

GLC of carbohydrate glycolipids, and GLC of long chain nitrogen bases.

The chapter on sterols and steroids (139 pages) deals primarily with TLC, and data are presented clearly in tabular form for a most comprehensive list including many steroids currently on the market. The chapter on bile acids (130 pages) provides a highly detailed description of GLC methodology including experimental methodology for "Filling of Columns" and "Formation of Derivatives." The chapter on prostaglandins (51 pages) succinctly covers all chromatographic methods with emphasis on metabolites and extraction. The section on carbohydrate glycolipid GLC (37 pages) includes many common sugars as well as detailed methodology for synthesizing derivatives. The section on long chain nitrogen bases (11 pages) provides detailed procedures for cleavage, derivative formation, and GLC.

Knowledge of chromatographic methodology is often critical in many pharmaceutical, biological, and synthetic research projects. The detailed information and experimental methodology presented in this book should provide a most useful source to the pharmaceutical scientist. It is highly recommended to those involved in research as well as development of compounds in the classes covered.

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Pharmacology of Marihuana. Vols. 1 and 2. Edited by MONIQUE C. BRAUDE and STEPHEN SZARA. Raven, 1140 Avenue of the Americas, New York, NY 10036, 1976. 458 pp. 16.5 × 24.5 cm. Price \$50.00 (two volumes).

This two-volume set represents the proceedings of the International Conference sponsored by the National Institute on Drug Abuse in Savannah, Ga., December 3-6, 1974.

These books contain a total of nine parts. The first part offers general background information, and the last part deals with the therapeutic potential. In the remaining seven parts, comprehensive research data are presented, including chemical and metabolic aspects; cellular, immunological, hormonal, autonomic, and neuropharmacological effects; behavioral pharmacology; related drug interactions; effects on genetics and reproduction; and the long-term effects of marihuana.

The data from both preclinical and clinical research are presented. Respiratory and cardiovascular effects are discussed in Part IV under Autonomic Effects. It is rather surprising that only a small portion of the text is devoted to these aspects, considering the complex effects of Δ^9 -tetrahydrocannabinol on the cardiovascular and respiratory systems, including interference with the reflexogenic mechanisms. The discussion on p. 287, Cardiovascular Effects, has very little to do with the cardiovascular system and deals mostly with bronchodilator effects.

The primary means of self-administration of marihuana is by inhalation, but little information is presented in these texts concerning its acute and/or chronic effects on pulmonary hemodynamics. Such information would have been useful, especially since therapeutic value has been implicated for marihuana in bronchial asthma. These limitations perhaps emphasize the urgent need for further research in these areas. In this respect, these books serve a useful purpose in documenting what is known and what is not.

Marihuana and its constituents are highly complex and possess numerous pharmacological properties; the National Institute on Drug Abuse performed an extremely useful service in comprehensively presenting this material. Dr. Braude and Dr. Szara should be commended for excellence in designing the symposium and editing the proceedings. These books will be extremely useful for researchers and clinicians concerned with research on marihuana.

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NOTICES

Kremers and Urdang's History of Pharmacy. Fourth Ed. Revised by GLENN SONNEDECKER. J. B. Lippincott, East Washington Square, Philadelphia, PA 19105, 1976. 571 pp. 19.5 × 24 cm. Price \$24.00.

Methods in Receptor Research. Part 1. Edited by MELVIN BLECHER. Dekker, 270 Madison Ave., New York, NY 10016, 1976. 383 pp. 15.5 × 23.5 cm. Price \$36.50.

Drugs and Therapy. A Psychotherapist's Handbook of Psychotropic Drugs. By ALVIN K. SWONGER and LARRY L. CONSTANTINE. Little, Brown, 34 Beacon St., Boston, MA 02106, 1976. 292 pp. 14.5 × 22 cm. Price \$8.95.

Fluorocarbon and Related Chemistry. Vol. 3. Edited by R. E. BANKS, M.G. BARLOW, et al. The Chemical Society, Burlington House, London W1V 0BN, England, 1976. 491 pp. 14.5 × 22.5 cm. Price £35.00.

Stylebook/Editorial Manual of the AMA. 6th Ed. By the Scientific Publications Division, American Medical Assn. Publishing Sciences Group, 162 Great Rd., Acton, MA 01720, 1976. 161 pp. 13.5 × 21.5 cm. Price \$6.50.

