

## BOOK REVIEW

**Compaction of Argillaceous Sediments**, by Herman H. Reike and George V. Chilingarian, Elsevier Scientific Publishing Co., New York, Amsterdam, \$32.00.

The practical and theoretical aspects of compaction of fine-grained sediments are covered in this book. This excellent synthesis of historical investigation, in addition to much added data of the authors' own research work in this field, provides a long needed text for researchers, industrial scientists, teachers and students studying the processes, effects and results of compaction of clays, silts and related fine-grained sediments. It also includes the study of over-pressured formations. Individual chapters are devoted to: (a) general principles; (b) interrelationships among depth of burial and geologic parameters, e.g. porosity, permeability, moisture content, etc.; (c) models of compaction processes; (d) effects of compaction on interstitial fluids in argillaceous sediments; (e) subsidence; (f) abnormal geopressures; and (h) compaction equipment for laboratory studies. The manner in which data have been presented in this text helps to simplify this complex topic. There is a wide variety of theoretical and experimental models, along with a detailed description of the effect of compac-

tion processes upon argillaceous materials and the interstitial fluids. The detailed review of laboratory equipment, its construction and calibration techniques, and type of data obtained, helps one to better understand the experimental work often presented in literature. It also provides a better understanding of the type and design of compaction apparatus required to obtain specific consolidation parameters.

The authors are to be complimented on their use of a multitude of examples, presentation of eight hundred references (including numerous Soviet papers), and the clarity of their descriptions of very complicated chemical and physical compaction processes. This timely text is a fine compliment to the two-volume reference work prepared by Chilingar and Wolf, entitled *Compaction of Coarse-grained Sediments*, Elsevier Scientific Publishing Co., 1976, 1977. These books will serve as a very valuable and long lasting reference work on compaction of sediments.

JOHN O. ROBERTSON, JR.

## ANNOUNCEMENTS

### SYMPOSIUM ON WATER MOVEMENT AND EQUILIBRIUM IN SWELLING SOILS

A symposium on Water Movement and Equilibrium in Swelling Soils is being organized by the Committee on Water in the Unsaturated Zone of the Section of Hydrology of the American Geophysical Union (AGU). The symposium will take place on 6 December 1977, at the Jack Tar Hotel in San Francisco, California, in conjunction with the Annual Fall Meeting of AGU. Papers are invited on all aspects of the behavior of water in expansive and shrinking soils, including laboratory and field measurements of water movement and soil deformation, instrumentation for investigating water in expansive soils, and theoretical or computer studies of water equilibrium and transport.

A principal objective of the symposium is to bring together soil physicists, engineers and hydrologists for discussion on problems of mutual interest in expansive soils. A summary discussion will follow the presentation of invited and contributed papers.

The Program Committee for the symposium consists of Dr. Garrison Sposito, Dept. of Soil Science and Agricultural Engineering, University of California, Riverside, CA 92502; Dr. Robert J. Reginato, U.S. Water Conservation Laboratory, Phoenix, AZ 85040, and Dr. James K. Mitchell, Dept. of Civil Engineering, University of California, Berkeley, CA 94720. Abstracts for inclusion in the program should be submitted to Dr. Mitchell or Dr. Sposito by no later than 1 July 1977. Notification of acceptance of the abstract will be sent by 1 August 1977.

### SHORT-COURSE

#### MINERALOGY AND GEOLOGY OF NATURAL ZEOLITES

sponsored by

The Mineralogical Society of America

4-6 November 1977 Seattle, Washington

#### Subjects

Crystal Structure  
Crystal Chemistry  
Saline-Lake Occurrences  
Marine Occurrences  
Low-Grade Metamorphic Occurrences  
Open-Basin Occurrences  
Industrial Applications  
Mineralogical Characterization

#### Lecturers and Staff

J. R. Boles University of California  
E. M. Flanigen Union Carbide Corporation  
A. J. Gude U.S. Geological Survey  
R. L. Hay University of California  
F. A. Mumpton State University of N.Y.  
R. A. Sheppard U.S. Geological Survey  
R. J. Stewart University of Washington  
R. C. Surdam University of Wyoming

#### Field Trip

Three to four days, to zeolite localities in the vicinity of Seattle.

#### Laboratory/Workshop Sessions

X-ray diffraction, petrographic, scanning electron microscopic characterization. Crystal model building, hand-specimen identification, field tests.

The short-course will be held immediately prior to the annual meeting of the Geological Society of America in Seattle, Washington, and will be limited to approximately 75 participants from academic, governmental and industrial organizations. Reduced student-rates will be offered. For further information and application forms, write to:

F. A. MUMPTON, Convener, M.S.A. Short-Course, Department of Earth Sciences, State University College, Brockport, NY 14420, U.S.A. (716-395-2635)