

The chapter on "Radiopharmaceuticals" is introduced with an outline of radioactivity and definitions, choice of radionuclide, principles of radiation hygiene, historical aspects of radioactive materials, and the radioactive products official in the *British Pharmacopoeia*. The diagnostic applications of radiopharmaceuticals are presented, and descriptions of radionuclide generators are given. Hospital preparation of radiopharmaceuticals, including the use of ampuls and multidose vials, the use of bactericides, and quality control, is described. A section on toxic ingredients and adverse reactions includes control by drug regulatory authorities. A final section discusses radioisotopes in clinical chemistry, professional collaboration, and future developments.

The chapter on "Rectal Administration of Drugs" is introduced with a discussion of lipid materials and water-soluble compositions as bases for suppositories. Sections on formulation development and quality control include drug release, problems with suspended solids, viscosity adjustments, melting ranges, solidification ranges, and physical breakdown in water. The manufacture and packaging of suppositories are included. Finally, a section on the rectal absorption of drugs (several different examples are given) in animals and humans is presented.

An index makes it possible to find most topics covered in the book.

The authors of this volume have cited over 800 references, including many of their own research papers, in their chapters. This broad coverage not only makes the volume valuable in itself but also is an advantage to the reader who may want to follow up on specific subjects.

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Beta-blockers—Present Status and Future Prospects. Edited by W. SCHWEIZER. University Park Press, Chamber of Commerce Building, Baltimore, MD 21202, 1974. 325 pp. 17.5 × 24.5 cm. Price \$19.50.

This publication contains the proceedings of an International Symposium held May 27–29, 1974. The book starts out with introductory remarks by Dr. C. Bartorelli describing the various points to be considered when evaluating beta-adrenergic blocking agents as potential antihypertensive drugs. The following chapter describes in great detail the relative beta-adrenergic blocking activity of various beta-blockers and their advantages and disadvantages when used as antihypertensive agents. Various possible mechanisms of action for the antihypertensive property of beta-blockers are also discussed.

The remaining chapters deal with various aspects of beta-blockers when prescribed as antihypertensive agents. All of these chapters are concise and well written, and certain aspects such as the renin-angiotensin-aldosterone interaction and the effect of beta-blockers on this system are covered rather thoroughly. In addition, there are chapters dealing with the importance of plasma volume in the treatment of hypertension and clinical experience with beta-blockers in the treatment of hypertension in the United Kingdom. Most of the chapters are followed by discussion sections which are very stimulating. Finally, the use of beta-blockers as antihypertensives is covered in a general discussion session, which is interesting, thought-provoking, and invaluable to the practicing physician as well as various research investigators.

Another aspect of beta-blockers covered in this book deals with their use in ischemic heart diseases, angina pectoris, cardiac arrhythmias, and hypertrophic cardiomyopathy. All of these chapters are written very thoroughly. The book also contains separate chapters that cover such topics as cardiological aspects of beta-blockade in

stress situations and oxygen dissociation from hemoglobin. Finally, the last portion of the book is devoted to describing the metabolic effects of beta-blockers as well as their pharmacokinetic properties, followed by a general discussion session on guidelines for the use of beta-blockers in general practice.

This book can serve as an excellent reference source for clinicians, research investigators, graduate students, and clinical pharmacists. Considering the wealth of information contained in this volume, the price is very reasonable.

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The Alkaloids. Vol. 5. Edited by J. E. SAXTON. The Chemical Society, Burlington House, London, England, W1V 0BN, 1975. 303 pp. 14 × 22 cm. Price \$48.25.

This book, the fifth of a series on alkaloids, is divided into 16 chapters and covers the literature from July 1973 to June 1974. As is the custom with previous books in this series, the first chapter is concerned with the biosynthesis of various classes of alkaloids and constitutes approximately 20% of the total book volume. This chapter begins with a quick, light introductory review of alkaloid biosynthesis, followed by detailed discussions on newer findings.

Chapters 2–16 are concerned with the phytochemistry of the alkaloids of pyrrolidine, piperidine, and pyridine; tropane; pyrrolizidine; indolizidine; quinolizidine; quinoline, quinazoline, acridone, and related compounds; β -phenylethylamines and isoquinoline; Amaryllidaceae and related plants; *Erythrina* and related plants; indole; diterpenoid; and steroidal and miscellaneous alkaloids. As is the case in past books of this series, the chapters on indole and isoquinoline alkaloids are more extensive than the discussions of other groups of compounds simply because of the abundance of literature on the chemistry of these two groups of alkaloids.

Of particular interest to students of indole alkaloids is J. A. Joule's compilation of ^{13}C -NMR data in a table of 36 typical indole and two biogenetically related quinoline alkaloid structures. These data should be of invaluable aid in the identification and structure elucidation of similar indole alkaloids.

Other than the relatively high price, one can recommend this book unequivocally to students of natural products chemistry.

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Symposium on Clinical Pharmacology. Sponsored by the National Cancer Institute. Pergamon Press, Maxwell House, Fairview Park, Elmsford, NY 10523. 236 pp. 16 × 23 cm. Price \$20.00.

This book is a collection of the papers presented at the Symposium on Clinical Pharmacology sponsored by the National Cancer Institute in the spring of 1973. Its purpose was to present and collate the most recent advances in the field of cancer chemotherapy. The papers are divided into five broad areas: Pharmacological Factors in Drug Action, Factors Influencing Drug Selectivity, Mechanisms of Clinical Drug Resistance, Combination Chemotherapy, and New Information on Mechanisms of Drug Action. This book should be of value to those involved in development of potential therapies for cancer.

Staff Review