, R. P. 07145

Combination

Carbonate rocks, porosity, permeability evaluation: Harris, John F. 03782

Log-Test-Log, instrumentation, principles, application: Powell, A. R. 07004

Cyclic activation

Possibilities: Givens, W. W. 10952

Dipmeter

Applications, Mississippi-Louisiana, Wilcox sands: Reese, Dale O. 09343

Data, Ohio, central, Trempealeau Formation: Bashe, Robert W. 10923

Well logging—Continued*Dipmeter—Continued*

Interpretation, petrofabrics: Rodriguez, A. R. 07272

Interpretation, petroleum exploration, Alberta: Cox, John W. 06021

Interpretation, shale diapir vs. normally bedded: Gilreath, J. A. 03375

Electrical

Application to rock mechanics, coal mines: Bond, L. O. 06829

Carbonate reservoir, cf. core data, Montana, Williston basin: Marchant, L. C. 07276

Data, Canada, western, formation factor values: Smith, W. D. M. 05935

Data, Florida, Myakka River basin area: Sutcliffe, H., Jr. 06078

Data, Illinois, Beech Creek Limestone: Bristol, Hubert M. 00808

Data, Kentucky, Big Sandy gas field: Ray, Edward O. 03205

Data, Saskatchewan, porosity-water saturation relationships: Heslop, A. 05946

Data, Texas, Delaware basin: Horst, G. F. 10179

Experimental studies, shaly sands, conductivities, model: Waxman, M. H. 02454

Induction, sandstones, environment of deposition: Krueger, W. C., Jr. 09330

Interpretation, low-resistivity sands, Gulf coast: Tixier, M. P. 07346

Interpretation, permeability, saturation evaluation: Timur, A. 11363

Interpretation, salinity, Atlantic Coastal Plain: Manheim, F. T. 05436

Interpretation, saturation, logging parameters, laboratory measurement: Walther, H. C. 07910

Interpretation, spontaneous potential, shaly sands: Smits, L. J. M. 02455

Interpretation, volcanic rocks, Nevada, Pahute Mesa: Snyder, R. P. 07145

Interpretation, water saturation, gas reservoirs: Paul, R. H. 07273

Methods, mapping from Rw and Sh data: Jones, Bob. 05916

Resistivity, interpretation, shale diapir vs. normally bedded: Gilreath, J. A. 03375

Self potential curve, offshore wells: Wallace, W. E. 07286

General

Application, volcanic rocks, hydrologic properties: Blankennagel, Richard K. 03796

Applications, hydrologic studies: Johnson, A. I. 07034

Automatic data processing: Knutson, G. C. 05955

Automatic data processing, computer programs: Dawson-Grove, G. E. 01628

Automatic data processing, input data, standardization: Connolly, E. T. 05953

Automatic data processing, Scanagraph for digitizing logs: Anderson, W. B. 05949

Catalog, logs, Utah: Byrd, William D. 11412

Catalog, logs, Utah: Kayser, Robert B. 10678

Directional surveys, computation, radius of curvature method: Wilson, G. J. 07336

Flow measurements in producing wells: Schaller, Herman E. 07283

Formation evaluation, education, Houston University: Overton, Harold L. 06527

Formation evaluation, education, Tulsa University: Helander, Donald P. 06518

Ground-water exploration, U.S. Geological Survey: Keys, W. Scott. 00067

Well logging—Continued*General—Continued*

Interpretation, Alberta, Devonian carbonates: Dorin, A. H. 05954

Interpretation, carbonate reservoirs: Baird, D. E. 07285

Interpretation, computer technique, gas reservoirs: Schmidt, A. W. 07902

Interpretation, formation factor-porosity relation: Carothers, James E. 06504

Interpretation, grain density value, effect: Granberry, Raymond J. 07278

Interpretation, stratigraphic correlation, Maryland: Hansen, Harry J., 3d. 03169

Interpretation, use of error ratio in least square fitting: Heselدين, G. M. 06516

Interpretation, volcanic rocks, Nevada Test Site: Carroll, Roderick D. 06819

Methods, California, San Joaquin Valley: Kane, Armour. 02868

Methods, interpretation, California, Bolsa Island: Campbell, David G. 04849

Methods, low-resistivity sands, Gulf Coastal Plain: Tixier, M. P. 06513

Offshore wells, problems: Snow, R. B. 07287

Petroleum exploration, technological advances: Hamilton, R. G. 11405

Programs, Illinois basin: Neal, Marvin R. 07961

Techniques, high-angle holes: Crippen, R. G. 07335

Temperature data, source accuracy, application: Hilchie, D. W. 06512

Gravity

Technique, instrumentation, application: McCulloh, T. H. 07279

Magnetic

Interpretation, sandstone properties: Timur, A. 09474

Radioactivity

Automatic data processing, programs: Dawson-Grove, G. E. 05947

Data, Kentucky, Big Sandy gas field: Ray, Edward O. 03205

Density logs, interpretation, Colorado, oil shale: Smith, James Ward. 07280

Gamma-ray, gross-count probe, uranium exploration: Hawkins, William K. 11299

Interpretation, low-resistivity sands, Gulf coast: Tixier, M. P. 07346

Methods, Sidewall Neutron Porosity: Lishman, J. R. 05959

Methods, thermal pulsed neutron, problems: Hilchie, D. W. 05951

Neutron and formation density, oil-bearing formations: Gaymard, R. 06519

Neutron, continuous- and point-logging: Prill, Robert C. 00734

Neutron log, correlation, statistical method: Walters, E. J. 07271

Pulsed neutron, problems, review: Hilchie, D. W. 07281

Temperature

Convective flow effect: Sammel, Edward A. 05299

Interpretation, digital recording, computer analysis: Morris, Billy P. 07282

Wells and drill holes*Alabama*

Coffee County, well records: Turner, J. D. 07141

Conecuh County, well and spring records: Reed, P. C. 07071

Covington County, well and spring records: Turner, J. D. 09477

Wells and drill holes—Continued

Alabama—Continued

Crenshaw County, well records: McWilliams, R. G. 07074

Dale County, well records: Newton, J. G. 07073

Henry County, well and spring records: Newton, J. G. 09441

Pike County, well and spring records: Shamburger, V. M., Jr. 07070

Alberta

Edmonton area, central, logs: Bayrock, L. A. 09492

Rocky Mountains, southeastern, well logs: Aitken, J. D. 00548

West-central, townships 11-25, water-well data: Geiger, K. W. 11284

Appalachians

Oil wells, log cf. core analyses: Duda, J. R. 09277

Arctic Ocean

Cores, sediments, climatic implications: Tsunemasa, Saito. 08186

Arizona

Coconino County, selected wells, basic ground-water data: McGavock, E. H. 00566

Paradise Valley, Maricopa County, well records and drillers' logs: Arteaga, F. E. 01879

