

Maleic Anhydride Derivatives: Reactions of the Double Bond. Lawrence H. Flett and William Howlett Gardner. New York: Wiley; London: Chapman & Hall, 1952. 269 pp. \$6.50.

This book presents in simplified form some 116 chemical reactions involving maleic anhydride or one of its unsaturated derivatives. These reactions are those characteristic of the olefinic nature of maleic anhydride and represent the kind of reaction which would be of prime interest to the industrial chemist. Each reaction is presented with fair detail, especially in regard to experimental quantities used and scope of the reaction type. Along with this, the authors give pertinent references to the literature.

As one might expect, and as is pointed out by the authors, a presentation of this type suffers from several disadvantages. Primarily, the book is limited in scope and does not discuss the theoretical or mechan-

istic viewpoint of the chemistry involved. Also, no attempt is made to present or discuss the various factors affecting the course of the reactions involved which would increase the value of the book. In addition, the classification system used has certain inherent disadvantages, so that the reader finds, for example, the reactions of organocadmium and organolithium compounds listed under Grignard reagents and the reactions of alcohols listed as those of their metallic salts.

However, the book is a useful addition to the already large number of those dealing with organic reactions. The concise presentation of the data and the general ease by which it may be located are to be especially commended. The book is recommended to those chemists whose principal interest is in the field of synthetic organic chemistry.

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Scientific Book Register

The Mathematical Theory of Non-Uniform Gases. An account of the kinetic theory of viscosity, thermal conduction, and diffusion in gases. 2nd ed. Sydney Chapman and T. G. Cowling. New York: Cambridge Univ. Press, 1952. 431 pp. Illus. \$10.50. (Suppl. vol. for owners of the first edition: *Notes Added in 1951*. Pp. 392-431. \$1.00.)

Josiah Willard Gibbs: The History of a Great Mind. Rev. ed. Lynde Phelps Wheeler. New Haven, Conn.: Yale Univ. Press; London: Geoffrey Cumberlege, Oxford Univ. Press, 1952. 270 pp. and plates. \$4.00.

The Chemistry and Physiology of the Nucleus. Experimental Cell Research. Suppl. 2, 1952. Proceedings of the symposium held August, 1951 by the Biology Department, Brookhaven National Laboratory. V. T. Bowen, Ed. New York: Academic Press, 1952. 402 pp. Illus. \$7.00.

Advanced Mechanics of Materials. 2nd ed. Fred B. Seely and James O. Smith. New York: Wiley; London: Chapman & Hall, 1952. 680 pp. Illus. \$8.50.

Headaches: Their Nature and Treatment. Stewart Wolf and Harold G. Wolff. Boston: Little, Brown, 1953. 177 pp. \$2.50.

Annual Review of Plant Physiology, 1952, Vol. 3. Daniel I. Arnon, Ed., and Leonard Machlis, Assoc. Ed. Stanford, Calif.: Annual Reviews, 1952. 369 pp. \$6.00.

Dairy Engineering. 2nd ed. Arthur W. Farrall. New York: Wiley; London: Chapman & Hall, 1953. 477 pp. Illus. \$6.00.

Eugenics: Galton and After. Carlos Paton Blacker. Cambridge, Mass.: Harvard Univ. Press, 1952. 349 pp. Illus. \$5.00.

Methoden der Organischen Chemie. (Houben-Weyl). Band VIII: *Sauerstoffverbindungen* III. 4th ed. Eugen Müller, Ed., with collab. of O. Bayer, H. Meerwein, and K. Ziegler. Stuttgart: Georg Thieme, 1952. 775 pp. DM 98.

The Vertebrate Organism, Part I. Howard H. Hillemann. P. O. Box 491, Corvallis, Ore.: Oregon State College Coop. Assoc., 1953. 122 pp. \$3.12 postpaid.

Superconductivity. 2nd ed. D. Shoenberg. New York: Cambridge Univ. Press, 1952. 256 pp. Illus. \$6.00.

The Theory of Electrons and Its Applications to the Phenomena of Light and Radiant Heat. 2nd ed. Repr. H. A. Lorentz. New York: Dover, 1952. 343 pp. Illus. \$3.50; paperbound \$1.70.

I Drank the Zambezi. Arthur Loveridge. New York: Harper, 1953. 296 pp. Illus. \$4.00.

An Introduction to Scientific Research. E. Bright Wilson, Jr. New York-London: McGraw-Hill, 1952. 375 pp. Illus. \$6.00.

The Composition and Assaying of Minerals. John Stewart-Remington and Wilfrid Francis. New York: Philosophical Library, 1953. 127 pp. \$5.50.

Annual Review of Nuclear Science, Vol. 2. James G. Beakerley *et al.*, Eds. Stanford, Calif.: Annual Reviews, 1953. (In cooperation with the National Research Council.) 429 pp. Illus. \$6.00.

Non-Aqueous Solvents: Applications as Media for Chemical Reactions. Ludwig F. Audrieth and Jacob Kleinberg. New York: Wiley; London: Chapman & Hall, 1953. 284 pp. Illus. \$6.75.

Vertebrate Zoology: An Introduction to the Comparative Anatomy, Embryology and Evolution of Chordate Animals. 2nd ed. G. R. de Beer. London: Sidgwick and Jackson, 1951; New York: Macmillan, 1953. 435 pp. Illus. \$5.50.

Culture: A Critical Review of Concepts and Definitions. Peabody Museum Papers, Vol. XLVII, No. 1. A. L. Kroeber and Clyde Kluckhohn, with assistance of Wayne Untereiner and appendices by Alfred G. Meyer. Cambridge, Mass.: Peabody Museum of American Archaeology and Ethnology, Harvard University, 1952. 223 pp. \$5.25.

Introductory Mycology. Constantine John Alexopoulos. New York: Wiley; London: Chapman & Hall, 1952. 482 pp. Illus. \$7.00.

The Atom Story: Being the Story of the Atom and the Human Race. J. G. Feinberg. New York: Philosophical Library, 1953. 243 pp. Illus. \$4.75.