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 known how to use them.

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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