

The equipment described in this article is not limited to the type of photography discussed. The camera is excellent for field use, and, with other accessories, it is suitable for copying page-size and larger illustrations for displays. The ringlight, without masking filters, is an excellent light source for most indoor photography.

References

- Eastman Kodak Company, 1957, Photography through the microscope: Eastman Kodak Co. Pub. P-2.
 Martin, Harold, 1961, Close-up photography with your camera: New York, Amphoto.
 O'Bryan, Deric, 1966, Climate and Mesa Verde tree rings: National Parks Magazine. (In preparation)
 Simmons, Robert, 1961, Close-up photography and copying: Philadelphia, Chilton Co., Book Div.

#

SOVIET BOOKS AND PUBLICATIONS ON HYDROLOGY (CONTINENTAL) AND HYDROGEOLOGY: TITLES AND SOME NOTES ON OBTAINING SOVIET MONOGRAPHS

By Frank T. Manheim (Geologist, Woods Hole, Mass.)

Introduction

A common method of publication for Soviet scientists, which partly supplants periodicals, is the publication of a collection of articles on a general area of research, frequently by members of a given institution. An extensive sampling of world geologic literature for 1961 (Hawkes, 1966) showed that 33 percent of Soviet titles appeared in periodicals whereas 55 percent of North American and 70 percent of Western European literature appeared in this form.

The Soviet predilection for symposia and collections of papers makes searching for information on a given subject more difficult for Westerners because the monographs in question are often not included in exchange agreements (except informal personal ones) with Western libraries and institutions, because they may be printed in small editions, and because such publications frequently escape the notice of Western abstract journals.

Unless one is fortunate enough to have many personal contacts in the Soviet Union, there seems to be little alternative to at least a rudimentary knowledge of Russian in order to stay abreast of work published as monographs and in collections.

Soviet Sources of Monograph Titles

Although Soviet monographs are poorly represented in American libraries and abstract journals, the titles of monographs are relatively easy to locate by using advance lists and bibliographic lists published in the Soviet Union. Some are given here.

Novye Knigi (New Books).--This weekly publication gives advance listing of books from the major publishing houses of the Soviet Union in subjects ranging from poetry to science and technology. Abstracts of the contents and an indication of the disciplines for which the publication may be of interest are given, along with number of pages, price, and estimated date of publication. One may place orders for the listed books with a number of firms in the United States and abroad, and the orders will be filled as the volumes appear. This is the surest method of obtaining desired books. Novye Knigi costs only about \$2 a year and, for those having some rudiments of Russian, is a worthwhile investment.

Knizhnaya Letopis (Book List).--This weekly listing gives virtually all books and brochures issued in all subjects and all languages in the Soviet Union, together with the number of pages, number of copies printed, price, publishing house, and institution of origin. No abstracts are provided. The listing may be immediately after publication or may be delayed as much as a year or two, or more. Besides the subject listing (oceanography is found under geological-geographical sciences), there is a convenient periodic author and subject index. Also, all works are cataloged by a decimal system that identifies subject matter. Knizhnaya Letopis costs about \$5 a year and is also worth ordering if one has some knowledge of Russian and wishes to survey Soviet work.

Knizhnaya Letopis Dopol'nitelnyi Vypusk (Book List Supplementary Issue).--A supplement to Knizhnaya Letopis, this list gives minor technical brochures, instruction bulletins, course notes, cata-

logs, and also all dissertations submitted toward the fulfillment of higher educational degrees in the Soviet Union. Most useful here are the "Aftoreferat Dissertatsii" (Authors' Summaries) of dissertations. This section may run to 100 pages or more.

