
 NEW BOOKS

College Chemistry in Nursing Education. A Study of College Courses as a Foundation for Basic Preparation. By EDNA CURTIS MORSE, R.N., A.M., Ed.D., Assistant Professor of Home Economics, Teachers College, Columbia University. Edited by ISABEL M. STEWART, R.N., A.M. The Macmillan Company, 60 Fifth Avenue, New York, N. Y., 1947. xvi + 260 pp. 14 × 21 cm.

From the vantage point of her extensive experience in nursing education and teaching, the author has made a survey and study of the long-standing but recently acutely-developed dual problems of the student nurse who has had chemistry in her previous training (oftentimes a college course) and the five-year nursing program student whose chemistry is taken as a regular college course. The standard prescribed nursing training program traditionally includes chemistry in the form of a short course (term or semester) of distinctly old-fashioned flavor, composed of classical descriptive inorganic, a dash of similar theory, and some rather disjointed scraps of elementary and specialized organic chemistry, all of which usually is absorbed by painful brute force memory. The usual freshman chemistry course, in an analogous way, lacks many elements important in the training of the nurse, especially the organic chemistry and applications.

The author gives a careful analysis of the problem, pulling no punches in her criticism of the shortcomings of both kinds of course. In her opinion, and she supports it with adequate fact and comparative argument, the typical college general chemistry course is not enough or the right chemistry for a good nurse. The second part of the book is a plan and outline of a supplementary course, largely organic and physiological, to upgrade the first course. If well done and well taken, the end-product nurse would be of superior chemical quality. The author does not suggest any attack on the other problem, equally serious in the reviewer's opinion, as to how to upgrade in general chemistry the product of the brief old-line nursing course. The book is a "must" and a good one, for those dealing with nursing chemistry.

ALLEN D. BLISS

Principles of High-Polymer Theory and Practice. Fibers, Plastics, Rubbers, Coatings, Adhesives. By ALOIS X. SCHMIDT, Assistant Professor in Chemical Engineering, and CHARLES A. MARLIES, Associate Professor in Chemical Engineering, College of the City of New York. (Chemical Engineering Series) McGraw-Hill Book Company, Inc., 330 West 42nd Street, New York 18, N. Y., 1948. xii + 743 pp. Illustrated. 15.5 × 23.5 cm. Price, \$7.50.

It appears to be an almost Herculean task to cover in a comparatively limited text of about 700 pages the fundamental aspects of macromolecules, their formation, structure, behavior in solution, their swelling and plasticizing, crosslinking and reinforcing, their solubility and flow properties, their manufacturing and compounding and their final mechanical thermal, optical and electrical properties. Yet the authors of this volume have come as near to an accomplishment of this task as one ever could hope to come. They achieve it by systematic simplification of all important fundamental ideas, numerical relationships, reaction mechanisms and structure-property relations without ever resorting to misleading or incorrect oversimplifications. All essential fundamental facts on the basic structure of macromolecules, their various types of interaction and their behavior in solution are simply and clearly stated and the consequences on the practical properties are drawn by way of using well chosen and typi-

cal examples. The text is lively and attractively written, does not require more mathematics, physics and chemistry than any good undergraduate student would know and excels particularly in the large number of carefully selected well-drawn figures and informative tables. There are only few attempts to provide for completely up-to-date, specialized information, but there are enough references to enable the interested reader to find his way to the ultimate sources of detailed information. This book will be very useful and helpful to everybody who wants to achieve a first simple, clear, and general insight into the entire field of high polymers from the theoretical concepts to the practical application; it can be highly recommended for this purpose.

H. MARK

 BOOKS RECEIVED

June 10, 1949–July 10, 1949

GERHART FRIEDLANDER AND JOSEPH W. KENNEDY. "Introduction to Radiochemistry." John Wiley and Sons, Inc., 440 Fourth Avenue, New York 16, N. Y. 1949. Chapman and Hall, Limited, London. 412 pp. \$5.00.

HENRY GREEN. "Industrial Rheology and Rheological Structures." John Wiley and Sons, Inc., 440 Fourth Avenue, New York 16, N. Y. 1949. 311 pp. \$5.50.

GLENN L. JENKINS, ANDREW G. DUMEZ, JOHN E. CHRISTIAN AND GEORGE P. HAGER. "Quantitative Pharmaceutical Chemistry. Theory and Practice of Quantitative Analysis Applied to Pharmacy." Third Edition. McGraw-Hill Book Company, Inc., McGraw-Hill Building, 330 West 42nd Street, New York 18, N. Y. 1949. 531 pp. \$4.75.

ALEXANDER LOWY AND WILMER E. BALDWIN. "A Laboratory Book of Elementary Organic Chemistry." Third Edition. John Wiley and Sons, Inc., 440 Fourth Avenue, New York 16, N. Y. 1949. 186 pp. \$3.00.

FREDERICK C. NACHOD. "Ion Exchange. Theory and Application." Academic Press, Inc., 125 East 23rd Street, New York, N. Y. 1949. 411 pp. \$8.50.

MAX PLANCK *in seinen Akademie-Ansprachen.* "Erinnerungsschrift der Deutschen Akademie der Wissenschaften zu Berlin." Akademie Verlag, Berlin. 1948. 204 pp. DM 8.75.

A. EDWARD REMICK. "Electronic Interpretations of Organic Chemistry." Second Edition. John Wiley and Sons, Inc., 440 Fourth Avenue, New York 16, N. Y. 1943, 1949. 600 pp. \$6.00.

PAUL V. SEYDEL. "Cotton Slashing." W. R. C. Smith Publishing Company, 806 Peachtree Street, N. E., Atlanta, Georgia. 1949. 270 pp. \$2.00 (paper), \$3.50.

SIDNEY SIGGIA. "Quantitative Organic Analysis via Functional Groups." John Wiley and Sons, Inc., 440 Fourth Avenue, New York 16, N. Y. 1949. 152 pp. \$3.00.

SIR JOHN SIMONSEN. "The Terpenes." Vol. II. Second Edition, Revised, Cambridge University Press (American Branch), 51 Madison Avenue, New York 10, N. Y. 1949. 619 pp. \$3.50.

L. ZECHMEISTER, Editor. "Fortschritte der Chemie organischer Naturstoffe." (Progress in the Chemistry of Organic Natural Products.) Springer Verlag, Wien. 1948. 417 pp. \$11.20; bound, \$12.00.