Waterman Wash area, ground-water data: Denis, E. E. 03141

Atlantic Ocean

Florida shelf to Blake Plateau, well cores, mineral facies: Weaver, Charles E. 02540

California

Borrego, Carrizo, San Felipe Valley areas, water wells, springs: Moyle, R. W., Jr. 11016

Central, subsiding areas, cores: Johnson, A. I. 00312

Canada

Rocky Mountain Foothills, lithologic logs: Stott, D. F. 03137

Caribbean Sea

Nicaragua Rise, cores: Bolli, H. M. 01070

Colorado

Northwestern, Piceance Creek basin, logs of test holes and wells: Coffin, D. L. 02086

Rocky Mountain Arsenal, cores, Precambrian rocks: Wrucke, Chester T. 00787

Slick Rock district, Mancos Shale core, zones: Shawe, Daniel R. 02720

Connecticut

Southeastern, coastal river basins, logs: Cervione, Michael A., Jr. 02430

Delaware

New Castle County, well logs, Potomac Formation, sand distribution: Jordan, Robert R. 02529

Florida

Charlotte, De Soto, Hardee Counties, well records: Kaufman, M. I. 01488

Econfina Creek basin, drillers' logs and well records: Musgrove, R. H. 07299

Everglades National Park, drillers' logs: U.S. Army Corps Engineers. 11365

Myakka River basin area, logs, drillers' and geophysical: Sutcliffe, H., Jr. 06078

Well data and water levels, 1963-64: Healy, Henry G. 01877

Georgia

Eastern, well logs: Georgia Geological Society. 06074

Gulf of Mexico

Cores, clay minerals: Scafe, Donald William. 04547

Wells and drill holes—Continued

Idaho

Southeastern, phosphate deposits: Harris, H. D. 09109

Illinois

Shelby County, well records: Sanderson, E. W. 09522

Kansas

Republican River area, logs of wells and test holes: Fader, Stuart W. 04781

Michigan

Gogebic County, drillers' logs: Doonan, C. J. 06989

Northern, Silurian carbonates, boreholes, correlation: Sanford, John T. 04719

Mississippi

Harrison County, water wells: Newcome, Roy, Jr. 01491

Montana

North-central, Judith River Formation, well records: Osterkamp, W. R. 04759

Nebraska

Platte River drainage area, lower, test-hole logs: Barnes, Ivan. 01490

Polk County, water wells, records: Smith, F. A. 01642

Nevada

Butte Valley, spring and well records, drillers' logs: Glancy, Patrick A. 07697

Diamond Valley, drillers' logs: Harrill, J. R. 04805

Mesquite-Ivanpah Valley area, well records and drillers' logs: Glancy, Patrick A. 07965

Moapa-Lake Mead area, well data and drillers' logs: Rush, F. Eugene. 08013

Smoke Creek-San Emidio Desert area, drillers' logs: Glancy, Patrick A. 02576

Snake River basin, well records and logs: Moore, Donald O. 07344

Thousand Springs Valley, well records and drillers' logs: Rush, F. Eugene. 07345

New Brunswick

Moncton map-area, Carboniferous rocks, logs: Carr, P. A. 00977

New Jersey

Atlantic County, well records and logs of wells: Clark, Glenn A. 05640

Essex County, well records: Nichols, William D. 07923

Monmouth County, well logs and records: Jablonski, Leo A. 08014

Rahway area, well records and logs: Anderson, Henry R. 05623

New Mexico

GNOME shaft, section: Gard, Leonard M., Jr. 04059

McKinley County, southeastern, well and spring records: Cooper, James B. 01878

New York

Crown Point Fish Hatchery area, logs of test wells: Kantrowitz, I. H. 07647

Suffolk County, Brookhaven Natl. Laboratory, well logs: Warren, M. A. 11438

North Carolina

Belhaven area, well records: Lloyd, Orville B., Jr. 09491

Chowan County, well records: Lloyd, Orville B., Jr. 08899

North Dakota

Grand Forks County, wells and springs: Kelly, T. E. 00066

Wells and drill holes—Continued*North Dakota—Continued*

- Renville and Ward Counties, water-well logs:
 Pettyjohn, Wayne A. 01051
 Water wells, levels, 1966: Randich, P. G. 00827
 Wells County, water-well logs: Buturla, Frank,
 Jr. 01052

Nova Scotia

- Water-well records, 1966-67: Nova Scotia De-
 partment of Mines. 11194

Ohio

- Great Miami River valley, lower, well records:
 Spieker, Andrew M. 05558

Ontario

- Bothwell area, observation well, log: Mellary, A.
 A. 05010
 Southwestern, well records, 1960-63: Ontario
 Water Resources Commission. 05641

Oregon

- Santiam River basin, lower, well records and
 drillers' logs: Helm, D. C. 04321

Pennsylvania

- Bradford County: Woodrow, Donald L. 09499
 Chester County, water well yields: Poth, Charles
 W. 03192
 Southwestern, core-log data, computer methods:
 Kent, Bion H. 07913

