

Drug Abuse: Social and Psychopharmacological Aspects. Compiled and edited by JONATHAN O. COLE and J. R. WITTENBORN, Charles C Thomas, 301-327 East Lawrence Ave., Springfield, IL 62703, 1969. xiii + 170 pp. 15.5 × 23.5 cm. Price \$9.50.

This book is drawn from reports presented during the Fifth Annual Meeting of the American College of Neuropsychopharmacology. While there is no primary focus to the papers included, they are representative of current research related to the growing social and medical concern of drug abuse.

One paper should be of particular interest because of the controversial nature of the topic and the scarcity of scientific research in this area. This study of the long-term effects of LSD administration in volunteer graduate students suggests that the use of LSD under controlled circumstances with selected individuals may be less hazardous and have less far-reaching consequences than previously thought. However, other studies reported in this book seem to present evidence to the contrary, confirming the need for more extensive research into these problems.

Data from a study of marijuana indicate that marijuana use begins as a group experience engaged in by peers, and not as the pusher engaging the youth.

This book includes eleven studies concerning various aspects of drugs and drug abuse. While the editors admit that no answers are presented, they are hopeful that this volume will serve to stimulate research in these and related areas.

Staff Review ■

Drugs and Youth. Edited by J. R. WITTENBORN, HENRY BRILL, JEAN PAUL SMITH, and SARAH A. WITTENBORN, Charles C Thomas, 301-327 East Lawrence Ave., Springfield, IL 62703, 1969. xiv + 485 pp. 18 × 26 cm. Price \$22.75.

This book, "Drugs and Youth," is based on the proceedings of the Rutgers Symposium on Drug Abuse held in June, 1968, at the Rutgers Interdisciplinary Research Center. The one hundred fifty participants in the three-day symposium were scientists, law enforcement officials, and members of the judiciary.

The book is divided into six major sections, the first being introductory material of a broad nature. Part II deals with morphine, heroin, and cocaine. Amphetamine-type and barbiturate tranquilizer-type drugs are covered in the third section, followed by marijuana and LSD in Part IV.

The concluding two sections deal with drug abuse and the law, and action to be taken, respectively.

Although the book takes a broad look at the problems of drugs and youth with a sociological emphasis, it should be of interest to all persons working in the area of drug abuse.

Staff Review ■

Techniques of Medication. By ERIC W. MARTIN, STEWART F. ALEXANDER, WILLIAM E. HASSAN, JR., and BURTON L. SHERMAN, J. B. Lippincott, East Washington Square, Philadelphia, PA 19105, 1969. vii + 239 pp. 18.3 × 26.1 cm. Price \$18.00.

This book is devoted to discussing those factors that often are not emphasized in the administration of a drug. In addition to the rational selection of a drug, factors such as route of administration and form of medication will often determine the usefulness of a medication. The authors have done well in attempting to discuss this comprehensive area. The book is introduced by discussing the trends in therapeutics and principles of medication. The second chapter is devoted to prescription writing and the factors that must be considered in a prescription. These factors would include dosage, directions to the patient, and legal and professional aspects.

This is followed by sections dealing with various routes of medication (dermatomucosal, parenteral, and gastrointestinal) and outlining the principles of medication that must be considered. These principles include topics such as dosage forms, techniques of administrations, and care of needles and syringes. The next section discusses nicely the handling of medication by nurses. This section is written in clear, easy-to-follow outline form. The book closes with a com-

prehensive discussion of the legal aspects of medication. These include factors such as prescribing errors, inadequate testing, and sensitivity reactions.

This book incorporates the basic concepts of a book published by Austin Smith in 1948 entitled "Technic of Medication." The authors of this volume are to be complimented on bringing this important topic up to date and providing a practical manual on medication techniques for physicians, medical students, nurses, and pharmacists. All members of the health team must not only know their drugs but, equally important, they must know how to use them.

