

one of the most interesting aspects of analgesic research: the endogenous, pain-regulating peptides and their synthetic analogues. This chapter should be of prime interest to those who seek the new challenges (and opportunities) of designing enkephalin releasers, metabolic inhibitors, as well as antagonists for substance P as analgetics of the future. The book concludes with a chapter by D. Lednicer on the evolution and SAR of major synthetic analgetics based on morphine. Although a good portion of the material treated in this chapter is historical in nature, it nonetheless serves as a useful guide to medicinal chemists and pharmacologists who are embarking on analgesic research. One minor blemish in this otherwise comprehensive coverage lies in the omission of some recently disclosed tricyclic analgetics, which deviate considerably from the partial morphine derivatives, both in structure and in activity profile.

Overall, the quality of production of this volume is excellent; figures and structures are clearly drawn and errors are minimal. It is a fine reference book which fulfills its purpose.

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**Chromatography of Alkaloids, Part A: Thin-Layer Chromatography.** (*Journal of Chromatography*, Vol. 23A). By A. BAERHEIM SVENDSEN and R. VERPOORTE. Elsevier Science Publishing Co., New York, NY 10017. 1982. 533 pp. 16 × 24 cm. Price \$104.25 (Dfl. 245).

Although this is the twenty-third volume in a continuing series which began in 1973 with the publication of "Chromatography of Antibiotics" (Volume 1), this is the first volume that is exclusively devoted to the discussion of the chromatography of alkaloids. Because of the large amount of information available, it was decided to publish this volume in two parts: Part A (thin-layer chromatography) and Part B (gas-liquid and high-performance liquid chromatography).

The book is divided into two major portions entitled a "General Part" and a "Special Part." The "General Part," consists of four chapters covering about 60 pages. Chapter 1 includes a discussion of adsorbents, solvent systems, development techniques, sample application, and several tables describing solvent classification and selectivity. Chapter 2 presents a discussion of the various methods of detection, including reagents, tables with color reactions, and a consideration of nonalkaloidal components capable of eliciting false-positive reactions with Dragendorff Reagent. Chapter 3 consists of a general consideration of thin-layer chromatographic separation and identification of alkaloids. This chapter also discusses the use of various reagents, solvent systems, fluorescence, ion-pair adsorption, and ion-exchange thin-layer chromatography. Finally, Chapter 4 includes a discussion of isolation methods and artifact formation resulting from different isolation techniques.

The "Special Part" of the book consists of 17 chapters, about 420 pages, which are devoted to the following classes of alkaloids: pyrrolidine, pyrrolizidine, pyridine, piperidine, quinolizidine, tropane, quinoline, phenethylamine and isoquinoline-derived, indole, steroidal, and miscellaneous. Each chapter consists of an extensive discussion of adsorbents, developing solvents,  $R_f$  values, detecting reagents, and references and is richly endowed with tables.

The Appendix alphabetically lists the 106 different reagents that have been discussed throughout the book and includes detailed instructions for their preparation. Finally, the Index is composed of a Subject Index, which contains general topics and classes, and a Compound Index, which contains only compounds.

This is a well-referenced and richly tabled book which should be extremely useful to anyone involved with the detection, isolation/separation, and identification of alkaloids from any source. It is not highly theoretical, nor is it intended to be, and is a practical work which addresses the subject concisely. The price is steep for the individual scientist, but certainly departmental, school, and institutional libraries would want this book in their collection.

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**Controlled Release Delivery Systems.** Edited by THEODORE J. ROSEMAN and S. Z. MANSORF. Marcel Dekker, Inc., 270 Madison Ave., New York, N.Y. 10016. 1983. 402 pp. 15 × 23 cm. Price \$57.50 (20% higher outside the U.S. and Canada).

The book, which contains 25 chapters, describes the proceedings of the Eighth International Symposium on Controlled Release of Bioactive Materials held in Fort Lauderdale, Florida, July 26–29, 1981. The editors of the book are recognized leaders in the field of polymeric controlled-release systems, and the authors selected to contribute full-length manuscripts represent a broad international array of experts in this area.

The topics covered in the book range from biomedical applications to agricultural uses for release vehicles for pesticides and herbicides. Heavy emphasis is placed on polymeric delivery systems with only one chapter on the use of prodrugs and one on liposomes. Subjects covered in the book include liposomes, microencapsulation, reservoir and monolithic devices, biodegradable and swellable matrices, prodrugs, and a contribution on magnetically controlled polymeric systems. All chapters contain a discussion section and all are adequately referenced. A subject index is also included.