Quebec

- Anticosti Island, boreholes, oil exploration:
 Roliff, W. A. 04718

Saskatchewan

- South Saskatchewan reservoir area, well data:
 vanEverdingen, R. O. 00976

South Carolina

- Greenville County, well records: Koch, Neil C.
 07172

South Dakota

- Britton area, test-hole logs and well records: Mc-
 Meen, James W. 09914
 Brookings area, test-hole logs and well records:
 Barari, Assad. 09924
 Bryant area, test-hole logs and well records: Jor-
 gensen, Donald. 09916
 Burke area, test-holes logs and well records:
 Christensen, Cleo M. 09913
 Dell Rapids area, test-hole and well logs, well
 records: Barari, Assad. 09920
 Eureka area, test-hole logs, well records: Steece,
 Fred V. 11058
 Faulkton area, test-hole logs and well records:
 Christensen, Cleo M. 09909
 Lake Andes area, test-hole logs and well
 records: Shurr, George W. 09918
 Lake Norden area, test-hole logs and well
 records: Jorgensen, Donald. 09915
 Lake Preston area, test-hole logs and well
 records: Hedges, Lynn S. 09910
 Menno area, test-hole logs and well records:
 Bruce, Richard L. 09911
 Miller area, test-hole logs and well records:
 Christensen, Cleo M. 09912
 Mission area, test-hole logs: Barari, Assad.
 11255
 Mitchell area, test-hole and well logs, well
 records: Barari, Assad. 09922
 Pickereel Lake, sediment core: Watts, W. A.
 01999
 Selby area, test-hole logs, and well data: Wong,
 H. D. 11060
 Sioux Falls area, test-hole logs: Vaughan, Ken-
 neth D. 06892
 Tyndall area, test-hole logs and well records:
 Bruce, Richard L. 09908

Wells and drill holes—Continued*South Dakota—Continued*

- Viborg area, test-hole logs and well records:
 Beffort, J. David. 09923
 Water-well logs, formation tops: Schoon, Robert
 A. 09076
 Waubay area, test-hole logs and well records:
 Beffort, J. David. 09921
 Wessington Springs area, test-hole and well logs,
 well records: Steece, Fred V. 09919
 Winner area, test-hole logs: Barari, Assad.
 09917

Tennessee

- Cookeville East quadrangle, drillers' logs: Munn,
 M. J. 11189
 Silerton quadrangle, driller's log: Sykes, C.
 Ronald. 05539
 Springfield North quadrangle, drillers' logs:
 Hershey, Robert E. 07607
 Youngville quadrangle, drillers' logs: Hershey,
 Robert E. 07608

Texas

- Liberty County, water wells and springs: Anders,
 R. B. 00815
 Nueces and San Patricio Counties, water-well
 records: Shafer, George H. 01534
 Nueces River valley, lower, test-hole logs: Gar-
 za, Sergio. 01533
 Polk County, well records and drillers' logs:
 Tarver, George R. 04216
 San Jacinto County, water-well logs: Sandeen,
 W. M. 04217
 Tyler County, water wells: Tarver, George R.
 01535
 Upton County, water well and test hole records:
 White, D. E. 01773

Utah

- Skull Valley, drillers' logs and well records:
 Hood, J. W. 02431

Vermont

- Ottawaquechee-Saxtons River basin, water wells,
 test borings: Hodges, Arthur L., Jr. 07624
 Wells-Ompompanoosuc River basin, water
 wells, test borings: Hodges, Arthur L., Jr.
 07623
 West-Deerfield River basin, water wells and test
 borings: Hodges, Arthur L., Jr. 07621
 White River basin, water wells and test borings:
 Hodges, Arthur L., Jr. 07622

Virginia

- Accomack and Northampton Counties, well
 logs, ground-water data: Sinnott, Allen. 03140
 Lee County, L. S. Bales well, log: Harris,
 Leonard D. 09630
 Princess Anne County, wells: Rogers, W. S.
 02526

Washington

- Island County, drillers' logs, water wells: Ander-
 son, Henry W., Jr. 05045
 Odessa area, well records and driller's logs: Gar-
 rett, A. A. 04777

West Virginia

- Tuscarora Sandstone and pre-Silurian test wells:
 Patchen, Douglas G. 05464

West Indies*Absolute age*

- Coral reefs, Pleistocene, C-14: Richards, Horace
 G. 08554

Areal geology

- Bonaire: Zonneveld, J. I. S. 07046
 Montserrat, southern: Rea, W. J. 06953

Geochemistry

- Saint Kitts, Mount Misery Volcano, basalt, an-
 desite, analyses: Baker, P. E. 03887

West Indies—Continued*Geochemistry—Continued*

Volcanic rocks, strontium isotope ratios, island arcs: Pushkar, Paul. 00518

Geomorphology

Bimini, beach erosion, sediment dispersal: Boon, John D., 3d. 00529

Cuesta development, climate effect: Blume, Helmut. 07616

Saint Vincent, leeward reefs: Adams, R. D. 04436

Mineralogy

Saint Kitts, Mount Misery Volcano, basalt, andesite: Baker, P. E. 03887

Paleontology

Foraminifera, Holocene, benthonic, bibliography: Seiglie, George A. 06024

Foraminifera, Tertiary-Quaternary, Barbados Ridge, cores: Ramsay, A. T. S. 07978

Radiolaria, Tertiary outcrops, trissocyclids: Goll, R. M. 06006

Reptilia, Pleistocene(?), Navassa, list: Patton, Thomas H. 00805

Petrology

Calcalkaline volcanic rocks, melting relations: Brown, G. M. 01568

Lesser Antilles, lava, island-arc development stage from composition: Baker, P. E. 07014

Saint Kitts, Mount Misery Volcano, lavas, ejecta: Baker, P. E. 03887

Sedimentary petrology

Bonaire, southern, Holocene sediments: Lucia, F. J. 03543

Saint Lucia Island, Port Castries Bay, benthonic foraminiferal ecology: Schafer, Charles T. 06589

Stratigraphy

Tertiary-Quaternary, Barbados Ridge, cores: Ramsay, A. T. S. 07978

Structural geology

Antillean arc-trench relations: Glover, Lynn, 3d. 01730

Island-arc genesis, sea-floor spreading: Donnelly, Thomas W. 07926

Relation to Pacific basin: Fourmarier, P. 06700

Volcanology

Lesser Antilles, pyroclastic-flow deposits, types: Sabine, P. A. 07308

West Virginia*Absolute age*

Morgantown area, Pleistocene lake deposit, carbon-14: Clendening, John A. 10291

Areal geology

General: Donaldson, Alan C. 08012

Economic geology

Ceramic materials, Randolph County, refractory clay: Englund, Kenneth J. 02612

Gravel, occurrence, properties: Arkle, Thomas, Jr. 08903

Limestone, western, resources: Kusler, David J. 01151

Mineral resources, Bramwell area: Englund, Kenneth J. 04205

Mineral resources, Charleston area: Haight, Oscar L. 08053

Natural gas, eastern, Oriskany Sandstone-Huntersville Chert: Patchen, Douglas G. 05463

