## NEW BOOKS

The Systematic Identification of Organic Compounds. By RALPH L. SHRINER, Professor of Chemistry, The State University of Iowa, and REYNOLD C. FUSON, Professor of Chemistry, The University of Illinois. Third Edition, John Wiley and Sons, Inc., 440 Fourth Avenue, New York 16, N. Y., 1948. viii + 370 pp. 15 × 22 cm. Price \$4.00.

The first edition of this laboratory manual appeared in 1935 as 195 pages; for reviews of this edition, see This JOURNAL, 58, 536 (1936), and J. Chem. Education 12, 596-597 (1935). Five years later a second edition had grown to 312 pages; for reviews of it, see This JOURNAL, 62, 2569 (1940), and J. Chem. Education, 17, 501 (1940). The present third edition requires 370 pages.

Although the approach to its subject is broadly retained, the material has been substantially amplified and the new incorporated with the old in a different sequence. By inclusion of new methods the chapter on the preparation of derivatives has been increased from 51 to 65 pages; that comprising tables of derivatives occupies the same space, but many new constants have been inserted in what were formerly gaps in the tables. The two chapters on separation of mixtures and interpretation of experimental data appear to be unchanged, but the eleven pages of problems have by new additions been expanded to twenty.

The utility of the index has been increased and ease of location of a given tabular entry facilitated by the inclusion of the melting or boiling point of the compound in the index itself.

In recent years increasing attention is being given to the special values of adequate training in the field to which this treatment comprises a valuable introduction; the new edition is, therefore, timely and welcome.

ERNEST H. HUNTRESS

Répertoire des Composés organiques polymorphes. (Encyclopedia of Polymorphic Organic Compounds.) By Louis Deffet, Assistant à l'Université de Bruxelles. Editions Desoer, 21 Rue Sainte-Véronique, Liége, 1942. 155 pp.

This book is a compilation of thermal and crystallographic data on organic compounds which exhibit polymorphism. After a very brief explanatory introduction, it lists, in its first section, 1188 organic compounds found to be polymorphic at atmospheric pressure, in its second section, 32 substances polymorphic under high pressure, in a third section, a bibliography of 994 references, and, in a fourth section, an alphabetical list of the substances, referring by number to those in the first two sections, which are arranged according to the system used by Richter. After the formula and name of each compound in the first two sections, abbreviations indicate the number of modifications, the occurrence of enantiotropy or monotropy, and the crystal forms, when known, and occasionally other information. Also listed are the melting and transition temperatures, and the heats of fusion and of transition, when available. The lists appear to have been prepared with the care that one would expect from a pupil of Professor Timmermans. On looking up a few familiar polymorphic substances, the reviewer has found no omissions of data published prior to December, 1941. The book should be very useful to investigators of polymorphism, and generally valuable as a reference work for data on the subject.

CHARLES P. SMYTH

## **BOOKS RECEIVED**

May 10, 1948—June 10, 1948

- HARRY BARRON. "Modern Rubber Chemistry." D.
  Van Nostrand Company, Inc., 250 Fourth Avenue,
  New York, N.Y., 1948. 502 pp. \$7.50.
- J. E. BELCHER and J. C. COLBERT. "Properties and Numerical Relationships of the Common Elements and Compounds." Fourth Edition. Appleton-Century-Crofts, Inc., 35 West 32d Street, New York 1, N.Y., 1948. 374 pp. \$3.00.
- ERNST DAVID BERGMANN. "The Chemistry of Acetylene and Related Compounds." Interscience Publishers, Inc., 215 Fourth Avenue, New York 3, N.Y., 1948. 108 pp. \$3.00.
- Ernst David Bergmann. "Isomerism and Isomerization of Organic Compounds." Interscience Publishers, Inc., 215 Fourth Avenue, New York 3, N.Y., 1948. 138 pp. \$3.50.
- JOHN BURCHARD. "M.I.T. in World War II. Q.E.D." John Wiley and Sons, Inc., 440 Fourth Ave., New York 16, N.Y., 1948. 354 pp. \$3.50.
- TENNEY L. DAVIS, Editor-in-Chief. "Chymia. Annual Studies in the History of Chemistry." Vol. I. University of Pennsylvania Press, 1948. Lancaster Press, Inc., Pa. 189 pp. \$3.50.
- René Dubrisay. "Propriétés des Corps et Constitution chimique." Presses Univérsitaires de France, 108 Boulevard Saint-Germain, Paris, France, 1948. 151 pp. 200 fr.
- T. P. HILDITCH. "The Chemical Constitution of Natural Fats." Second Edition. John Wiley and Sons, Inc., 440 Fourth Avenue, New York, N.Y., 1947. 554 pp. \$9.00.
- C. A. JACOBSON. "Encyclopedia of Chemical Reactions." Vol. II. Reinhold Publishing Corporation, 330 West 42d Street, New York 18, N.Y., 1948. 917 pp. \$12.00.
- RICHARD KUHN. "Biochemistry. Part I." Published by Office of Military Government for Germany, Field Information Agencies Technical, Economics Division, Research Control Branch, Berlin, Germany. 218 pp.
- J. S. Long and H. V. Anderson. "Chemical Calculations." Fifth Edition. International Chemical Series. McGraw-Hill Book Company, 330 West 42nd Street, New York 18, N.Y., 1948. 401 pp. \$3.75.
- W. C. PIERCE and E. L. HAENISCH. "Quantitative ANALYSIS." Third Edition. John Wiley and Sons, Inc., 440 Fourth Avenue, New York 16, N.Y., 1948. 520 pp. \$3.75.
- W. W. PIGMAN and M. L. WOLFROM. "Advances in Carbohydrate Chemistry." Vol. III. Academic Press, Inc., 125 E. 23rd Street, New York 10, N.Y., 1948. 424 pp. \$8.50.
- W. Theilheimer. "Synthetic Methods of Organic Chemistry." Vol. I. Interscience Publishers, Inc., 215 Fourth Avenue, New York 3, N.Y., 1948. 254 pp. \$5.00.
- E. J. W. Verwey and J. Th. G. Overbeek. "Theory of the Stability of Lyophobic Colloids. The Interaction of Sol Particles having an Electric Double Layer." Elsevier Publishing Company, 215 Fourth Avenue, New York, N.Y., 1948. 205 pp. \$4.50.
- "A Symposium on the Use of Isotopes in Biology and Medicine." Contributors: Drs. Clarke, Urby, Seaborg, Aebersold, Nier, Coryell, Kamen, Melville, Sprinson, Wood, Bloch, Greenberg, Chaikoff, Hamilton, Hall, Hertz, Bale, Nickson and Daniels. The University of Wisconsin Press, Madison, Wis., 1948. 445 pp. \$5.00.