BIBLIOGRAPHY ON THE OCCURRENCE, PROPERTIES, AND USES OF ZEOLITES FROM SEDIMENTARY DEPOSITS, 1985-1992

by

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BIBLIOGRAPHY ON THE OCCURRENCE, PROPERTIES, AND USES OF
ZEOLITES FROM SEDIMENTARY DEPOSITS, 1985-1992

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ABSTRACT

This bibliography is an alphabetical listing of about 2,000 publications and formal
releases, including patents and selected abstracts, from the world literature on the
occurrence, properties, and uses of zeolites from sedimentary deposits for the period 1985
to 1992. The bibliography is available as hard copy or on a 3.5-inch floppy diskette,
which was prepared on a Macintosh LC computer using EndNote Plus software.
Computer searches of the bibliography can be made by author, year, title, journal,
publisher, and keywords.

INTRODUCTION

Zeolites were discovered more than two centuries ago, and nearly 50 distinct species
now have been recognized. Numerous zeolites also have been synthesized, but most have no
natural counterparts. Zeolites occur in rocks that are diverse in lithology and age, and they
have formed in many different geological environments. The most common and perhaps best
known zeolite occurrences are in the cavities and fractures of igneous rocks, particularly
basaltic rocks. Most of the large, attractive zeolite specimens in museum collections have
been obtained from igneous rocks. In recent years, zeolites have been recognized as
important rock-forming constituents in low-grade metamorphic rocks and in various
sedimentary rocks, particularly rocks that were originally rich in vitric material. The zeolites
in sedimentary rocks are very finely crystalline and do not appeal to mineral collectors, but
deposits of this type are voluminous and have economic potential for many industrial and
agricultural processes.

DESCRIPTION OF BIBLIOGRAPHY

This compilation is an alphabetical listing of about 2,000 publications and formal
releases, including patents and selected abstracts, from the world literature on the
occurrence, properties, and uses of zeolites from sedimentary deposits for the period 1985
to 1992. Certain bibliographic entries concerning the properties of zeolites from other
geologic settings and the results of laboratory syntheses have been included herein because
these reports supplement our understanding of natural zeolites in sedimentary
environments. Another compilation for publications that were released prior to 1985 is in
preparation and will be available as an U.S. Geological Survey open-file report.

The bibliography is available as hard copy or on a 3.5-inch floppy diskette. The
diskette was prepared on a Macintosh LC computer using EndNote Plus software.
EndNote Plus works with Macintosh models 512KE and up, and System 4.2 or later. To
perform bibliographic searches of the diskette, either the EndNote Plus program or the less-
expensive but limited EndNote Plus demonstration disk must be installed on a Macintosh
computer. New bibliographic references can be added with the EndNote Plus program but
cannot be added with the demonstration disk. Searches can be made by author, year, title, journal, publisher, or keywords.

The keywords added to each bibliographic entry include the zeolite name as well as terms relating to the fields of geology, properties, and uses. Keywords under geology are the following: formation name and age of the host rock, lithology (includes tuff, sandstone, shale or mudstone, and carbonate), depositional environment (includes fluviatile, lacustrine, marine, subaerial, soil, and hydrothermal or geothermal), location (includes country and state), and resources. The keywords under properties are the following: chemical composition, cell dimensions, refractive indices, cation exchange, adsorption, isotopes, heating, synthesis, and modification. Keywords under uses are the following: agriculture (includes plant, animal, and aquaculture), rad (radioactive) waste, pollution, energy, building materials, beneficiation, and health. Search items can be combined by using the Boolean And, Or, and Not features.


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