Natural gas, Kanawha Forest, Ripley, and Rocky Fork fields: Patchen, Douglas G. 04158

Natural gas, Kanawha-Jackson Counties, development: Haney, Gene. 03240

Natural gas, Tuscarora Sandstone and pre-Silurian wells: Patchen, Douglas G. 05464

West Virginia—Continued*Economic geology—Continued*

Natural gas, Wayne County area, Keefer Sandstone: Patchen, Douglas G. 04801

Petroleum and natural gas, Vadis field: Milner, William. 05577

Petroleum, natural gas, Greenbrier Limestone: Haight, Oscar L. 07617

Petroleum, natural gas, Ohio, Brooke, and Hancock Counties: Haight, Oscar L. 08926

Engineering geology

Highway geology symposium: Erwin, Robert B. 08011

Land subsidence, Bentons Ferry-Fairmount highway: Thompson, Berke L. 07999

Landslides, occurrence and correction: Leach, Richard C. 07968

Tunnels, East River Mtn.: Smith, James D. 08000

General

Geological Survey, Geologic Data Section, program: Latimer, I. S., Jr. 01715

Geomorphology

Bone-Norman cave system, description: Davis, John O. 07876

Cassell Cave, effect of faulting: Eddy, G. E. 07877

Flower Pot Cave, description: Medville, Douglas. 07874

Friars Hole karst area: Bicking, Lewis A. 09178

Great Savanna, caves: Rutherford, John M. 08970

Greenbrier County, caves, survey data, correlation with joints: Rutherford, John M., Jr. 07783

Mineral-Grant Counties, Wills Mountain anticlinorium, transverse drainage: Clark, G. Michael. 08645

The Hole, description: Rutherford, John M., Jr. 07875

Tucker County, Cave Hollow System: Smith, Gordon L. 10867

Hydrogeology

Kanawha River valley, ground-water resources: Wilmoth, Benton M. 05579

Monongahela River basin, Devonian-Permian aquifers: Ward, Porter E. 07461

Maps, geologic

Bramwell area: Englund, Kenneth J. 04205

Charleston area: Haight, Oscar L. 08053

General: Cardwell, Dudley H. 06712

Monongahela River basin: Ward, Porter E. 07461

Maps, mineral resources

Charleston area: Haight, Oscar L. 08053

Maps, oil and gas

Ohio, Brooke, and Hancock Counties: Haight, Oscar L. 08926

Maps, structure

Greenbrier Limestone: Haight, Oscar L. 07617

Paleontology

Crinoidea, Pennsylvanian, Brush Creek Limestone, new: Burke, J. J. 04331

Man, fossil, Holocene, Charleston area, St. Albans site, artifacts: Broyles, Bettye J. 01714

Palynology, Quaternary, Cranesville Swamp, profile: Cox, Donald D. 04346

Palynomorphs, Pennsylvanian, Dunkard Group, new: Clendening, John A. 06303

Palynomorphs, Pennsylvanian, Redstone coal seam: Habib, Daniel. 02506

Pteridophytes, Devonian, Hampshire shale, new: Andrews, Henry N. 09348

West Virginia—Continued

Sedimentary petrology

Appalachian region, Catskill Formation, facies: Allen, J. R. L. 03441

Morgantown area, Pleistocene lake deposit, mineral composition: Clendening, John A. 10291

Pennsylvanian nonmarine sedimentation models: Ferm, J. C. 08177

Stratigraphy

Bramwell area, new names: Englund, Kenneth J. 04205

Devonian, Catskill Formation, Appalachian region: Allen, J. R. L. 03441

Devonian, Romney Group, correlation with Millboro Shale: Hasson, Kenneth O. 10303

Mississippian, Greenbrier Limestone: Haught, Oscar L. 07617

Mississippian, Greenbrier Limestone, southwestern: Thomas, Lloyd R. 05580

Pennsylvanian, Allegheny Formation, depositional environment: Ferm, John C. 03440

Pennsylvanian, Charleston area: Haught, Oscar L. 08053

Pennsylvanian, Upper, Redstone coal seam, paleoecology: Habib, Daniel. 02506

Sections: Cardwell, Dudley H. 06712

Structural geology

Cassell Cave, reverse faults: Eddy, G. E. 07877

Harpers Ferry area, Blue Ridge, thrust fault: Burford, Arthur E. 10287

Wisconsin

Absolute age

Northeastern, Penokean granitic rocks, U-Pb: Banks, Philip O. 08608

Pleistocene chronology, Wisconsinan Stage, C-14: Black, Robert F. 02282

Areal geology

Central, guidebook, greenstone belt: Tri-State Geological Field Conf. 04793

Dunn County: Olcott, Perry G. 09142

Green Bay and Gravel Island National Wildlife Refuges: Dutton, Carl E. 00022

Economic geology

Lead-zinc, Upper Mississippi Valley district: Heyl, Allen V. 05408

Uranium, reconnaissance, 1952-56: U.S. Atomic Energy Commission. 08994

Engineering geology

Slope stability, Milwaukee, lake bluff: Murphy, W. G. 07860

Waste disposal, Westby area, ridge and furrow method: Bendixen, Thomas W. 00092

General

Baraboo region, geological vandalism: Paull, Richard A. 07836

History of research, thermoluminescence, Univ. Wisconsin: Daniels, Farrington. 03982

Geochemistry

Iron, Lake Mendota sediments, distribution: Nriagu, Jerome O. 02250

Jefferson County, soils, silicate genesis: Borchardt, G. A. 02262

Lake Mendota, nitrogen cycle: Brezonik, Patrick Lee. 04451

Lakes, manganese: Delfino, Joseph John. 06534

Madison area, Lake Mendota sediments, sulfur compounds: Nriagu, Jerome O. 04473

Saint Croix-Pierce Counties, soils, trace elements: Foss, J. E. 02267

Sedimentary rocks, rare-earth concentrations, mineral phases: Collins, Kenneth Alan. 02029