Referativnyi Zhurnal (Journal of Abstracts). -- This well-known abstract journal lists papers from all countries and on all scientific and technical subjects. Titles of Western publications are given in the original language, but the abstracts are all in Russian. Although less comprehensive for Western publications in chemistry than Chemical Abstracts, from an overall point of view it is the most thorough and complete abstract journal for science and technology in the world, and it provides a virtually complete listing of books and journals in the Soviet Union. The journal is divided into different sections, each of which can be ordered by subscription. Sections can be ordered with or without indexes and in different degrees of completeness. For example, the entire series "Geografiya," with indexes, comes out 24 times a year and costs \$61.50; but the partial issue "Geografiya: Oceanology, Hydrology of the Continents, Glaciology" comes out in monthly editions and costs \$10 for a year's subscription. Items in Referativnyi Zhurnal come out after a delay of a year or more; therefore books in great demand may already be out of print if orders are placed from listings in the journal.

Other sources. -- Many publishing houses in the Soviet Union issue catalogs or advance publication lists, which can be obtained from the institutions that contribute publications to them. Soviet publishers' lists can also be gotten from booksellers in this country and abroad that specialize in Soviet publications.

Procuring and Consulting Soviet Monographs

A number of institutions in the United States and Canada have good collections of Soviet periodical literature; but, with the possible exception of the Library of Congress, monograph collections are poor and often nonexistent. Since reprints are rare, used copies of interesting monographs hard to find even in the Soviet Union, and translations of monographic literature into foreign languages very limited, consultation or acquisition of older Soviet books is a difficult matter. Essential works may be obtained by ordering microfilm or photocopy from the Gosdarsstvennaya Publichnaya Biblioteka (U.S.S.R. National Library), Leningrad, or from the Photoduplication Department, Lenin Library (Biblioteka SSSR Imeni V. I. Lenina), Moscow.

Two firms in the United States, listed below, keep large collections of current Soviet books in all fields. They also issue free regular listings of books (and records and artistic prints) on request.

Victor Kamkin, Inc.
1410 Columbia Road, N.W.
Washington, D.C. 20009

and

Four Continent Book Corp.
156 Fifth Avenue
New York, New York 10010

The latter is registered with the State Department as an agent of the Soviet government agency V/O Mezhdunarodnaya Kniga (U.S.S.R. International Books), Moscow.

Both the above firms and those listed below will accept subscriptions to Soviet newspapers, journals, weekly lists, or magazines. Four Continent and the firms below accept current or advance orders on Soviet monographs.

Stechert Hafner, Inc.
31 East 10th Street
New York, New York 10003

Schoenhof's Foreign Books, Inc.
Harvard Square
Cambridge, Massachusetts 02138

The costs of Soviet monographs delivered by mail through the firms listed are approximately double the original prices in rubles. For example, a 327-page monograph may cost 2.10 rubles, or \$2.32, in the Soviet Union. The purchase price in the United States, with postage, would be between \$4.00 and \$4.50.

In principle, any bookseller may order Soviet books; but in practice this is a specialized matter best left to firms that have experience and personnel with the necessary language skills to do the job properly. A full list of firms handling Soviet literature in this country and abroad can be obtained from V/O Mezhdunarodnaya Kniga, Moscow, U.S.S.R.

Publications on Hydrology (Continental) and Hydrogeology

The listed publications are a sampling of recent (and a few older) Soviet monographs in hydrology and hydrogeology. The books were bought at kiosks at the Second International Oceanographic Congress (Moscow, June 1966), at various bookshops in Moscow, and at the VNIGRI (Petroleum Research Institute) kiosk in Leningrad. Prices in rubles or kopeks are listed at the end of each citation. The official exchange rate is US\$1.11 = 1.00 ruble (1.00 ruble = 100 kopeks). Copies of a more extensive list, including oceanography and geology, are available on request (Manheim, 1966).

Afanas'ev, T. P., 1965, *Gidrogeologiya i gidrogeokhimiya povolzh'ya* (Hydrogeology and hydrochemistry of the Volga basin): Izdatel'stvo "Nauka," 167 p. Good regional pictures and isosalines. 79 kopeks.
Alekhin, Y. M., 1956, *Kratkosrochnye prognozy stoka na ravinnykh rakakh* (Short-term prediction of water flow in plains rivers): *Gidrometeorologichskoe Izdatel'stvo*, Leningrad, 266 p. 84 kopeks, used.

