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BOOK REVIEWS

CHEMISTRY AND TECHNOLOGY OF LIME AND LIMESTONE, by Robert S. Boynton, x + 520 pages, Interscience Publishers, New York, 1965. \$22.00.

CHEMISTRY AND TECHNOLOGY OF LIME AND LIMESTONE is a clearly written and well illustrated reference text on the limestone and lime industry.

The author stated in the preface that the book is designed primarily for the industrial world and secondarily for academic use, and he admirably fulfilled the first function but fell somewhat short of accomplishing the second.

Chapter One, Introduction, is brief, as it should be. Chapters Two and Three discuss the formation and properties of limestone and limestone exploration and extraction and are the only places where the author's treatment of a subject is too brief to be effective. Mr. Boynton's Chapters Four through Thirteen, respectively, discuss Limestone Processing; Limestone Uses; Theory of Lime Hydration; Methods of Hydration; Economic Factors of Lime and Limestones; and Analytical Testing of Limestone and Lime. Of these topics the reviewer believes Mr. Boynton's most excellent contributions are the precise complete and up to date discussions of the Theory of Calcination (Chapter Six), Lime Manufacture (Chapter Seven) and Theory of Lime Hydration (Chapter Nine).

The four appendices are welcome additions of valuable data to the lime and limestone technicians.

In the reviewer's opinion, this text meets the needs of the lime and limestone industry and also is recommended highly as supplementary reading to augment courses in civil and chemical engineering, as well as a reference for economic geologists interested in non-metallics.

William A. Kneller

LABORATORY STUDIES IN GEOLOGY, by John P. Miller and Robert Scholten. 194 pages. W. H. Freeman and Company, San Francisco, California, 1965. \$3.75.

This is a revision of an established lab manual put out by the same publishers in 1962 in loose-leaf form. The coverage is that typical of a college level, one-term course in physical geology, with some considerable emphasis on "process" to accompany the usual material on rocks, minerals, and landforms, the "results." There is a real attempt made by the writers to deal with as many subjects as possible in a quantitative fashion without presupposing an extensive background in mathematics.

In general, the goal set forth by the authors is achieved. Nearly the only negative comments this reviewer could make are those that can be levelled against any laboratory manual written by some other person, which comments result from the fact that each instructor has his own pet examples and exercises and his own unique approach to nearly every subject within the field. The fact that each of the 15 exercises is available separately, at a cost of 25¢ each, means that even this objection does not prevent anyone from using at least part of the manual, at a relatively low cost to the student. As published laboratory manuals in physical geology go, this one clearly is the best currently on the market.

Donald F. Eschman

GEOLOGICAL DATA PROCESSING, by F. G. Smith. 284 pages. Harper and Row, New York, 1966. \$14.00.

"It would not be much of a misnomer if the book were to be entitled simply 'Data Processing.'" This statement comes from Carey Croneis, editor of Harper's Geoscience Series, in the Editor's Introduction to this book. In truth, there is very little geological in the book to warrant its title; several chapters contain not a mention of items geological. Only in the last chapter does one find geoscience examples to any great extent. Of the well over one hundred problems, less than ten are geologically oriented. The selected reference list is nearly devoid of earth-science literature.

What, then, is in this book? GEOLOGICAL DATA PROCESSING is an introduction to those aspects of applied mathematics particularly useful to data analysis on a high-speed digital computer. The viewpoint is always that of casting problems into a form amenable to machine computation. Introduction of the algorithm and an algebraic language (FORTRAN IV) is blended smoothly into the mathematical development. The presentation is elementary, lucid, and certainly appropriate for newcomers to automatic data handling.

Henry Pollack

SYMPOSIUM ON ORIGIN AND DISTRIBUTION
OF THE ELEMENTS

This symposium of the International Association of Geochemistry and Cosmochemistry was originally scheduled for Paris, September 21-23, 1966. However, because of an unforeseen re-scheduling of the UNESCO General Conference that conflicted with the symposium, it was necessary to postpone the latter. New dates for the meeting, May 8-10, 1967, have now been agreed upon and we have been assured that space and facilities in the UNESCO Headquarters Building, Place de Fontenoy, Paris VII, will be available at that time.

The symposium is under the co-sponsorship of the Association, UNESCO, and the International Union of Geological Sciences. It is divided into five subject sections. Papers in all of these fields are invited. These sections are listed below, together with names and addresses of chairmen-organizers, to whom titles, abstracts, inquiries, etc. should be directed.

Section I - Theories of Origin

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Section II - Solar, Stellar and Interstellar Abundances

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Section III - Meteorites

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Department of Geophysics, Australian National University
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Section IV - Planets, Asteroids, Comets, Tektites

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Section V - Terrestrial Abundances

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Proceedings of the symposium will be published in one or more volumes. To the end that these may be made as comprehensive a summary as possible, manuscripts are solicited for publication whether or not the papers can be presented in Paris. Manuscripts for publication only can also be sent to the Section Chairmen, or directly to the Chairman of the Program Committee, Professor L. H. Ahrens, Department of Geochemistry, University of Cape Town, Rondebosch, South Africa.