Wisconsin—Continued

Geochemistry—Continued

Southwestern, geochemical prospecting, zinc: DeGeoffroy, J. 06944

Geomorphology

Devils Lake area, general: Black, Robert F. 02281

Driftless area, landforms, structural control: Palmquist, Robert C. 10113

Southwestern, Troy Valley, buried, configuration: Green, J. H. 02705

Geophysical surveys

Keweenaw province, crustal structure, seismic: Farnham, Paul Rex. 02630

Regional, magnetic, airborne: Patenaude, Robert William. 01352

Glacial geology

Bloomer area, moraines, ice-stagnation features: Black, Robert F. 07805

Devils Lake area, general: Black, Robert F. 02281

Hydrogeology

Dunn County, ground water, irrigation potential: Olcott, Perry G. 09142

Maps, geologic

Marathon County: Tri-State Geological Field Conf. 04793

Mineralogy

Clay minerals, Jefferson County, soils, genesis: Borchardt, G. A. 02262

Paleontology

Bryozoa, Ordovician, Champlainian limestones, southwestern: Bork, Kennard B. 05771

Diatoms, Pleistocene, Trempealeau Valley, nomenclature: Andrews, George W. 00560

Petrology

Ashland County, Mellen Granite: Katzman, Michael M. 10973

Ashland County, Mellen Granite, lithologic phases: Katzman, Michael M. 07792

Northeastern, rapakivi granites, genesis of mantles: Elders, W. A. 00528

Precambrian rocks, potash metasomatism in granitization: Gore, Dorothy J. 05078

Temperly-Thompson district, carbonate rocks, alteration: Cahoon, Bobby G. 08636

Sedimentary petrology

Jefferson County, soils on drumlins, clay accumulation: Allan, R. J. 02263

Jefferson County, soils, size analysis: Borchardt, G. A. 02262

Lake Superior area, armored mud balls, genesis, destruction: Dickas, A. B. 06614

Lake Superior shore and Michigan basin, red clay sediments: Petersen, G. W. 02288

Lake Superior shore, bottom sediments: Horton, J. W. 07798

Northeastern, esker, crevasse fillings differentiated: Suttner, Lee J. 10121

Northeastern, fragipan soils: Olson, Gerald W. 02277

Northern, Keweenaw clastics: Hite, David Marcel. 02633

Saint Croix-Pierce Counties, soils, genesis, morphology: Foss, J. E. 02267

Southern, Platteville Formation: Rassam, Ghasan Noel. 02624

Stratigraphy

Paleozoic, nomenclature, subsurface correlation: Ostrom, Meredith E. 09194

Pleistocene, Wisconsinan Stage, definition, sub-stages: Frye, John C. 04839

Wisconsin—Continued

Stratigraphy—Continued

Precambrian, Keweenawan, northern, correlation: Hubbard, Harold A. 10955

Quaternary, Wisconsinan Stage, new chronology: Black, Robert F. 02282

Structural geology

Milwaukee County, fault zones, well-log evidence: Distelhorst, Carl A. R. 02280

Weathering

Jefferson County, drumlin soils, clay accumulation: Allan, R. J. 02263

Jefferson County, soils: Borchardt, G. A. 02262

Saint Croix-Pierce Counties, glacial drift, profiles: Foss, J. E. 02267

Worms

Cambrian

Northwest Territories, Lower, Ellesmere Island: Cowie, J. W. 03888

Devonian

New York, Cardiff Shale: Cameron, Barry. 09758

Scalarituba missouriensis

Paleozoic, North America, distribution, filled burrows: Conkin, James E. 04329

Wyoming

Absolute age

Absaroka Mountains, Mummy Cave fill, prehistoric record: Wedel, Waldo R. 00597

Artifacts, Quaternary, Altitheermal: Husted, Wilfred M. 02328

Big Horn Mountains, Precambrian granite and gneiss: Heimlich, Richard A. 00647

Bighorn Mountains, Precambrian rocks, K-Ar: Heimlich, Richard A. 07883

Medicine Bow Mountains, metasediments: Houston, R. S. 10680

Medicine Bow Mountains, Precambrian chronology: Hills, F. Allan. 05055

Rocky Mountains area, Precambrian chronology: Giletti, Bruno J. 04710

Wind River Range, Granite Lake pluton, isotope systematics: Naylor, R. S. 10736

Areal geology

Black Hills area, guidebook: Wyoming Geological Association. 05903

Grand Teton National Park: Love, J. D. 05987

New Rambler district: McCallum, M. E. 07983

Northeastern, field trip log: Mohl, K. L. 05881

Yellowstone National Park, guidebook: Wayne State University. 07680

Earthquakes

1965, Yellowstone-Hebgen Lake region: Eaton, J. P. 08263

Economic geology

Bentonite, occurrence, resources: Thorson, Thomas A. 05878

Coal, Black Hills area, resources, evaluation: Levene, Harold. 05920

Coal, Project Thunderbird: Wold, John S. 05901

Gold, copper, platinum, New Rambler district: McCallum, M. E. 07983

Gold, platinum, Centennial Ridge district: McCallum, M. E. 07982

Iron, Albany County, Iron Mountain magnetite deposit, genesis: Reinking, Robert Louis. 01353

Iron, Atlantic City district: Bayley, Richard W. 05399

Iron, Iron Mountain, titaniferous: Hagner, Arthur F. 05402

Metals, south-central, occurrence: Tweto, Ogden. 05403

Wyoming—Continued

Economic geology—Continued

Mineral resources, Fish Lake quadrangle, limitations: Rohrer, Willis L. 00296

Mineral resources, Munger Mountain quadrangle: Albee, Howard F. 01424

Natural gas, Church Buttes field, occurrence: Gras, Victor B. 02143

Natural gas, Green River basin, occurrence: Krueger, Max L. 02142

Natural gas, Hanna and Laramie basins, occurrence: Mitchell, Steven D. 02146

Natural gas, Rock Springs uplift, occurrence: Reese, Douglas L. 02144

Natural gas, Sand Wash basin, occurrence: Masters, Charles D. 02149

Natural gas, Wamsutter arch, occurrence: Ritzma, Howard R. 02145

Natural gas, Wind River basin, occurrence: Paape, Donald W. 02141

Oil shale, Eden area, resources, possibilities: Smith, John Ward. 06152

Oil shale, Green River, physical properties: Tihen, S. S. 05664

Petroleum and natural gas, Iron Creek field: Dahill, Murray P. 09369

Petroleum, Black Hills area, Dakota Sandstone: Runge, John S. 05912

Petroleum, Kitty field, occurrence: Swirczynski, Richard P. 05910

Petroleum, northeastern, Muddy Sandstone: Guess, Roy H. 05907

Petroleum, occurrence, Muddy Sandstone: Wulf, George R. 05905

Petroleum, Recluse field, occurrence: Hinton, Gene. 05911

Petroleum, South Coyote Creek field, production: Hegna, Earl T. 05913

Petroleum, West Moorcroft and Wood fields: Mettler, Donald E. 05914

Platinum, associated elements, Centennial district, New Rambler mine area: Theobald, P. K., Jr. 05734