This is a useful book, providing a reader with an overview of the various applications in controlled-release technology. It cannot be recommended for an individual seeking an in-depth discussion on any one given subject. However, it is well written and serves to elucidate the current status of this rapidly growing field.

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## NOTICES

*Advances in Steroid Analysis.* Edited by S. GOROG. Elsevier Scientific Publishing Co., 52 Vanderbilt Ave., New York, NY 10017. 1982. 551 pp. 16 × 24 cm. Price \$104.75 (Dfl. 225.00).

*Analytical Profiles of Drug Substances. Vol. II.* Edited by KLAUS FLOREY, Academic Press, 111 5th Ave., New York, NY 10003. 1982. 665 pp. 15 × 23 cm.

*Application of Pharmacokinetics to Patient Care.* Edited by CHARLES A. WALKER and LAMBROS P. TTERLIKKIS. Praeger, 521 Fifth Ave., New York, NY 10175. 1982. 175 pp. 15 × 24 cm. Price \$26.50.

*Assessing Causes of Adverse Drug Reactions. (With Special Reference to Standardized Methods).* Editor: JAN VENULET. Coeditors: GARRY-CLAUDE BERNEKER and ANTONIO G. CIUCCI. Academic Press, 111 Fifth Ave., New York, NY 10003. 1982. 223 pp. 15 × 23 cm.

*Benzodiazepines. A Handbook. (Basic Data, Analytical Methods, Pharmacokinetics and Comprehensive Literature).* By HAROLD SCHULTZ, Springer-Verlag New York Inc., 175 5th Ave., New York, NY 10010. 1982. 439 pp. 19 × 27 cm. Price \$88.00.

*British National Formulary, Number 4 (1982).* Publications of the Pharmaceutical Society of Great Britain. 1 Lambeth High Street, London, SE1 7JN, England. 1982. 454 pp. 13 × 22. Price £4.50.

*Cancer Mortality by Occupation and Social Class 1851–1971.* (IARC Scientific Publications No. 36) Office of Population Censuses and Surveys, Studies on Medical and Population Subjects No. 44. By W. P. D. LOGAN, Her Majesty's Stationary Office, London, and Lyons International Agency for Research on Cancer. 1982. 253 pp. 20 × 30 cm. Price \$30.00 (Sw Fr. 60).

*Chromatographic Separation and Extraction with Foamed Plastics and Rubbers.* By G. J. MOODY and J. D. R. THOMAS. Marcel Dekker, Inc., 270 Madison Ave., New York, NY 10016. 1982. 139 pp. 14 × 23 cm. Price \$29.75. (20% higher outside the U.S. and Canada).

*Critical Stability Constants. Vol. 5. First Supplement.* By ARTHUR E. MARTELL and ROBERT M. SMITH. Plenum Publishing Corp., 233 Spring St., New York, NY 10013. 1982. 604 pp. 21 × 28 cm. Price \$69.50.

*Crown Compounds. (Their Characteristics and Applications.)* By MICHIO HIRAOKA. Elsevier Scientific Publishing Co., 52 Vanderbilt Ave., New York, NY 10017. 1982. 275 pp. 16 × 25 cm. Price \$83.75. (Dfl. 180.00).