General questions about the symposium or about the Association can also be directed to Professor Ahrens or to Professor Earl Ingerson, Department of Geology, The University of Texas, Austin, Texas 78712, U.S.A.

ION EXCHANGE COLUMN

News from the San Diego Union

The U.S. Geological Survey announced yesterday it is opening a marine geology laboratory in San Diego as part of a long-range program to inventory the mineral wealth of the Continental Shelf in the Pacific.

The laboratory, to be headed by Dr. George W. Moore, will be housed in the Bureau of Commercial Fisheries' existing research center in La Jolla. Moore and several assistants will staff the new laboratory.

Research there will be in conjunction with a new office of marine geology and hydrology being established by the USGS at its research center in Menlo Park, California.

Dr. William T. Pecora, Geological Survey director, said the Menlo Park office will supervise the geological investigation of the Continental Shelf and mapping of the shelf floor.

Purpose of the new La Jolla laboratory, he said, will be to collaborate with associated research by the Bureau of Commercial Fisheries and Scripps Institution of Oceanography.

Pecora said the Survey plans to maintain the La Jolla Laboratory as a permanent facility.

He said the establishment of the Menlo Park and La Jolla Laboratories "emphasizes our need and interest to gain basic scientific knowledge of undersea geology off California, Oregon, Washington, Alaska and Hawaii."

An inventory of Pacific shelf mineral deposits, he said, is necessary before effective exploration to mine these resources can be conducted.

PERSONALS

Dr. John A.S. Adams, Chairman of the Department of Geology at Rice University, announces that Dr. DONALD R. BAKER, organic geochemist and petrologist formerly with Marathon Oil Company, and Dr. DIETER HEYMANN, specialist in the geochemistry of meteorites, formerly with the Enrico Fermi Institute of Chicago, have joined the geology faculty this September.

ALLEN S. ROGERS, former Senior Scientist with Texas Instruments, Inc., Dallas, Texas, and Head of the Geology Department, Haile Selassie I University, Addis Ababa, Ethiopia, has been appointed Head of the Geology Department, University of Ife, Ibadan, Nigeria.

ADA SWINEFORD left the Kansas Geological Survey and the Department of Geology at the University of Kansas to be an associate professor of geology at Western Washington State College in Bellingham in September.

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16-20 Australian and New Zealand Assoc. for the Advancement of Science, Melbourne (L. Mann, ANZAAS Organising Sec., Univ. of Melbourne, Parkville, N. 2, Victoria, Australia).

Feb.

1-3 SW Federation of Geological Societies Ann. Mtg., Hobbs, New Mexico (W. W. Steward, Amerada Petroleum Corp., Box 1260, Hobbs, N. M.).

March

16-18 Geological Society of America, NE Section Ann. Mtg. and special symposiums on hydrogeology of the NE, Pleistocene geology of N. Appalachians, marine geology and geophysics, Hotel Somerset, Boston, Mass. (Martin Prinz, Dept. of Geol., Tufts Univ., Medford, Mass. 02155).

30-
April 1 Geological Society of America, SC Section 1st Mtg., Norman, Oklahoma (C. J. Mankin, School of Geol., Univ. Oklahoma, Norman, Okla. 73069).

6-7 Forum on geology of industrial minerals, University of Kansas, Lawrence, Kansas (R. G. Hardy, Mineral Resources Section, Kansas Geol. Survey, Lindley Hall, University of Kansas, Lawrence, Kan. 66044).

17-20 American Geophysical Union Annual Mtg., and section of volcanology, geochemistry, and petrology symposia on properties of crystalline solutions and the mantle as a source of magma, Washington, D. C. (Robert O. Fournier, U.S. Geological Survey, 345 Middlefield Road, Menlo Park, Calif. 94025).

19-21 Pacific Northwest metals and minerals conference, Portland, Oregon (R. S. Mason, 1069 State Office Building, Portland, Ore. 97201).

CALENDAR

(conc.)

May

- 4-5 Symposium, salt-water encroachment of aquifers, Baton Rouge, La.
- 8-10 International Assoc. Geochem. Cosmochem., Symposium on the origin and distribution of elements, UNESCO Headquarters Bldg., Paris, France (cf. separate announcement for names and addresses of chairmen).
- 10-13 Geological Society of America, Rocky Mountain Section Ann. Mtg. and field trips, Golden, Colorado (John Montague, Montana State Univ., Bozeman, Mont.).

July

- 19-21 Conference on aspects of asbestos minerals, Oxford, England.
(J. Zussman, Oxford University, Department of Geology and Mineralogy Parks Road, Oxford, England).

- Aug. 28- International Meeting of Geologists, Kingston, Ontario (Geological
Sept. 3 Association of Canada, Queens University, Kingston, Ontario, Canada)

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