pilation of papers in this area may not appear again for many years.

The entire volume is well arranged and remarkably free from errors, in view of the number and geographical distribution of the contributors.

J. Kistemaker, the force behind the conference and in the preparation of these proceedings, has performed a valuable service for his colleagues.

C. P. KEIM
Technical Information Division,
Oak Ridge National Laboratory

Progress in the Chemistry of Organic Natural Products. vol. XIV. L. Zechmeister, Ed. Springer, Vienna, Austria, 1957. viii + 377 pp. $17.85.

In this most recent volume of the *Progress* series, Zechmeister has assembled seven chapters representative of fields of current interest; five of these deal with the chemistry of plant materials. Noteworthy is the steady increase in the amount of space devoted to biogenetic mechanisms—no longer an isolated area of fragile speculation.

"Acetylenverbindungen im Pflanzenreich," by F. Bohlmann and H. J. Mannhardt, reviews the methods of isolation, structure elucidation, and synthesis of a variety of acetylenes and polyacetylenes found in both higher and lower plants. The chapter closes with a detailed speculation on the biogenesis of this series and a description of the use of actylene compounds as a guide in plant taxonomy.

In "Neuere Ergebnisse auf dem Gebiete der glykosidischen Herzgifte: Zucker und Glykoside," C. Tamm presents recent work on the chemistry of the cardiac-active glycosides. Physical properties of the sugars and aglycones, as well as botanical sources of the glycosides, are presented in extensive tables.

The chemistry of hypericin and related polycyclic quinones is set forth in a chapter by H. Brockmann, "Photodynamisch wirksame Pflanzenfarbstoffe." These plant coloring matters sensitize grazing animals to serious irritation by sunlight. The interesting hypothesis that such compounds catalyze the photooxidation of proteins is discussed briefly.

In "Biosynthetic relations of some natural phenolic and enolic compounds," A. J. Birch summarizes the evidence derived from labeling and other experiments which permits an elaboration of the pathway from two-carbon fragments to complex cyclic compounds. By making use of a few chemical reactions known to be within the realm of enzymes, Birch is able to correlate the structures and biosynthesis of a wide variety of natural products, including phenols, coumarins, anthocyanins, lignin precursors, terpenoids, and tropolones.

H. Sobotka, N. Barsel, and J. D. Chanley have reviewed the chemistry, physiology, and pharmacology of "The aminochromes." The oxidation products of phenylethylamines have long been of interest as precursors of melanin pigments. The current research activity on the metabolism of adrenalin and aromatic amino acids, and on the pharmacological properties of these unstable quinones themselves, renders the chapter particularly timely.

A portion of the complex and fascinating chemistry of vision is reviewed in "Visual pigments," by R. A. Morton and G. A. J. Pitt. In addition to describing the chemistry of retinenes and rhodopsin, the authors have enhanced the value of the review by including a comparative survey of the eye pigments of nonmammalian species.

A final chapter by H. Brown, "The carbon cycle in nature," discusses the possible origins and the quantities, rates, and mechanisms of turnover of biochemical carbon. A number of phenomena are explained by the assumption that the earth was born with a reducing atmosphere which was gradually transformed to the present oxidizing atmosphere.

The high calibre of writing traditional to this series is maintained in the present volume, as is the quality of the paper and printing.

LOUIS A. COHEN
National Institute of Arthritis
and Metabolic Diseases,
National Institutes of Health

British Pharmacopoeia, 1958. Published under the direction of the General Medical Council. Pharmaceutical Press, London, for the Council, 1958 (order from Rittenhouse Bookstore, Philadelphia). xxvi + 1012 pp. £3 3s.

American readers familiar with the *United States Pharmacopeia* (*USP*), volume XV, will be perfectly at home with the *British Pharmacopoeia, 1958* (*BP*). The two compendia are similar in scope, content, and format. Both consist of introductory notices and definitions, several hundred pages of monographs running from acacia to zinc undecylenate (including names, descriptions, identification and assay methods, and the like), and detailed appendices on methods and materials. In both books the material is assembled with the assistance of committees drawn from pharmacists and physicians from universities and industry; the English use about twice as many committees as do the Americans.

A few of the minor differences may be interesting to American readers. The *BP* eliminates the salt of a drug when only one form is used; thus "Injection of neostigmine methylsulfate" becomes "Neostigmine injection." In expressing dosage the *BP* is somewhat less consistent than the *USP*. Some statements are brief, as for isoniazid: "0.1 to 0.3 g. daily in divided doses"; others are long, as for cyanocobalamin: "By intramuscular injection, controlling dose, 50 to 100 micrograms weekly, or more frequently if subacuate combined degeneration of the spinal cord is present; maintenance dose, 50 to 100 micrograms every two or three weeks." In the *USP* the usual dose and the range of doses are given separately, with therapeutic directions uniformly brief. A more important difference is the inclusion of a categorizing name or statement in the *USP* which informs the reader of the general action or type of the drug, and thus helps to identify a drug when its name alone does not bring recognition.

Neither book is a therapeutic guide for physicians. Rather both are books of standards and sources of pharmaceutical directions which list officially those drugs preferred in good medical practice.

WINDSOR CUTTING
Department of Medical Microbiology,
Stanford University

New Books

Administrative Medicine. Transactions of the fifth conference, 28–30 October 1956, Princeton, N.J., George S. Stevenson, Ed. Josiah Macy, Jr. Foundation, New York, 1958. 197 pp. $3.75.

Advances in Clinical Chemistry. vol. I. Harry Sobotka and C. P. Stewart. Academic Press, New York, 1958. 409 pp. $12.

Adventures in the World of Science. Charles Greeley Abbot. Public Affairs Press, Washington, 1958. 159 pp. $3.50.

Aircraft Communications Systems. J. H. H. Grover. Philosophical Library, New York, 1958. 135 pp. $6.

Bacterial and Mycotic Infections of Man. Rene J. Dubos. Lippincott, Philadelphia, ed. 3, 1958. 832 pp. $8.50.

The Biological Replication of Macromolecules. Symposia of the Society for Experimental Biology, No. XII. Academic Press, New York, 1958. 261 pp. $9.50.

Buildings for Research. An architectural record book. F. W. Dodge Corp., New York, 1958. 224 pp. $9.50.

Causes de la répartition des êtres vivants. Raymond Furon. Masson, Paris, 1958. 168 pp. Paper, F. 1000.

Clinical Neuroanatomy, Neurophysiology, and Neurology. With a method of brain reconstruction. Louis Hausman. Thomas, Springfield, Ill., 1958. 547 pp. $9.75.

Coccidioidomysocis. Marshall J. Fiese. Thomas, Springfield, Ill., 1958. 253 pp. $9.50.

Cosmic Electrodynamics. J. W. Dungey. Cambridge Univ. Press, New York, 1958. 192 pp. $6.

Discussions on Child Development. A consideration of the biological, psycho-