

Drug Interactions. Edited by D. G. GRAHAME-SMITH. University Park Press, Chamber of Commerce Bldg., Baltimore, MD 21202, 1977. viii + 310 pp. 15 × 23 cm. Price \$44.50.

This volume, consisting of five major sections, presents the proceedings of a symposium held in London in March 1975. The book contains information particularly useful for clinical pharmacologists and toxicologists. Unfortunately, the practicing clinician will find the material too esoteric to be of much value in the care of patients. Primarily, this may not be a fault of the book but rather the recognition that our knowledge of this area is still scanty, especially when applied to the clinical setting, as opposed to studying drug interactions *in vitro*.

The first two sections (10 chapters) are devoted to fundamental aspects of drug interactions, but basic principles are also scattered throughout the remaining 13 chapters, which deal with Drug Interactions in Psychopharmacology, Influence of Disease on Drug Effects and Interactions, and Specific Drug Interaction Problems.

Hershel Jick defines drug interaction as "a pharmacological response which cannot be explained by the action of a single drug but is due to two or more drugs acting simultaneously." C. T. Dollery points out that "the main importance of drug-disease interactions . . . lies in their unpredictability, or the fact that, even when predictable, they are often not predicted."

M. D. Rawlins underscores the complexity of the entire field for pharmacodynamic interactions alone. He envisions four types: (a) enhanced effects produced by two drugs acting at the same site, (b) increased effects produced by two drugs acting at different receptor sites, (c) enhanced effects of a drug by one that is devoid of action itself, and (d) antagonism of the effect of one drug by another. J. W. Bridges highlights the further complexity of the field by indicating that, for complete predictability, all receptor sites for each drug must be identified, the physiological consequences recognized, and the concentrations and persistence of the drugs at the receptor sites determined. Obviously, we are far from having begun to attain this goal.

"Drug Interactions" is well referenced but not casually read. This thrifty reviewer considers the book to be excessively priced.

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Advances in Mass Spectrometry in Biochemistry and Medicine, Vol. II. Edited by ALBERTO FRIGERIO. Halsted, 605 Third Ave., New York, NY 10016, 1977. 609 pp. 15 × 23 cm. Price \$48.50.

The book is a report on the proceedings of the Third International Symposium on Mass Spectrometry in Biochemistry and Medicine, Mario Negri Institute for Pharmacological Research in Milan, Italy, in June 1975. Volume II follows the same basic format established in Volume I, which detailed the proceedings of the 1974 Symposium.

It contains a cross-section of mass spectral applications being implemented by the authors in various laboratories for the solution of biomedical problems. Forty-eight separate entries on individual topics, ranging from Automated Multicomponent Analysis of Biological Mixtures by Gas Chromatography-Mass Spectrometry to Peptide Fragmentation Mechanisms have been contributed by specialists in the field. The articles are of varying quality and importance. They cover a wide range of interest areas and should appeal to a large segment of the scientific community. One of the book's strong points is the excellent use of diagrams and illustrations, which complete most presentations. Also, all entries are followed by thorough bibliographies.

In particular, the major topics include detection and identification of low levels of drug metabolites and other biomedical applications. Uses of mass spectrometry for the study of such medically important compounds as steroids, prostaglandins, peptides, and catecholamines are given. Although gas chromatography-mass spectrometry is the principal means of separation and identification of compounds, several other examples of isolation and separation are discussed. Some of the major topics covered include mass fragmentography, gas chromatography-mass spectrometry using stable isotopes, derivatization, electro-optical ion detection, electron impact, chemical ionization, field ionization, field desorption, high-resolution mass measurements, and data acquisition and processing.

Due to the nature of this book, a single review is a virtual impossibility. The scientific merit, the method of presentation, the writing style, and the readability differ with each article. After taking into consideration

the highs and lows, an overall view of these presentations is very positive. This book will have definite value to many chemists, biochemists, pharmacologists, and medical researchers as well as mass spectrometrists.

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NOTICES

The Plasma Membrane: Models for Structure and Function. By B. D. GOMPERTS. Academic, 111 Fifth Ave., New York, NY 10003, 1977. 224 pp. 15 × 23 cm. Price \$22.25.