- Bars, E. A., Kogan, S. S., 1965, *Organicheskoe veshchestvo podzemnykh vod neftegazonosnykh oblastei* (Organic matter in subsurface water of petroliferous areas): Izdatel'stvo "Nedra," 190 p. 24 kopeks.
- Bavydov, L. K., 1953, *Gidrografiya SSSR* (Hydrography of the U.S.S.R.), v. 1, General characteristics, 182 p. v. 2, Hydrography of regions, 595 p. Both volumes, 3.70 rubles.
- Bogoslovskii, B. B., 1960, *Ozerovedenie* (Limnology): Izdatel'stvo Moskovskogo Universiteta, Moscow, 335 p. Special attention given to hydrology and hydrochemistry. 80 kopeks.
- Bykov, V. D., ed., 1965, *Voprosy gidrologii* (Questions of hydrology): Izdatel'stvo Moskovskogo Universiteta, no. 2, 129 p. 85 kopeks. Contents:
- Bliznyak, E. V., and Tikhotskii, K. G., *Scientist-Patriot* (volume is dedicated to the late scientist), p. 7-10.
- Bliznyak, E. V., On the method of calculating discharge of water. p. 11-19.
- Klige, R. K., Relation of mean flow to water levels in the Baikal region. p. 20-28.
- Skorniyakov, V. A., Daily hydrologic cycle of the River Sayan. p. 29-36.
- Bykov, V. D., and Varelopulo, A. F., Hydrology of the Ryazan area. p. 42-51.
- Lastochkina, L. A., and Kurdyumov, L. D., Determining the water table of stream supply (tributaries). p. 52-57.
- Kurdyumov, L. D., On the question of fluid movement in a jointed bedrock. p. 58-67.
- Pavlov, V. M., Determination of transfer coefficients for low velocities of water movement. p. 68-76.
- Speranskaya, A. A., and Man'kovskii, V. I., Electrometric, electrodeless device to measure current and direction. p. 77-81.
- Mikhailov, V. N., Bed processes at the mouths of rivers. p. 82-90.
- Bogoslovskii, B. B., Some characteristics of the Mozhai basin, summer 1960. p. 91-97.
- Tsytserin, G. V., Some aspects of the salinity of the Altai drainage system of the Irtysh. p. 98-104.
- Ivanova, L. S., Dynamics of salinization and silting of Volga water. p. 105-118.
- Burkal'tseva, M. A., On the method of establishing the relationship $u = f(Q)$ for calculating the chemical denudation of mountain streams. p. 119-125.
- Evstigneev, V. M., On calculation of minimum flow in periodically frozen streams in the Baikal region. p. 126-127.
- Aleksinskaya, L. N., and Mudrev, Yu. V., On the question of postglacial formations in central Baikal. p. 128-129.