Reviewed by J. P. Long
Department of Pharmacology
University of Iowa
Iowa City, IA 52240 ■

Industrial Toxicology. By LAWRENCE T. FAIRHALL. Second Edition (Facsimile of 1957 Edition). Hafner Publishing Co., New York, NY 1969. xii + 376 pp. 18.3 × 26.3 cm. Price \$12.00.

A continuing demand for this standard reference work in industrial toxicology has justified this reprinting of the 12-year old second edition. It is likely that part of such a demand is based on the desires of some to replace their much-used and worn-out copies. Fairhall has had a well-established and long-standing reputation as a source of information about elements and compounds of toxicologic significance in industry. This book, though hardly expected to be up to date, still contains much data of current value and is a useful guide to some of the outstanding older literature.

With a compendium type of format, this volume is presented in two parts. Part I deals with inorganic substances, mostly elements and their salts, oxides, or compounds with hydrogen. The larger Part II, entitled *Carbon Compounds*, deals with numerous organic chemicals. For each substance or compound, its chemical and physical characteristics, industrial uses, toxicity, and general approach to methods of analysis are described in a concisely documented form. There is little consideration of mechanisms of toxic action and no discussion of the treatment of poisoning by the agents described. An appendix contains tables listing urinary metabolites of 73 compounds, threshold limit values of numerous toxic gases, vapors, fumes and dusts, and the LD₅₀'s by oral administration in rats of 104 organic chemicals.

Obviously, much new knowledge concerning substances of industrial toxicologic importance has developed since this edition was published in 1957, and several more recent books are available that contain such information. Hence, the later works must be relied upon as prime references in the field, with Fairhall serving a valuable supplementary and back-up function. An example of an area in arrears in this book is the timely topic of pesticides. Some of the well-known controversial persistent pesticides such as aldrin, dieldrin, endrin, heptachlor, and heptachlor epoxide are not described, though threshold limit values and LD₅₀'s for aldrin and dieldrin are tabulated in the appendix.

For numerous agents described, however, little or no new information has been produced since 1957, and for these substances Fairhall stands as a definitive reference. This volume is still an important component of any library purporting to cover toxicology comprehensively or industrial toxicology specifically.

Reviewed by Julius Coon
Jefferson Medical College
Philadelphia, PA 19107 ■

The Biochemistry of Alkaloids: Molecular Biology, Biochemistry and Biophysics, Vol. 3. By TREVOR ROBINSON. Springer-Verlag, New York, NY, 1968. 149 pp. 17 × 25 cm. Price \$9.75.

I enjoyed the opportunity of reviewing this book which was both readable and interesting. Although the author, in his preface, makes no attempt to state whether the monograph is intended primarily as a text or reference book, it would appear to me that its greatest

utility would be in the former category, especially in a graduate course in alkaloids.

The material covered is thorough and the author's viewpoint regarding the unbalanced progress in the study of alkaloid biochemistry is heartily supported by the reviewer, *i.e.*, quite a bit is known about alkaloid biosynthesis but very little is known about function or degradative pathways. For example, the author cites the work of Fairbairn, who showed that the morphine alkaloids are not end products of metabolism but appear to be actively turned over at a rapid rate. Similar studies of this type are sadly lacking and much more work is needed in this area. It may well be that alkaloids are active metabolites within plants.

In any book there is a certain lag period between the literature survey, writing, and official publication. The lag period works against areas of research which are making active progress. A specific example of material which has been greatly extended since publication of the book is the work on the biosynthesis of indole alkaloids. This problem has now been pretty well cleared up and a monoterpenoid precursor is well established for the C₉ or C₁₀ unit involved. This is not a criticism of the author but is cited to point out some problems even with monographs of this type. Indeed, overall I believe the book to be quite up to date.

In summary, the book is clearly written, well organized, and readable. The major alkaloids are covered according to structural types and their biochemistry discussed. I would recommend its use in courses of natural products and especially in courses emphasizing alkaloids. It is a welcome addition to the library of books dealing with natural products.