Reviews of Physiology, Biochemistry and Pharmacology, Vol. 77. Contains: Regulation of Noradrenaline Release by Presynaptic Receptor Systems, by K. STARKE; Biology of Leukotaxis, by P. A. WARD and E. L. BECKER; and Capillary Structures and O₂ Supply to Tissue, by W. A. GRUNEWALD and W. SOWA. Springer-Verlag, 175 Fifth Ave., New York, NY 10010, 1977. 236 pp. 16 × 24 cm. Price \$52.80.

Yeasts and Yeast-Like Microorganisms In Medical Science. Edited by KAZUO IWATA. University of Tokyo Press, Distributor: ISBS, PO Box 555, Forest Grove, OR 97116, 1977. 346 pp. 18 × 26 cm. Price \$24.50.

Receptors and Mechanism of Action of Steroid Hormones, Part II. Edited by JORGE R. PASQUALINI. Dekker, 270 Madison Ave., New York, NY 10016, 1977. 440 pp. 15 × 23 cm. Price \$39.75.

The Lymphocyte: Structure and Function, Part 1. Edited by JOHN J. MARCHALONIS. Dekker, 270 Madison Ave., New York, NY 10016, 1977. 384 pp. 14 × 23 cm. Price \$37.50.

Foams. Edited by R. J. AKERS. Academic (London), 24-28 Oval Rd., London NW1 7DX, England, 1977. 301 pp. 15 × 23 cm. Price \$23.50.

Inhibition and Inactivation of Vegetative Microbes. Edited by F. A. SKINNER and W. B. HUGO. Academic (London), 24-28 Oval Rd., London, NW1 7DX, England, 1977. 378 pp. 15 × 23 cm. Price \$26.25.

Actualités Pharmacologiques. Edited by RENE HAZARD. Masson, 120 Coulevard, Saint-Germain, 75280 Paris Cedex 06, France, 1977. 206 pp. 16 × 24 cm. Price 140 Fr.

Reviews of Physiology, Biochemistry and Pharmacology, Vol. 78. Contains: Properties and Structural Basis of Simple Diffusion Pathways in the Erythrocyte Membrane, by B. DEUTICKE; and The Gradient Hypothesis and Other Models of Carrier-Mediated Active Transport, by R. K. CRANE. Springer-Verlag, 175 Fifth Ave., New York, NY 10010, 1977. 183 pp. 17 × 25 cm. Price \$42.70.

Hazards in the Chemical Laboratory, 2nd Ed. Edited by G. D. MUIR. The Chemical Society, Burlington House, London, W1V 0BN, England, 1977. 473 pp. 15 × 23 cm. Price \$14.00.

Chemical Pharmacology of the Synapse. By D. J. TRIGGLE and C. R. TRIGGLE. Academic (London), 24-28 Oval Rd., London, NW1 7DX, England, 1977. 654 pp. 15 × 23 cm. Price \$43.75.

Toxicology of Trace Elements: Advances in Modern Toxicology, Vol. 2. Edited by ROBERT A. GOYER and MYRON A. MEHLMAN. Halsted, 605 Third Ave., New York, NY 10016, 1977. 303 pp. 14 × 23 cm. Price \$24.50.

Radiotracer Techniques and Applications, Vol. 1. Edited by E. ANTHONY EVANS and MITSUO MURAMATSU. Dekker, 270 Madison Ave., New York, NY 10016, 1977. 704 pp. 16 × 24 cm. Price \$65.00.

Disinfection, Sterilization, and Preservation, 2nd Ed. Edited by SEYMOUR S. BLOCK. Lea & Febiger, 600 Washington Square, Philadelphia, PA 19106, 1977. 1049 pp. 18 × 26 cm. Price \$48.50.

Newburger's Manual of Cosmetic Analysis, 2nd Ed. Edited by ALAN J. SENZEL. The Association of Official Analytical Chemists, PO Box 540, Benjamin Franklin Station, Washington, DC 20044, 1977. 150 pp. 17 × 26 cm. Price \$10.50.

Dermatotoxicology and Pharmacology: Advances in Modern Toxicology, Vol. 4. Edited by FRANCIS N. MARZULLI and HOWARD I. MAIBACH. Halsted, 605 Third Ave., New York, NY 10016, 1977. 567 pp. 16 × 24 cm. Price \$37.50.