

Book Reviews

Organic Photochemistry. By ROBERT O. KAN, Assistant Professor of Chemistry, Kent State University. McGraw-Hill Book Co., Inc., 330 West 42nd St., New York, N. Y. 1966. viii + 293 pp. 15.5 × 23.5 cm. \$12.50.

Professor Kan's entry into the field of monographs on photochemistry is timely and quite comprehensive in its treatment of various classes of organic photoreactions. The book consists of eight chapters, mostly quite unrelated. The first chapter, on "concepts," is too incomplete to be of much value. The remaining chapters serve as seven modern, up-to-date review articles with a very large number of references, quite useful to the worker in the field but probably of little value to the beginning student. Thus the book, despite the author's statement to the contrary, cannot be considered a textbook.

The photochemistry reviewed in the book covers the broad spectrum of homolytic photolysis, rearrangement and isomerization, addition, redox, and ionic processes. Mechanistic hypotheses are advanced in many places, and the author appears to be quite careful to differentiate between sensitized and nonsensitized processes. My chief criticisms of the book are that it is somewhat redundant in some places (dienone rearrangements, various steroidal photoprocesses, cage-forming reactions, etc., most of the above being in large complex molecules leading to mechanistic ambiguities), and that there is too little physical chemistry in the main body (quantum yields and their interpretation, spectroscopic correlations with chemical processes). The text is quite free from typographical errors, although phenyl is designated both as C_6H_5 and ϕ , sometimes even in the same equation—bothersome but tolerable.

In the final analysis, I must recommend this book because it is a useful and extensive review of the modern literature of photochemistry in an era when the field is exploding beyond the capacity of writers to review it.

Peter A. Leermakers

Hall Laboratory of Chemistry, Wesleyan University
Middletown, Connecticut

BOOKS RECEIVED; December 1966

ARTHUR J. AHEARN, Editor. "Mass Spectrometric Analysis of Solids." American Elsevier Publishing Co., Inc., 52 Vanderbilt Ave., New York, N. Y. 1966. 175 pp. \$10.75.

L. V. COCKS and C. VAN REDE. "Laboratory Handbook for Oil and Fat Analysts." Academic Press Inc., Ltd., Berkeley Square House, Berkeley Square, London, W.1., England. 1966. 419 pp. \$15.00.

J. CALVIN GIDDINGS and ROY A. KELLER, Editors. "Advances in Chromatography." Volume 1. Marcel Dekker, Inc., 95 Madison Ave., New York, N. Y. 1965. 392 pp. \$14.50.

J. INCZÉDY. "Analytical Applications of Ion Exchangers." Pergamon Press Inc., 44-01 21st St., Long Island City, N. Y. 1966. 443 pp. \$17.50.

INTERNATIONAL UNION OF PURE AND APPLIED CHEMISTRY. "Microchemical Techniques. Plenary Lectures Presented at the International Symposium on Microchemical Techniques—1965, held in Pennsylvania, 22–27 August, 1965." Butterworth Inc., 7300 Pearl St., Washington, D. C. 1965. 184 pp. \$8.00.

I. M. KOLTHOFF and PHILIP J. ELVING, Editors. "Treatise on Analytical Chemistry." Part II. "Analytical Chemistry of Inorganic and Organic Compounds." Volume 4. Interscience Publishers, John Wiley and Sons, Inc., 605 Third Ave., New York, N. Y. 1966. 452 pp. \$17.00.

DONALD MCNEIL. "Coal Carbonization Products." Pergamon Press Inc., 44-01 21st St., Long Island City, N. Y. 1966. 159 pp. \$2.95.

B. A. NEWTON and P. E. REYNOLDS, Editors. "Biochemical Studies of Antimicrobial Drugs. Sixteenth Symposium of the Society for General Microbiology held at the Royal Institution, London, April 1966." Cambridge University Press, 32 East 57th St., New York, N. Y. 1966. 349 pp. \$11.50.

MOWBRAY RITCHIE. "Chemical Kinetics in Homogeneous Systems." John Wiley and Sons, Inc., 605 Third Ave., New York, N. Y. 1966. 115 pp. \$2.95.

M. STACEY, J. C. TATLOW, and A. G. SHARPE, Editors. "Advances in Fluorine Chemistry." Volume 5. Butterworth Inc., 7300 Pearl St., Washington, D. C. 1965. 288 pp. \$14.95.

VINCENT A. SUPRYNOWICZ. "Introduction to Electronics for Students of Biology, Chemistry and Medicine." Addison-Wesley Publishing Co., Inc., Reading, Mass. 1966. 324 pp. \$12.50.

RICHARD J. WURTMAN. "Catecholamines." Little, Brown and Co., 34 Beacon St., Boston, Mass. 1966. 111 pp. \$6.75.