Uranium, Black Hills area: Hart, Olin M. 05395

Uranium, Black Hills area, Edgemont district: Bowles, C. Gilbert. 05868

Uranium, central, genesis, exploration: Rackley, R. I. 09455

Uranium, conference papers: Wyoming Governor's Conf. on Uranium. 00024

Uranium, exploration, review: Grutt, E. W., Jr. 00023

Uranium, Powder River basin: Mrak, Vernon A. 05396

Uranium, production: Flanagan, Phillip E. 05917

Uranium, Shirley basin: Bailey, R. V. 00001

Uranium, Shirley Basin: Harshman, E. N. 05397

Uranium, Shirley basin, solution mining: Anderson, J. S. 09570

Uranium, Wyoming basin: Harshman, E. N. 05394

Engineering geology

Reservoirs, Anchor Reservoir area, sink development, seismic survey: Godson, Richard H. 05038

Slope stability, Bighorn Mountains, Shell Canyon: Schuster, R. L. 10260

Geochemistry

Laramie Range, batholith, related metamorphics: Condie, Kent C. 00008

Mowry Shale, organic carbon, geochemical prospecting: Schrayner, G. J. 05906

Wyoming—Continued

Geochemistry—Continued

- New Rambler mine area, platinum, geochemical prospecting: Theobald, P. K., Jr. 05734
Yellowstone Park, rhyolite, alteration by hot springs: Raymahashay, Bikash C. 01983

Geomorphology

- Beartooth Mountains, periglacial boulder clusters, piping: Smith, H. T. U. 07392
Big Horn Mountains, drainage, pre-Pleistocene relicts, Buffalo area: Nelson, Robert S. 06948
Loess, origin in High Plains, western: Lugn, A. L. 02330
Medicine Bow Mountains, east-central, erosion, Cenozoic episodes: McCallum, M. E. 01713
Northwestern, Carter Mountain landslides: Pierce, William G. 05200
Southern, Sherman Granite, bedrock-topographic relations: Eggler, David H. 10895

Geophysical surveys

- Anchor Reservoir area, seismic: Godson, Richard H. 05038
Grand Teton National Park and vicinity: Behrendt, John C. 07532
Gravity field, effect of structure: Malahoff, Alexander. 11320
Powder River basin, electrical logging: Jones, Bob. 05916
Southeastern, gravity: Smithson, Scott B. 10399
Water-table depth, alluvium thickness, seismic: Duguid, James Otto. 01505
Yellowstone Park, geyser basins, thermal water, heat, discharge: Fournier, Robert O. 08692
Yellowstone Park thermal areas, drill holes: White, D. E. 11128

Geothermal energy

- Old Faithful geyser, physical model: Geis, Fred, Jr. 01508

Glacial geology

- Absaroka Mountains, Galena Creek rock glacier: Potter, Noel, Jr. 11073
Yellowstone Lake area, ice-accumulation center, late Pleistocene: Richmond, Gerald M. 10254

Hydrogeology

- Green River basin, ground-water resources: Welder, George E. 07922
Ground water, radioactivity in bog: Sturges, David L. 00140
Ground-water levels, 1961-65: U.S. Geological Survey. 02411
Peat, hydrologic properties in mountain bog: Sturges, David L. 04984
Wind River basin area, aquifers: Whitcomb, Harold A. 01645
Yellowstone Park, hydrothermal explosions, Pleistocene: Muffer, L. J. P. 08817

Maps, geologic

- Big Creek area: Houston, R. S. 10680
Bradley Peak quadrangle: Bayley, Richard W. 06486
Centennial Ridge gold-platinum district: McCallum, M. E. 07982
Downs Mountain taconite area: Worl, R. G. 07972
Fish Lake quadrangle: Rohrer, Willis L. 00296
Grand Teton National Park and vicinity: Behrendt, John C. 07532
Grand Teton National Park and vicinity: Love, J. D. 11319
Grand Teton National Park and vicinity: Reed, John C., Jr. 07514
Green River basin: Welder, George E. 07922

Wyoming—Continued

Maps, geologic—Continued

- Laramie Range, northern and central: Condie, Kent C. 00008
Medicine Bow Mountains: Hills, F. Allan. 05055
Medicine Bow Mountains: Houston, R. S. 10680
Muddy Gap quadrangle: Reynolds, Mitchell W. 06484
Munger Mountain quadrangle: Albee, Howard F. 01424
New Rambler district: McCallum, M. E. 07983
Pat O'Hara Mountain quadrangle: Pierce, William G. 04767
Shirley Basin area: Harshman, E. N. 02933
Virginia Dale area: Eggler, D. H. 04295
Whiskey Peak quadrangle: Reynolds, Mitchell W. 06485
White Rock Canyon quadrangle: Hyden, Harold J. 06487
Wind River basin area: Whitcomb, Harold A. 01645
Wind River basin, south-central: Soister, Paul E. 02436

Maps, ground water

- Green River basin: Welder, George E. 07922
Wind River basin area: Whitcomb, Harold A. 01645

Maps, magnetic

- Grand Teton National Park and vicinity: Behrendt, John C. 07532

Maps, radar imagery

- Yellowstone National Park: U.S. Geological Survey. 06711

Maps, structure

- Medicine Bow Mountains: Houston, R. S. 10680

Mineralogy

- Alcaline, alkali feldspars, Green River Formation: Iijima, Azuma. 02217
Clay minerals, fractionated, cation equilibria: Fertil, Walter. 04745
Clay minerals, Gypsum Spring and Sundance Fms.: Furlong, Robert B. 06946
Kaolinite, Rock Springs area, Almond Formation: Asquith, G. B. 03615
Na-montmorillonite, Upton and Crook Counties, particle morphology: Roberson, H. E. 05569

Paleoclimatology

- Altihermal, age: Husted, Wilfred M. 02328
Pleistocene, Converse County: Anderson, Elaine. 08060
Quaternary, landslide mass, Cody area: Pierce, William G. 10250

