

are excellent, particularly the one listing the many symbols used, 179 in all.

It is probable that a specialist in the organic chemistry of polymers would like to see more of his field covered and the same will doubtless be true of the physical chemist and the applied chemist. Each, however, will find the essentials of his subject ably and authoritatively presented.

In the opinion of this reviewer, this book is the outstanding general text in this field. It should also serve as an invaluable reference book for the non-specialist. While more complete books are available on advanced topics and on limited, applied phases of the field, this text will serve as an "initiator" to the field of polymer chemistry.

DEPARTMENT OF CHEMISTRY
POLYTECHNIC INSTITUTE OF BROOKLYN HARRY P. GREGOR
BROOKLYN, NEW YORK

Crystal Structures. Volume II. Chapter XI. Miscellaneous Inorganic Compounds. Chapter XII. Structure of the Silicates. By RALPH W. G. WYCKOFF, Laboratory of Physical Biology, National Institute of Arthritis and Metabolic Diseases, Bethesda, Maryland. Interscience Publishers, Inc., 250 Fifth Avenue, New York 1, N. Y. 1957. 261 pp. 19.5 × 24.5 cm. Price, \$7.00.

Previously issued sections of this very valuable loose-leaf reference work have already been reviewed.^{1,2}

The present section includes detailed structure data on the silicates and on miscellaneous inorganic compounds: complex and basic halides, thio salts, complex sulfides, complex oxides, and a few other compounds not belonging in these or other categories previously included. Coverage of the results of detailed structure analyses of all classes of chemical substances is not complete, except for some figures and the most recent work, which will presumably be covered in supplements to be issued later.

The world owes Dr. Wyckoff and the publishers a big debt of gratitude for the preparation and publication of this monumental work.

- (1) J. Donohue, *THIS JOURNAL*, **74**, 5554 (1952).
(2) M. L. Huggins, *ibid.*, **75**, 6089 (1953).

RESEARCH LABORATORIES
EASTMAN KODAK COMPANY MAURICE L. HUGGINS
ROCHESTER 4, N. Y.

Encyclopedia of Chemical Reactions. Volume VI. Samarium, Scandium, Selenium, Silicon, Silver, Sodium. Compiled by C. A. JACOBSON, Late Professor of Chemistry, West Virginia University. Edited by CLIFFORD A. HAMPPEL, Manager, Chemical Equipment Division, Fansteel Metallurgical Corp., Editor, "Rare Metals Handbook." Reinhold Publishing Corporation, 430 Park Avenue, New York 22, N. Y. 1956. 438 pp. 16 × 23.5 cm. Price, \$12.50.

Volume VI of the Encyclopedia covers the reactions of six elements, samarium, scandium, selenium, silicon, silver and sodium. In general this reviewer can simply repeat the same criticisms as were voiced by the reviewers of previous volumes (*THIS JOURNAL*, **68**, 1678 (1946); **71**, 2278 (1949);

75, 5772 (1953)). The main objection is still the incompleteness of the coverage. To be sure, a compilation of a comprehensive encyclopedia is a gargantuan and unenviable task; however, if such work is to have any usefulness, at least an attempt should be made at reasonable completeness.

In order to illustrate the extent of this work it is sufficient to mention that there is a total of 77 reactions listed for samarium, of which 52 date to 1883 and 1885, and 51 reactions are listed for scandium, 46 of which are taken from pre-World War I literature!

The appendix contains a list of 93 journals from which the abstracts were made. One cannot but wonder why journals such as *Oil and Soap* or *Soap and Sanitary Chemicals* are included, while *Acta Chem. Scand.*, *Canadian J. Chem.*, or *J. Ind. Chem. Soc.* are omitted and the only Russian journal listed is the *J. Russ. Phys. Chem. Soc.* which ceased publication in 1930?

One easily comes to the conclusion that the title "Encyclopedia of Chemical Reactions" is certainly too pretentious. It is rather a limited collection of chemical reactions. As such it may have some usefulness for a research worker. To claim that the work is encyclopedic is certainly unrealistic.

DEPARTMENT OF CHEMISTRY
STATE UNIVERSITY OF IOWA ALEXANDER I. POPOV
IOWA CITY, IOWA

BOOKS RECEIVED

June 10, 1957–July 10, 1957

- H. GEOFFREY BRAY AND KENNETH WHITE, "Kinetics and Thermodynamics in Biochemistry." Academic Press Inc., 111 Fifth Avenue, New York 3, N. Y. 1957. 343 pp. \$7.50.
- J. HENGSTENBERG, B. STURM AND O. WINKLER. (Edited by). "Messen und Regeln in der Chemischen Technik." Unter Mitwirkung zahlreicher Fachwissenschaftler herausgegeben von Springer-Verlag, Reichpietschauer 20, Berlin W. 35, Germany. 1957. 1261 pp. DM. 146.
- H. A. KRAMERS. "Quantum Mechanics." Translated by D. ter Haar. Interscience Publishers, Inc., 250 Fifth Avenue, New York 1, N. Y. 1957. 496 pp. \$12.50.
- THOMAS MOORE. "Vitamin A." D. Van Nostrand Company, Inc., 126 Alexander Street, Princeton, New Jersey. 1957. 645 pp. \$14.00.
- F. F. NORD, Edited by. "Advances in Enzymology and Related Subjects of Biochemistry." Vol. XVIII. Interscience Publishers, Inc., 250 Fifth Avenue, New York 1, N. Y. 1957. 435 pp. \$9.00.
- M. CANNON SNEED AND ROBERT C. BRASTED, Editors. "Comprehensive Inorganic Chemistry." Volume Six. "The Alkali Metals." By John F. Suttle. "Hydrogen and Its Isotopes." By Robert C. Brasted. D. Van Nostrand Company, Inc., 126 Alexander Street, Princeton, New Jersey. 1957. 234 pp. \$6.00.