

**Fundamentals of Clinical Pharmacokinetics.** By JOHN G. WAGNER. Drug Intelligence Publications, Hamilton, IL 62341, 1975. xvi + 461 pp. 18 × 26 cm. Price \$37.50

This text is the second in the series on pharmacokinetics by the author. The previous text, "Biopharmaceutics and Relevant Pharmacokinetics" (Drug Intelligence Publications, Hamilton, Ill., 1971) describes in detail the methodology and equations used in pharmacokinetics, with particular emphasis on the derivation of these equations. The present text, on the other hand, deals more closely with the clinical applications of these equations. The intent of the present text is "... to organize much of the knowledge of pharmacokinetics, with particular emphasis on human data, so that it may ultimately be useful in the clinical use of drugs." This objective is well carried out by the author.

The book begins with an introductory chapter, which generally describes the applications and importance of pharmacokinetics. The second chapter presents the basic pharmacokinetic equations for linear models, which are then used in the third chapter in the discussion of dosage regimen calculations. Chapters 4 and 5 describe absorption models and methods for estimating absorption rate constants, followed by a chapter discussing the use of Laplace transforms for linear models. Chapters 7 and 8 contain an up-to-date discussion of nonlinear pharmacokinetics and a relatively short discussion of statistical methods useful in evaluating blood level data.

Chapter 9 discusses the relationship between drug concentration and response and the kinetics of pharmacological response, followed by a discussion of bioavailability in Chapter 10. Chapter 11 is a particularly worthwhile one, in which a thorough and current review of the effects of normal and pathologic physiology on pharmacokinetics is contained. The final chapter contains a discussion and computer program listing of automated methods of pharmacokinetic analysis. In addition to an extensive and thorough subject index, the text also contains an author citation index which should prove useful.

Most of the chapters are well written and presented in such a way that persons not thoroughly acquainted with pharmacokinetics can still understand the basic principles of the topic under discussion. Each chapter is followed by several review questions and/or problems, illustrating the principles discussed in the chapter.

This book presents one of the best and most comprehensive discussions of clinical pharmacokinetics available today. The book should be an excellent addition to the reference shelf of scientists involved in basic or clinical research. Although some sections of the book may be too advanced for many fifth-year students, it certainly should be useful in teaching Pharm.D. and graduate level courses. Of particular interest are the many examples using actual data and the generous use of references for the topics being discussed.

Although the pharmacokinetic terminology used throughout the text is not internally consistent from chapter to chapter, it may be useful in introducing the reader to differences in nomenclature routinely found in the literature. The text uses set type rather than photo offset, which is a distinct improvement over the previous text in this series. The only negative feature of the book is its price, which probably places it out of reach of most undergraduate and many graduate students.

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**Pharmacology and Pharmacokinetics.** Edited by TORSTEN TEORELL, ROBERT L. DEDRICK, and PETER G. CANDLIFFE. Plenum Press, 227 West 17th Street, New York, NY 10011, 1974. 16 × 23.5 cm. 388 pp. Price \$24.50.

In the fall of 1972, approximately 60 leading pharmacologists and pharmacokineticists convened to pay tribute to Professor Torsten Teorell on his retirement from the Chair of Physiology at Upsala University. The stated purpose of the program was "to review the present status, describe or formulate the pertinent problems, and

finally delineate, if possible, the best ways of solving these problems" in pharmacokinetics. This volume, which includes 21 contributed papers and discussion summaries of each, represents the proceedings of that conference held at the John E. Fogarty International Center for Advanced Study in the Health Sciences, National Institutes of Health.

The presentations were mostly review in nature, sometimes didactic but only rarely provocative. Topics ranged from theoretical and practical considerations in modeling, interspecies scaling, and drug design to general discussions on the effects of disease, of physical, physiological, and genetic factors, and of concomitant therapy and the route of administration on drug biotransformation, distribution, and excretion; to specific applications in anticoagulant and cancer chemotherapy and in the treatment of depression and other neuropsychiatric disorders. In most cases, some prior knowledge of the author's work, or at least familiarity with the field, is presumed.

In many ways, this volume is an album of self-portraits by many of the pioneers in pharmacokinetics. It is also an accurate status report on the progress and frustrations of an emerging discipline during the first 50 years of development. While its sentimental value may have been flawed by the separate publication of approximately one-half of its titles in the *Journal of Pharmacokinetics and Biopharmaceutics*, its historical significance has not been thereby diminished.

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**Remington's Pharmaceutical Sciences.** 15th Edition. Edited under the direction of ARTHUR OSOL and JOHN E. HOOVER. Mack Publishing Co., Easton, PA 18042, 1975. 21 × 29 cm.

Acquaintance with every aspect of current information about drugs, including chemical, pharmaceutical, and toxicological, as well as areas of medicine relevant to drug therapy, is increasingly necessary for pharmacists to serve as members of the health professions team. The presentation of such diverse knowledge is the principal objective of this, the 15th edition of "Remington's Pharmaceutical Sciences."

Although every chapter has been revised, many rewritten, and several added, the most extensive revisions and additions are in those areas useful in preparing the pharmacist for the role of drug information specialist.

The section on Pharmaceutical and Medicinal Agents has been expanded to 33 chapters and includes new chapters on the pharmacological aspects of drug abuse, adverse effects, and interactions of drugs. The group on Biological Products now contains a chapter on principles of immunology. Chapters on bioavailability, bioequivalency testing, and stability of pharmaceutical products have been added to the Pharmaceutical Preparations section. Four new and two entirely rewritten chapters have been added to the section on Pharmaceutical Practice, which reflects the patient-oriented approach to pharmacy practice.

This volume is highly recommended as a comprehensive and up-to-date source of information on all facets of the pharmaceutical sciences and their application to pharmacy practice.

*Staff Review*

## NOTICES

*European Pharmacopoeia. Vol. III.* Published under the direction of the Council of Europe. Maisonneuve, S.A., 57-Sainte-Ruffine, France, 1975. 464 pp. 16 × 25 cm.

*Pesticide Selectivity.* Edited by JOSEPH C. STREET. Dekker, 270 Madison Ave., New York, NY 10016, 1975. 197 pp. 15.5 × 23.5 cm. Price \$18.50.