

**Biopharmaceutics and Relevant Pharmacokinetics.** By JOHN G. WAGNER. Drug Intelligence Publications, Hamilton, IL 62341, 1971. 375 pp. 18.5 × 26 cm. Price \$15.00.

The subject areas of biopharmaceutics and pharmacokinetics have long been misinterpreted and often used interchangeably in pharmacy. Nonetheless, the importance of this subject material has been recognized by the practitioners in all health-related fields, and the need for understanding and teaching of this material has been accepted.

This first edition of "Biopharmaceutics and Relevant Pharmacokinetics" presents as its goals three objectives: (1) to provide a textbook in the area of biopharmaceutics; (2) to provide a bibliography on specific areas covered; and (3) to provide a reference book for the scientists engaged in these areas.

The book itself, as the title indicates, is divided into two parts. The first section, Biopharmaceutics, deals with the influence of product formulation on drug activity. It encompasses 28 chapters starting with a review of the basic systems involved, *i.e.*, GI physiology, excretory system, and drug metabolism. This is followed by the roles of these systems in drug distribution, including absorption mechanism, *in vitro-in vivo* comparisons, and other physiological factors which affect drug activity. This section also includes the practical aspects involved in drug formulation and discusses the generic equivalents, means of providing prolonged drug activity and the associated blood levels, dose regimens, and chemical modifications which may be necessary along with other related topics too numerous to list here.

In the second section on Pharmacokinetics, the specific kinetics of drug absorption, distribution, metabolism, and excretion are discussed. Each of the above is treated completely and integrated with the concepts of compartmental models. The rationale and parameters involved in fitting various types of data to available models are discussed. The mathematics involved is provided and two chapters presenting those methods most commonly used in model fitting are included. Bioavailability determination as a function of the compartmental model selected is also discussed.

If the foregoing sounds like a compilation of articles previously published by Dr. Wagner, it is. However, several new chapters and some updated material necessary to present a coherent picture of the subject area have been added. The author presents an outline of his objectives for each section as well as for many of the individual chapters. Also in many of the chapters he presents a summary and his conclusions of the results presented. The bibliographical chapters in the two sections of the book are as complete and exhaustive as any previously published. In summary, Wagner has provided a book which is suitable for the graduate student and can also be used as a bibliographical and basic reference source for those engaged in research and undergraduate teaching.

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**Thermomicroscopy in the Analysis of Pharmaceuticals.** By MARIA KUHNERT-BRANDSTATTER. Pergamon Press Ltd., Headington Hill Hall, Oxford OX3 0BW, England, 1971. x + 409 pp. 18 × 25.5 cm. Price £10.00.

The hot-stage microscope has found increasingly wide spread use during the past two decades, largely through the work of Ludwig Kofler. This publication, written by a former student of Kofler's, contains general discussions of the methods used with the hot-stage microscope and more than 300 pages of tabular data concerning identification of various pharmaceutical products.

*Staff Review* ■

**The Alkaloids, Volume I, A Specialist Periodical Report.** Edited by J. E. SAXTON. The Chemical Society, Burlington House, London, W1V 0BN, England, 1971. xiii + 505 pp. 14.5 × 22 cm. Price £ 11.00.

If this first volume on alkaloids in the series of Specialist Periodical Reports portends the quality of future issues, we can look forward to valuable additions. This type of presentation, most comprehensive in its scope, allows individuals in disciplines other than organic chemistry to keep abreast of the exponentially growing number of publications in the highly specialized area of alkaloids.

Of particular interest to this reviewer and his colleagues was the chapter on bisindole alkaloids. It fills the gap in the literature since the last isolated reviews and, in turn, coordinates them in a systematic manner, as does the chapter on biosynthesis of the terpene indole alkaloids. Chapter 20 dealing with pharmacologically interesting and clinically useful alkaloids brings the experimental work into practical focus, which in essence is the motivating factor behind much of the investigation.

The use of arabic numbers in designating structures and the clear formulas make reading very easy.

This volume will make an excellent addition to earlier comprehensive reviews on alkaloids and belongs in every scientific library, as well as in those of serious alkaloid investigators.

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**The Biochemistry of Functional and Experimental Psychoses.** By HANS WEIL-MALHERB and STEPHEN I. SZARA. Charles C Thomas, 301-327 East Lawrence Ave., Springfield, IL 62703, 1971. xviii + 406 pp. 15.5 × 23.5 cm. Price \$18.50.

The physiology and metabolism of some neurotransmitters and their relation to behavior are the first topics discussed in this book. Subsequent sections deal with the biochemistry of affective disorders, the biochemistry of schizophrenia, and with drug-induced model psychoses. The relationship between functional and model psychoses is discussed in the final chapter.

*Staff Review* ■

**Chemical Modification of Proteins.** By GARY E. MEANS and ROBERT E. FEENEY. Holden-Day, Inc., 500 Sansome St., San Francisco, CA 94111, 1971. x + 254 pp. 17.5 × 23.5 cm. Price \$12.50 (cloth), \$6.96 (paper).

Intended primarily as a textbook on protein chemistry, this book presents the chemical methods used to relate the roles of the individual side chains of the amino acids of proteins to the chemical, physical, and biological properties of proteins. The book is organized into three parts that are independent but interrelated by cross-referencing.

*Staff Review* ■