

REVIEWS

Analytical Profiles of Drug Substances, Volumes 1, 2, and 3.

Edited by KLAUS FLOREY. Academic, 111 Fifth Ave., New York, NY 10003. Volume 1, 480 pp., 16 × 24 cm, Price \$14.00; Volume 2, 575 pp., 16 × 24 cm, Price \$18.50; Volume 3, 581 pp., 16 × 24 cm, Price \$19.50.

The series, *Analytical Profiles of Drug Substances*, Volumes 1, 2, and 3, was originated by the members of the Section on Pharmaceutical Analysis and Quality Control of the Academy of Pharmaceutical Sciences to provide a collection of available information for drugs recognized in the official compendia. Although some data about these drugs were readily available, much of the information was scattered through the literature or stored in files of pharmaceutical research laboratories. When scientists needed chemical or physical data about a drug substance, they could be fairly certain that the data existed somewhere, but they could also be reasonably certain that the particular information could not be found without an extensive literature search or through correspondence with other scientists. Only scientists who had experienced the frustration of looking for the elusive data could have recognized that a compilation of the available data about drug substances could be important enough to warrant the tremendous task of collecting and organizing the data into a series of books.

Three volumes of the series have now appeared presenting 59 separate monographs for drug substances. Originally the monographs were divided into sections covering description, physical properties, synthesis, stability-degradation, metabolism, and the methods of analysis for the drug substances. Monographs in the later volumes have been expanded to contain information about the pharmacokinetics, protein binding, interactions with other drugs, biopharmaceutics, and toxicity.

When conflicting data for certain properties have appeared in the literature, all of the data are reported, but the authors of the monographs usually indicate which data have been accepted as most accurate. However, the reader need not simply accept the author's evaluation because references for the original sources are given. All of the monographs are liberally referenced, and these references can be as valuable to the research scientist as the collected data.

Later volumes in the series contain Addenda for previously published monographs, an Errata section, and a cumulative index for the monographs.

The volumes of this series were prepared by scientists for scientists, not the casual reader. Thus, the casual reader should not expect to be entertained, but the scientist can expect and find useful data about the drugs covered in the series.

Staff Review

Progress in Medicinal Chemistry, Vol. 9. Edited by G. P. ELLIS and C. B. WEST. American Elsevier, New York, NY 10017, 1973. 347 pp. 15 × 22 cm.

This case-bound edition combines Parts I and II of Volume 9, which were issued in limp covers during 1972. The book represents a timely offering of reviews of subjects that are of current interest including natural products having antitumor activity, the study of drug metabolism using isotope techniques, and the therapy of parkinsonism.

Too often naturally occurring substances are classified according to the taxonomy of plants, which may be confusing to the reader who is not trained in botany or pharmacognosy. After reviewing the methods used for detecting antitumor activity, the authors of the chapter on naturally occurring antitumor agents chose to classify the agents as tertiary amines, heterocyclic

amines, amides and imides, nitro and nitroso compounds, epoxides, lactones, quinones, aminoquinones, quinone methides, oxidized terpenoids, glycosides, and proteins. This approach more closely represents a chemical classification and will provide less difficult reading to members of other disciplines.

With an increasing demand for knowledge of the metabolic fate of drugs, the chapter on isotope techniques in the study of drug metabolism should receive a warm welcome. While it is not an exhaustive study, the chapter includes some of the major developments in isotopic techniques during the last decade.

The chapter on the pharmacotherapy of parkinsonism begins with a discussion of the etiology and biochemical manifestations of the disease. A review of the action of normal neurohumoral transmitters and their relations to the symptoms of Parkinson's disease is followed by a very brief summary of the drugs found to be of some value in therapy. The chapter ends with a seven-page addendum that includes a discussion of 118 references, most of which appeared after the completion of the manuscript. Here reference is given to several recent reviews covering various aspects of Parkinson's disease and its treatment.

While not of any lesser importance, the other chapters will have a narrower range of readers. The remaining three chapters will be of interest primarily to chemists and medicinal chemists and include a review of the chemistry of chromone-2- and -3-carboxylic acids and their derivatives (4-oxopyranoazoles and 4-oxopyranoazines) and adrenochrome and related compounds. Brief discussions of the biological properties of some of the agents are included.

The few errors that were noticed in the book are obvious to the reader and should present no particular problems of interpretation. These include such things as a pyrazole ring is referred to as an imidazole and a hydrogen atom is joined to a carbon atom by a triple bond. Obviously the hydrogen should be a nitrogen atom.

The book should find an interested audience among medicinal and natural products chemists as well as pharmacologists.

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Modern Chemical Analysis and Instrumentation. By HAROLD F. WALTON and JORGE REYES. Dekker, 95 Madison Ave., New York, NY 10016, 1973. 351 pp. 15.5 × 23 cm. Price \$12.75.

As stated by the authors in the Preface, this book is intended as a textbook of instrumental analysis for the undergraduate student who possesses some fundamental knowledge of titration and stoichiometry and how to use basic equipment.

The theory of each method is discussed and a few instruments are described in detail. Experiments utilizing a wide range of instruments are included.

Staff Review

Catalog of Teratogenic Agents. By THOMAS H. SHEPARD. The Johns Hopkins Press, Baltimore, MD 21218, 1973. 211 pp. 15.5 × 23.5 cm. Price \$10.00.

Nearly 650 drugs are included in this publication, although some are only cross-references. A summary of the teratogenic effects from the literature is given and the pertinent literature citations. While not strictly evaluative, conflicting reports and data are presented. Subject and author indexes are also included.

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