- Filatov, K. V., 1961, *Osobennosti khimicheskogo sostava podzemnykh vod Altaiskogo kraya i ikh svyaz' s poverkhnostnykh vodami* (Characteristics of the chemical composition of subsurface waters of the Altai region and their connection with surface waters): Izdatel'stvo Akademii Nauk SSSR, Moscow, 49 p. 38 kopeks.
- Il'ina, E. N., Lyubomirovy, B. N., and Tychino, N. Ya., 1962, *Podzemnye vody i gazy Sibirskoi platformy* (Subsurface waters and gases of the Siberian platform): Gostoptekhizdat, Leningrad, 288 p. 1.82 rubles.
- Kalesnik, S. V., ed., 1965, *Vodnyi balans i zailenie malykh vodokhranilishch Chernozemnogo tsentra RSFSR* (Hydrologic balance and silting of small water reservoirs of the Chernozem region of the RSFSR): Izdatel'stvo "Nauka," Moscow-Leningrad, 242 p. 13 papers. 1.55 rubles.
- Kalinin, G. P., and Losev, K. S., eds., 1966, *Gidrologiya sushi* (Hydrology of the continents): "Itogi Nauki," Seriya Geografiya, Akademiya Nauk SSSR, Moscow, 147 p. Collection of seven papers with extensive references, both Western and Soviet. 71 kopeks.
- Kaufman, A. A., 1965, *Teoriya induktsionnogo karotazha* (Theory of induction logging): Izdatel'stvo "Nauka," Sibirskoe Otdelenie, Novosibirsk, 235 p. 1.26 rubles.
- Keller, R., 1965, *Vody i vodnyi balans sushi* (Waters and hydrologic cycle in the continents): Izdatel'stvo "Progress," Moscow, 535 p. Translated from German, East Germany. 2.26 rubles.
- Khrebtov, A. I., 1965, *Geotermicheskie usloviya i termal'nye vody tsentral'nogo predkavkaz'ya* (Geothermal conditions and thermal waters of the central Ciscaucasus): Izdatel'stvo "Nauka," 199 p. 66 kopeks.
- Klimentov, P. O., 1955, *Gidrogeologiya* (Hydrogeology): Gosgeoltekhizdat, Moscow, 311 p. 75 kopeks, used.
- Kononov, V. I., 1965, *Vliyanie estestvennykh i iskusstvennykh ochagov tepla na formirovanie khimicheskogo sostava podzemnykh vod* (Influence of natural and applied heat sources on the formation of the chemical composition of subsurface waters): Izdatel'stvo "Nauka," 146 p. Includes chemical data on fumaroles, water, sediments, rocks, etc. 84 kopeks.
- Kopanev, G. V., 1960, *Podzemnye i poverkhnostnye vody Buryatskoi ASSR* (Subsurface and surface waters of the Buryat ASSR): Izdatel'stvo Akademii Nauk SSSR, 151 p. 65 kopeks, used.
- Krotova, V. A., 1960, *Gidrogeologicheskie kriterii neftenosnosti* (Hydrogeological criteria of oil): Gostoptekhizdat, 161 p. 1.17 rubles.
- 1962, *Gidrogeologicheskie faktory formirovaniya neftyanykh mestorozhdenii* (Hydrogeological factors in the formation of oil deposits): Gostoptekhizdat, 327 p. 2.10 rubles.

