

REVIEWS

Applied Pharmacology. 10th Edition. By ANDREW WILSON and H. O. SCHILD. Little, Brown & Company, Boston, Mass., 1968. xii + 721 pp.

The authors have developed an excellent text relating the fundamental principles of pharmacology to the therapeutic use of drugs. Numerous features of the organization and style of presentation contribute to continuity of thought so essential to reader comprehension. For example, the first three chapters identify and discuss general principles of pharmacology utilized in subsequent chapters dealing with specific drug classes. Included are factors affecting the tissue concentration of administered drugs (absorption, protein binding, metabolism, and excretion), factors affecting drug-receptor interaction and the concept of drug modification of enzyme catalyzed chemical processes controlling body functions. Pertinent aspects of physiology, biochemistry, and clinical medicine are reviewed and incorporated into the presentation of the pharmacologic subject matter.

The reviewer finds this book to have great appeal as a teaching text for basic courses in pharmacology or as a self-study text for research personnel in allied fields. With each class of drugs the authors have been wisely selective in presenting a limited number of pertinent experimental findings to illustrate the basis for explaining the drug's mechanism of action as it is presently understood. Liberal use of tables and diagrams adds greatly to the clarity of presentation. The presentation is adequate for the reader using this text for self-study purposes. Furthermore, the authors instill an appreciation for the experimental method on which inferences about drug action are based. Thus when used as a teaching text this style of approach should lend itself to further elaboration at the instructor's discretion.

An initial problem for most students of pharmacology is gaining familiarity with basic terminology relating to drug names and descriptions of their actions. As a British text, *Applied Pharmacology* may impose some hardship on the pharmacy or medical student in this country since there are slight differences between the British and United States conventions for some of the drug names. This minor problem should be easily overcome if the students are provided with a supplemental glossary of terms.

The authors state that their aim has been to inculcate a critical approach to the study of the mode of action and the clinical use of drugs. *Applied Pharmacology* goes a long way in accomplishing this objective.

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Peptides 1968: Edited by E. BRICAS. North-Holland Publishing Company, Amsterdam, The Netherlands, 1968, xiii + 345 pp. 15.5 × 22.9 cm. Price \$16.00. Proceedings of the Ninth European Peptide Symposium, Orsay, France, April, 1968.

The current volume, like its predecessors, is indeed a valuable aid to researchers working in the field of peptides. This book provides an up-to-date account of literature and the various trends and scope in the peptide field. The presentation is divided into eight sections, each of which incorporates the work of leading authorities in the field. Sections one and seven are of particular interest as they uncover the new possibilities. Section one deals with the conformational studies of peptides and decapeptides. The proper conforma-

tional knowledge is of vital importance for the complete understanding of biological activities of peptides and proteins. Section seven focuses the attention on another very interesting area, that is, the bacterial cell wall peptides. Section five is devoted to the synthesis of nonsymmetrical cystine peptides and presents complete data on the various aspects of insulin synthesis. Sections two and three outline the progress made toward the design of new protecting groups and coupling methods. Modifications and possible improvements of solid phase method of peptide synthesis are discussed in section four. Sections six and eight provide valuable information by outlining the contributions made by utilizing classical approaches in the synthesis of biologically active peptides and structure-activity relationships in the peptide chemistry. The inclusion of the author index in this volume is an improvement over the previous volumes.

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Chelates in Analytical Chemistry. Vol. II. Edited by H. A. FLASCHKA and A. J. BARNARD, JR. Marcel Dekker, Inc., New York, N.Y. 1969.

This volume, like the previous one, is a collection of monographs in this area of analytical chemistry. A brief review of each of them will be made here. A general assessment of the book concludes this review.

The first, by Buděšinsky, is concerned with synthetic methods for preparing arylazo derivatives of 4,5-dihydroxy-2,7-naphthalene disulfonic acid, *i.e.*, chromotropic acid and a review of their use in the analysis of about thirty metallic elements in ores and alloys, *etc.* A large table of data is presented, giving optimum pH values for the use of these reagents with different metals, the wavelengths of absorption maxima, molar absorptivities, *etc.*

The second article by Štulík and Vydra, is concerned with the application of the "dead stop" titration technique to solutions containing a number of metallic ions and EDTA.

The third monograph, by Firsching, is concerned with conventional and homogeneous precipitation reactions involving the use of oxalate, 8-quinoline and its derivatives, oximes, dioximes, hydroxamic acids, carboxylic acids, 1,10-phenanthraline, 2,2'-bipyridine, and miscellaneous compounds. This article is a review of the literature in the period of 1960-1965.

Jungreis and Thabet have prepared a short, but excellent, article on the use of Schiff bases in reactions involving chelation.

Burger has also written a short discussion on the selectivity and analytical applications of dimethylglyoxime and related dioximes and presented a short review of recent work in this area.

Finally, Lassner and Püschel have written an extensive review of niobium and tantalum reactions with various chelating and other reagents. While the article is comprehensive in the literature cited, these authors do not make an understandable and systematic presentation of the analytical chemistry of these elements, which seems called for in an article of this length. The article is particularly weak in treating separative reactions involving niobium, titanium, and tantalum combinations.

In general this book is a useful reference work, much like analytical reviews. It is not recommended for the student, but rather for the reference library dealing mostly with transition elements.

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