Paleomagnetism

- Precambrian, Front Range, reversals, pole position: Eggler, D. H. 00369

Paleontology

- Brachiopoda, Ordovician, Bighorn Formation, Bighorn Mts.: Macomber, Richard Wiltz. 04540
Conodonts, Cambrian-Ordovician, Big Horn Mts.: Koucky, Frank L. 11035
Diatoms, Eocene, Wagon Bed Formation, freshwater: Lohman, Kenneth E. 02435
Fauna, Permian, Phosphoria rock complex, biostratigraphy: Yochelson, Ellis L. 00126
Foraminifera, Triassic, Thaynes Formation, western: Schroeder, Marvin L. 00936
Mammalia, Eocene, Badwater Creek area, primates: Robinson, Peter. 02806
Mammalia, Eocene, Bridger Fm., insectivores, Marsh collection: Robinson, Peter. 07576
Mammalia, Eocene, lower, artiodactyls, tarsus evolution: Guthrie, Daniel A. 11292

Wyoming—Continued

Paleontology—Continued

- Mammalia, Paleocene, south-central, apatemyid origins: Szalay, Frederick S. 05993
- Mammalia, Paleocene, Swain Quarry, microdonts: Szalay, Frederick S. 03870
- Mammalia, Pleistocene, Little Box Elder cave: Anderson, Elaine. 08060
- Ostracoda, Cretaceous, Bear River Formation: Pinto, Iraja Damiani. 10772
- Palynology, Cretaceous-Paleocene, Lance-Fort Union Formations, Lance area: Leffingwell, Harry A. 07933
- Pelecypoda, Permian, hinge evolution, crassatellacean: Boyd, Donald W. 03869
- Pisces, Devonian, Beartooth Butte Fm., new dipnoan: Denison, Robert H. 02833
- Pisces, Devonian, Beartooth Butte Formation, oldest lungfish: Denison, Robert H. 08940
- Pisces, Permian, Phosphoria rock complex: Van Sickle, Dianne H. 00125
- Pteridophytes, Cretaceous, Frontier Formation: Rushforth, Samuel R. 06140
- Reptilia, Cretaceous, Mowry Formation, Osage area: Romer, Alfred Sherwood. 01484
- Reptilia, Eocene, crocodylid genus: Wassersug, Richard J. 11185
- Stromatolites, Precambrian, Nash Fm., Medicine Bow Mts.: Knight, S. H. 07578
- Vertebrata, Tertiary, seasonal growth evidence: Voorhies, M. R. 11049

Petrology

- Absaroka volcano plateau, Sylvan Pass intrusive center: Casella, Clarence J. 10216
- Beartooth Mountains, amphibolites, regional distribution: Bentley, Robert D. 07821
- Centennial Ridge gold-platinum district, Precambrian rocks: McCallum, M. E. 07982
- Diatremes, sedimentary inclusions: Chronic, John. 00019
- Grand Teton National Park and vicinity, Precambrian rocks: Reed, John C., Jr. 07514
- Laramie Mountains, gneiss, mineral assemblages: Hodge, Dennis S. 07891
- Laramie Range, granitic rocks, associated metamorphics: Condie, Kent C. 00008
- Medicine Bow Mountains: Houston, R. S. 10680
- Medicine Bow Mountains, amphibolite: McCallum, M. E. 09148
- Paradise Basin quadrangle, regional metamorphism: Perry, Kenneth, Jr. 10249
- Pegmatite, Wind River Mountains: Proctor, Paul Dean. 10940
- Virginia Dale ring-dike complex: Egger, D. H. 04295
- Wind River Mountains, taconite: Worl, R. G. 07972
- Yellowstone National Park, Cenozoic volcanics: Wayne State University. 07680
- Yellowstone Park, shoshonite volcanics: Nicholls, J. 08825
- Yellowstone Park, welded ash-flow sheets: Prostka, Harold J. 10252

Sedimentary petrology

- Arminto-Alkali Creek, dendritic surge marks: High, Lee R., Jr. 01333
- Black Hills, Deadwood Formation, lithofacies: Kulik, Joseph W. 10110
- Inclusions, Lower Paleozoic sediments in diatremes: Chronic, John. 00019
- Northwestern, Sundance Formation, paleocurrent analysis: Stone, Randolph. 09706
- Red Peak Formation, current directions: Picard, M. Dane. 03530

Wyoming—Continued

Sedimentary petrology—Continued

- Wind River Range, Paleozoic, carbonates: Tucker, M. M. Riddler. 03630

Stratigraphy

- Bradley Peak quadrangle, sections: Bayley, Richard W. 06486
- Cambrian-Quaternary, Fish Lake quadrangle, section: Rohrer, Willis L. 00296
- Cenozoic, Medicine Bow Mts., east-central: McCallum, M. E. 01713
- Cretaceous, Fall River Sandstone, Powder River basin: Berg, Robert R. 05720
- Cretaceous, Muddy Sandstone, Rocky Mts.: Wulf, George R. 05905
- Cretaceous, Tertiary, Wind River basin: Paape, Donald W. 02141
- Eocene, Green River Formation, Tipton Shale Member redefined: Roehler, Henry W. 05714
- Eocene, Owl Creek Mts., eastern: Ferris, C. S., Jr. 07577
- Eocene, Wapiti Formation, Trout Peak Trachyandesite, northwestern: Nelson, Willis H. 00432
- Eocene, Wind River Formation, Wind River basin: Soister, Paul E. 02436
- Grand Teton National Park and vicinity: Love, J. D. 11319
- Middle, Late paleoenvironment, Jurassic, Big Horn Mts.: Furlong, Robert B. 06946
- Mississippian, Madison Limestone, Bull Lake Member, new name: Sando, William J. 05077
- Mississippian-Quaternary, Munger Mtn. quadrangle, sections: Albee, Howard F. 01424
- Muddy Gap quadrangle, sections: Reynolds, Mitchell W. 06484
- Paleocene-Eocene, Willwood Formation, Big Horn basin: Neasham, John W. 08821
- Pat O'Hara Mountain quadrangle, sections: Pierce, William G. 04767
- Shirley Basin area, section: Harshman, E. N. 02933
- Triassic-Jurassic, south-central, correlation, nomenclature: Pipiringos, George N. 00113
- Whiskey Peak quadrangle, sections: Reynolds, Mitchell W. 06485
- White Rock Canyon quadrangle, section: Hyden, Harold J. 06487
- Wind River basin area, sections: Whitcomb, Harold A. 01645
- Structural geology*
- Absaroka Mountains, southern, syncline: Fisher, Frederick S. 00783
- Beartooth Mountains, Cloverleaf Lakes area: Bentley, Robert D. 10207
- Big Horn County, Sheep Mtn. anticline: Johnson, Gary D. 06982
- Bighorn Mountains, northern, Precambrian and Laramide deformations: Jennings, Ted Vernon. 00853
- Black Hills area, tectonics, regional setting: Sales, John K. 05904
- Carbon County, Hanna basin, faulting, role in subsidence: Shelton, John W. 00912
- Cordilleran foreland, tectonics, mechanism: Sales, John K. 04513
- Flaming Gorge area, monocline, plunging: Threet, Richard L. 09167
- General, effect on gravity field: Malahoff, Alexander. 11320
- Grand Teton National Park and vicinity: Love, J. D. 11319
- Heart Mountain fault, tectonic denudation: Pierce, W. G. 06112