Handbook of Basic Pharmacokinetics. By W. A. RITSCHER. Drug Intelligence Publications, Hamilton, IL 62341, 1976. 370 pp. 11.5 × 19.5 cm. Price \$16.00.

Aminergic Hypotheses of Behavior: Reality or Cliche? National Institute on Drug Abuse Research Monograph Series 3. Edited by BRUCE K. BERNARD. National Institute on Drug Abuse, 11400 Rockville Pike, Rockville, MD 20852, 1975. 148 pp. 20.5 × 27 cm. Price \$6.75.

Handbook of Intermediary Metabolism of Aromatic Compounds. By B. L. GOODWIN. Halsted, 605 Third Ave., New York, NY 10016, 1976. 25.5 × 20 cm. Price \$75.00.

Frontiers of Pharmacology. Journal of Pharmacy and Pharmacology: Special Supplement. Edited by B. A. CALLINGHAM, M. A. SIMMONDS, and D. W. STRAUGHAN. The Pharmaceutical Press, 17 Bloomsbury Square, London, WC1A 2NN, England, 1976. 405 pp. 18 × 25.5 cm. Price £2.50.

Dimethyl Sulphoxide. By DIETER MARTIN and HERMANN G. HAUTHAL. Halsted, 605 Third Ave., New York, NY 10016, 1975. 500 pp. 16 × 25 cm.

Organic Chemistry, Series Two. Vol. 3: Aromatic Compounds. Edited by H. ZOLLINGER. Butterworth, Borough Green, NR Sevenoaks, Kent, England, 1976. 350 pp. 16 × 24 cm. Price £13.45.

Organic Chemistry, Series Two. Vol. 4: Heterocyclic Compounds. Edited by K. SCHOFIELD. Butterworth, Borough Green, NR Sevenoaks, Kent, England, 1976. 392 pp. 16 × 24 cm. Price £13.45.

Lung Liquids. Ciba Foundation Symposium 38 (new series). CIBA Pharmaceutical Co. Elsevier, 52 Vanderbilt Ave., New York, NY 10017, 1976. 330 pp. 17 × 24.5 cm.

Narcolepsy. (Advances in Sleep Research. Vol. 3) Edited by C. GUILLEMINAULT, C. DEMENT, and P. PASSOUANT. Halsted, 605 Third Ave., New York, NY 10016, 1976. 689 pp. 16 × 23.5 cm. Price \$40.00.

Organophosphorus Chemistry. Vol. 7. Edited by S. TRIPPETT et al. The Chemical Society, Burlington House, London, W1V 0BN, England, 1976. 285 pp. 14.5 × 22.5 cm. Price \$55.00.

Pharmacology of Behavior and Memory. By R. YU. II'YUCHENOK. Halsted, 605 Third Ave., New York, NY 10016, 1976. 216 pp. 16 × 23.5 cm. Price \$22.50.

Photochemistry. Vol. 7. Edited by D. BRYCE-SMITH et al. The Chemical Society, Burlington House, London, W1V 0BN, England, 1976. 617 pp. 14.5 × 22.5 cm. Price £32.00.

Psychotropic Action of Hormones. Edited by T. M. ITIL, G. LAUDAHN, and W. M. HERRMANN. Halsted, 605 Third Ave., New York, NY 10016, 1976. 248 pp. 16 × 23.5 cm. Price \$25.00.

Separation and Purification Methods. Vol. 4. Edited by E. S. PERRY, C. J. van OSS, and E. GRUSHKA. Dekker, 270 Madison Ave., New York, NY 10016, 1976. 413 pp. 16 × 23.5 cm. Price \$32.50.

Drug Misuse . . . Human Abuse. By HELEN I. GREEN and MICHAEL H. LEVY. Dekker, 270 Madison Ave., New York, NY 10016, 1976. 566 pp. 18.5 × 26 cm. Price \$19.75.

Basic Neurochemistry. Second Ed. Edited by GEORGE J. SIEGEL et al. Little, Brown, 34 Beacon St., Boston, MA 02106, 1976. 825 pp. 15.5 × 23.5 cm. Price \$15.00.

Genetic and Biochemical Aspects of the Development of Datura. Monographs in Developmental Biology. Vol. 12. By MARIE E. CONKLIN. S. Karger AG., Arnold-Bocklin-Strasse 25, CH-4011 Basel, Switzerland, 1976. 170 pp. 15.5 × 22.5 cm. Price \$30.50.