- Kudelin, B. I., Korobeinikova, Z. A., and Lebedeva, N. A., 1963, *Estestvennyie resursy podzemnykh vod tzentral'no-chernozemnogo raiona i metodika ikh kartirovaniya* (Resources of ground water in the central Chernozem area and its mapping): Izdatel'stvo Moskovskogo Universiteta, 145 p. Very routine. 90 kopeks.
- Nikiforov, Ya. D., and Dyakon, K., eds., 1963, *Gidrologiya ust'voi oblasti Dunaya* (Hydrology of the mouth of the Duna): Gidrometeorologicheskie Izdatel'stvo, Moscow, 383 p. 2.37 rubles.
- Panteleev, I. Ya., 1963, *Uglekislye mineral'nye vody severnogo Kavkaza* (Carbonate mineral waters of the northern Caucasus): Izdatel'stvo Akademii Nauk SSSR, 89 p. Geology, hydrology, and geochemistry of mineral and thermal waters of the Caucasus dealt with in detail. 1.12 rubles.
- _____, ed., 1965, *Termal'nye i mineral'nye vody severnogo Kavkaza* (Thermal and mineral waters of the northern Caucasus): Izdatel'stvo "Nauka," Moscow, 126 p. Six articles. 60 kopeks.
- _____, ed., 1965, *Gidrogeologicheskie usloviya orozhaemykh zemel* (Hydrogeological conditions in irrigated soils): Izdatel'stvo "Nauka," 87 p. Shows interesting depth profiles of (presumably pore) water and salt distribution for as deep as 30 meters or more. 36 kopeks.
- Pinneker, E. V., 1966, *Rassoly Angarolenskogo artesianskogo bassaina* (Brines of the Angaro-Lena artesian basin): Izdatel'stvo "Nauka," Moscow, 334 p. Reports brines having as high as 600 grams per liter salt content. 2.15 rubles.
- Ponomarenko, G. P., ed., 1965, *Gidrologicheskie i gidrokhimicheskie issledovaniya v tropicheskoi zone Atlanticheskogo Okeana* (Hydrologic and hydrochemical studies in the tropical zone of the Atlantic Ocean): Izdatel'stvo "Naukova Dumka," Kiev, 146 p. Water circulation, heat balance, waves and wind, silica and phosphate, pH, analytical studies of silicon, suspended matter, and relief of Romanche Trench. 63 kopeks.
- Rogov, M. M., Romashin, V. V., and Shteinbakh, V. V., 1964, *Gidrologiya Ustevoi oblasti zapadnoi dviny* (Hydrology of the discharge area of the Dvina (West)): Gidrometeoizdat, Moscow, 349 p. Background information, river and sea levels, thermal regime, structure and development of channel, current, bars, temperature, salinity color, and ice regime. 1.65 rubles.
- Shvetsov, P. F., ed., 1964, *Voprosy geokhimii podzemnykh vod* (Questions of the geochemistry of subsurface waters): Izdatel'stvo "Nedra," Moscow, 267 p. Collection of papers dedicated to the 100th anniversary of the birth of V. I. Vernadsky. 1.25 rubles.
- Sokolov, A. A., 1952, *Gidrografiya SSSR* (Hydrography of the U.S.S.R.): Gidrometeorologicheskoe Izdatel'stvo, Leningrad, 471 p. 1.20 rubles, used.
- Sribnyl, M. F., and Favorin, N. N., eds., 1964, *Nauchnye raboty po vodnomu khozyaistvu* (Scientific work on water resources): Izdatel'stvo "Nauka," 142 p. 74 kopeks.
- Sukharev, G. M., 1959, *Gidrogeologiya i vody neftiannykh i gazovykh mestorozhdenii* (Hydrogeology and waters of oil and gas deposits): Gostoptekhizdat, Leningrad, 342 p. 1.10 rubles.
- Tsurikova, A. P., and Shul'gina, E. F., 1964, *Gidrokimiya Azovskogo Morya* (Hydrochemistry of the Sea of Azov): Gidrometeoizdat, Leningrad, 247 p. 92 kopeks.
- Yakuzseni, V. P., 1961, *Gidrogeologiya yugo-vostoka Prikaspiiskoi vpadiny v svyazi s neftegazonosnostyu* (Hydrogeology of the southeastern Caspian basin and its relation to petroleum productivity): Gostoptekhizdat, 233 p. Many data on strontium, lithium, manganese, and barium (spectral) in subsurface waters, and outline of salt deposits in northern Caspian basin. Appendix. 1.71 rubles.

Conclusions

A large part of Soviet scientific literature is published as monographs, which are poorly represented in American libraries and abstract journals. Very few are translated. These books are relatively easy to locate through advance and bibliographic lists, such as *Novye Knigi* and *Knizhnaya Letopis*, published in the Soviet Union. Subscriptions to these lists are inexpensive and may be obtained in this country.

Soviet books are issued in limited editions and are rarely reprinted. Hence, failure to get them as they come out may mean their permanent nonavailability for future reference. The importance of Russian literature is increasing in almost all scientific fields, and language competence in Russian on the part of American science graduates is also increasing. These factors suggest that the acquisition of current Soviet monographs of potential significance will provide a valuable resource to future workers, even though at present there may be little general knowledge of, or demand for, Russian scientific books.

References

- Hawkes, H. E., 1966, The literature of geology: *Geotimes*, v. 10, no. 9, p. 23-43.
- Manheim, F. T., 1966, Soviet books and publications on geological and chemical oceanography, hydrology, and other subjects, acquired during the Second International Oceanographic Congress, Moscow, June 1966: titles and some translated contents and notes: Woods Hole Oceanographic Institution Reference 66-51, 37 p. (Unpublished manuscript)