Reviewed by John Tashiro
College of Pharmacy
University of Rhode Island
Kingston, RI 02881 ■

NOTICES

Chemical and Botanical Guide to Lichen Products. Edited by CHICITA F. CULBERSON. University of North Carolina Press, Chapel Hill, 1969. xi + 628 pp. 16 × 23.5 cm. Price \$12.50.

II. *Nachtrags- und Ergänzungsband Gehes Codex.* Edited by FELIX DIEPENBROCK. Wissenschaftliche Verlagsgesellschaft MbH., Stuttgart, Germany, 1969. 538 pp. 16 × 23.5 cm. Price DM 85.-. (German)

Drugs in Current Use and New Drugs. Edited by WALTER MODELL. Springer Publishing Co., Inc., 200 Park Ave. S., New York, NY 10003, 1970. v + 201 pp. 14 × 21 cm. Price \$3.25.

Handbook of Experimental Pharmacology: Diuretica. Springer-Verlag, 1 Berlin 33, Heidelberger Plaza, Berlin-West, 1969. xviii + 764 pp. 17 × 25.5 cm. Price \$68.20. (German)

Circulatory and Respiratory Mass Transport. Edited by G. E. W. WOLSTENHOLME and JULIE KNIGHT. Little, Brown and Co., 34 Beacon St., Boston, MA 02106, 1969. x + 310 pp. 15.5 × 23.5 cm. Price \$12.50.

The Lynn Index—A Bibliography of Phytochemistry. Edited by NORMAN R. FARNSWORTH, RALPH N. BLOMSTER, MAYNARD W. QUIMBY, and JOHN W. SCHERMERHORN. Norman R. Farnsworth Publisher, School of Pharmacy, University of Pittsburgh, Pittsburgh, PA 15213, 1969. ix + 274 pp. 15 × 23 cm. Price \$5.00.

Gas Chromatography in Biology and Medicine. A Ciba Foundation Symposium. Edited by ROTH PORTER, J & A. Churchill Ltd., 104 Gloucester Place, London, England, 1969. ix + 213 pp. 15 × 23.5 cm. Price 60s.

Molecular Biology Biochemistry and Biophysics. Edited by A. KLEINZELLER. Springer-Verlag, 175 Fifth Ave., New York, NY 10010, 1969. xi + 166 pp. 16.5 × 25.5 cm. Price \$12.70.

Biochemical and Clinical Aspects of Alcohol Metabolism. Edited by VISHWANATH M. SARDESAL. Charles C Thomas, 301-327 East Lawrence Ave., Springfield, IL 62703, 1969. xiii + 319 pp. 18.2 × 26 cm. Price \$27.00.

Oral Hypoglycaemic Agents. Edited by G. D. CAMPBELL. Academic Press Inc., London Ltd. Berkeley Square House, Berkeley Square, London, England W1X 6BA, 1969. xviii + 482 pp. 15.7 × 23.7 cm. Price \$19.50.

Biochemistry of Mental Disorders: Report of a WHO Scientific Group. World Health Organization Technical Report Series, No. 427, World Health Organization, Geneva, Switzerland, 1969. 40 pp. 16 × 24 cm. Price 6/-, \$1.00, Sw. fr. 3.-., Paperbound. (English)

Principles for the Testing and Evaluation of Drugs for Carcinogenicity: Report of a WHO Scientific Group. World Health Organization Technical Report Series, No. 426, World Health Organization, Geneva, Switzerland, 1969. 26 pp. 16 × 24 cm. Price \$4-, \$0.60, Sw. fr. 2.-., Paperbound. (English)

Pharmaceutical Advertising, 1968 Revision. Offprint from the International Digest of Health Legislation, Geneva, 1968, Vol. 19, No. 3, World Health Organization, Geneva, Switzerland, 1968. Local distributors: The American Public Health Association, Inc., 1740 Broadway, New York, NY 10019. 100 pp. 16 × 24 cm. Price Sw. fr. 12.-., £1 4s. Od., \$4.00, Paperbound. (English)