Wyoming—Continued*Structural geology—Continued*

Laramie Mountains, folds, isoclinal: Toogood, David J. 10270

Laramie Range, southern, foliation, transpositional: King, John S. 10884

Medicine Bow Mountains: Houston, R. S. 10680

Owl Creek Mountains, eastern, faults: Ferris, C. S., Jr. 07577

Southwestern, overthrust belt, tectonic history: Crosby, Gary W. 04512

Sweetwater County, Wamsutter arch: Ritzma, Howard R. 02145

Wind River Mountains, fracture trends in taconite: Worl, R. G. 07972

Yellowstone National Park, Cenozoic volcanics: Wayne State University. 07680

Volcanology

Old Faithful Geyser, mechanism: Rinehart, John S. 00046

Yellowstone Park, Old Faithful Geyser, thermal studies: Rinehart, John S. 10497

Xenon*Abundance*

Chondrites, excess heavy, source: Rowe, M. W. 06676

Leighton chondrite: Meason, J. L. 00388

Geochemistry

Carbonaceous chondrites, parent nuclides: Pepin, Robert O. 08049

Chondritic meteorites, unequilibrated, analyses: Heymann, D. 00297

Meteorites, iron, concentration, isotopes: Alexander, E. C. 02675

Isotopes

Abundance in Leighton chondrite: Meason, J. L. 00388

Meteorites: Eugster, O. 08487

Xe-129, formation interval, meteorites: Reynolds, John H. 08048

Xe-136f, Xe-129r, chondrites: Sabu, D. D. 01998

X-ray diffraction analysis*Data*

Albite, low, high, calculated intensities, spacings: Borg, I. Y. 07540

Alkali feldspar, structure: Wright, Thomas L. 02224

Alkali feldspar, structure: Wright, Thomas L. 02225

Allactite: Moore, Paul B. 06466

Amarantite, structure: Susse, P. 09652

Amphibole, California, Cazadero blueschists: Coleman, R. G. 01932

Amphibole, cation distribution: Borg, Iris. 08614

Anorthite, calculated intensities and spacings: Borg, I. Y. 07540

Antimonian groutite: Klein, Cornelis, Jr. 09413

Apatite, composition fluctuations: Skinner, H. C. W. 04272

Apatite, synthetic: Simpson, Dale R. 07517

Apatite, synthetic potassium-bearing system: Simpson, Dale R. 05969

Augelite, California, Mono County: Araki, T. 06788

Bentonite, Kansas, Carlile Shale: Hostetler, James M. 09285

X-ray diffraction analysis—Continued*Data—Continued*

Beryl, crystal chemistry: Frondel, Clifford 06585

Berzelite, manganese berzelite, synthetic: Ito, Jun. 09408

Billingsleyite, Utah, East Tintic district: Frondel, Clifford. 07541

Braitschite, Utah, Grand County: Raup, Omer B. 06787

Bytownite, calculated intensities and spacings: Borg, I. Y. 07540

Calcite-aragonite ratios, determination, shell structure, influence: Towe, Kenneth M. 09718

Chlorite, Arkansas, Anderson talc deposit: Wu, Dah-cheng. 09303

Chrysotile, cylindrical lattice: Toman, K. 02060

Chrysotile, cylindrical lattice, profiles, form, position, width: Toman, K. 02061

Clay minerals, Arizona, Roosevelt Lake: Pipkin, Bernard W. 11385

Clay minerals, crystallite size distribution in soils: Arnold, R. W. 06641

Clay minerals, Wyoming, Big Horn Mts., Jurassic strata: Furlong, Robert B. 06946

Clay-mineral assemblages, Pleistocene deposits, differentiation, Kansas: Tien, Pei-Lin. 05091

Clays and shale, Montana, relative mineral abundances: Berg, R. B. 09121

Clays, glacial drift, Wisconsin: Foss, J. E. 02267

Clinocllore, acid-extracted and untreated: Ross, G. J. 03651

Coal and carbonaceous materials: Ergun, Sabri. 07012

Diaboleite, synthetic, cf. natural: Winchell, R. E. 09058

Dolomite: Rosenberg, P. E. 06582

Epidote, California, Salton Sea geothermal system: Keith, Terry E. C. 07537

Esperite, margarosanite, alamosite, unnamed phases: Ito, Jun. 02214

Eucryptite, bikitaite: Leavens, Peter B. 06770

Loellingite, solid solution substitution: Radcliffe, Dennis. 11243

Mackayite, Mexico, Sonora: Gaines, Richard V. 09221

Safflorite, solid solution substitution: Radcliffe, Dennis. 11243

Sepiolite: Wollast, Roland. 11377

Methods

Ore minerals, identification, impurities: Petruk, W. 11149

Textbook: Nuffield, E. W. 11204

Yukon*Mineralogy*

Tintinaite, Tintina area, new kobellite antimony analog: Harris, D. C. 11295

Zinc*Analysis*

Ion-exchange electrode: Mukherji, Anil K. 11333

Mexico

Durango, Mapimi district, occurrence: Hoffman, Victor J. 11303

United States

Central, summary: Heyl, Allen V. 09395