- Cyclodextrins and Their Inclusion Complexes*. By J. SZEJTLI. Heyden & Son, Inc., 247 S. 41st Street, Philadelphia, PA 19104. 182. 296 pp. 16 × 24 cm. Price \$35.00.
- Drugs and Nursing Implications*. 4th Ed. By LAURA E. GOVONI and JANICE E. HAYES. Appleton-Century-Crofts, 292 Madison Ave., New York, NY 10017. 1982. 1143 pp. 15 × 23 cm.
- Drug Therapy in Obstetrics and Gynecology*. Edited by WILLIAM F. RAYBURN and FREDERICK P. ZUSPAN. Appleton-Century-Crofts, 292 Madison Ave., New York, NY 10017. 1982. 399 pp. 17 × 24 cm. Price \$38.50.
- Dynamics of Biological Membranes. (Influence on Synthesis, Structure and Function)*. By M. D. HOUSLAY and K. K. STANLEY. John Wiley & Sons, One Wiley Drive, Somerset, NJ 08873. 1982. 330 pp. 15 × 23 cm. Price \$54.95.
- Environmental Health Criteria 18: Arsenic*. Health & Biomedical Information Programme, World Health Organization, 1211 Geneva 27, Switzerland, 174 pp. 13 × 21 cm.
- Environmental Health Criteria 19: Hydrogen Sulfide*. Health & Biomedical Information Programme, World Health Organization, 1211 Geneva 27, Switzerland. 1982. 60 pp. 14 × 21 cm. Price Sw Fr. 6.
- Field Guide to the Detection and Control of Xerophthalmia*. 2nd Ed. By ALFRED SOMMER. World Health Organization, Health and Biomedical Information Programme, 1211 Geneva 27, Switzerland. 1982. 58 pp. 15 × 24 cm. Price Sw Fr. 10.
- Flavonoids and Bioflavonoids, 1981. Studies In Organic Chemistry II. (Proceedings of the International Bioflavonoids Symposium—6th Hungarian Bioflavonoid Symposium, Munich, FRG 9-6-81)*. Edited by L. FARKAS, M. GABOR, F. KALLAY, and H. WAGNER. Elsevier Scientific Publishing Co., 52 Vanderbilt Ave., New York, NY 10017. 1982. 534 pp. 16 × 24 cm. Price \$104.75. (Dfl. 225).
- From Genetic Experimentation to Biotechnology—The Critical Transition*. Edited by WILLIAM J. WHELAN and SANDRA BLACK. John Wiley & Sons, Inc., One Wiley Drive, Somerset, NJ 08873. 1982. 266 pp. 15 × 23 cm. Price \$39.95.
- IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans. Vol. 27: Some Aromatic Amines, Anthraquinones and Nitroso Compounds, and Inorganic Fluorides Used in Drinking Water and Dental Preparations*. Lyons, International Agency for Research on Cancer. 1982. 341 pp. 17 × 24 cm. Price Sw Fr. 40.
- IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans. Vol. 28: The Rubber Industry*. Health & Biomedical Information Programme, World Health Organization, 1211 Geneva 27, Switzerland. 486 pp. 17 × 24 cm. Price Sw Fr. 70.
- Immune Regulation. (Evolutionary and Biological Significance)*. Edited by LAURENS N. RUBEN and M. ERIC GERSHWIN. Dekker, 270 Madison Ave., New York, NY 10016. 331 pp. 15 × 23 cm. Price \$45.00 (20% higher outside U.S. and Canada.)
- Index Nominum 1982. 11th Ed.* Edited and published by the Laboratory of the Swiss Pharmaceutical Society of Zurich. Drug Intelligence Publications, Inc., 1241 Broadway, Hamilton, IL 62341. 1982. 1006 pp. 20 × 30 cm. Price \$140.00.
- Laboratory Decontamination and Destruction of Carcinogens in Laboratory Wastes: Some Nitrosamines*. Editors: M. CASTEGNARO, G. EISENBRAND, G. ELLEN, L. KEEFER, D. KLEIN, E. B. SANSONE, D. SPINCER, G. TELLING & K. WEBB. Health & Biomedical Information Programme, World Health Organization, 1211 Geneva 27, Switzerland. 1982. 73 pp. 17 × 24 cm. Price \$10.00 (Sw Fr. 18).
- Legislative Action to Combat the World Smoking Epidemic*. By RUTH ROEMER. Health & Biomedical Information Programme, World Health Organization, 1211 Geneva 27, Switzerland. 131 pp. 15 × 24 cm. Price Sw Fr. 17.
- Literature Guide to the GLC of Body Fluids*. By AUSTIN W. SIGNEUR. Plenum, 233 Spring Street, New York, NY 10013. 1982. 385 pp. 21 × 27 cm. Price \$85.00.
- Macromolecular Chemistry, Vol. 2. A Review of the Literature Published during 1979 and 1980*. Reporters: A. D. JENKINS and J. F. KENNEDY. The Royal Society of Chemistry, Burlington House, London W1V 0BN, England. 1982. 425 pp. 13 × 22 cm. Price \$117.00 (£59.00)
- Methods in Environmental Virology*. Edited by CHARLES P. GERBA and SAGAR M. GOYAL. Dekker, 270 Madison Ave., New York, NY 10016. 1982. 378 pp. 15 × 23 cm. Price \$59.50 (20% higher outside the U.S. and Canada).
- The Natural Coumarins: (Occurrence, Chemistry, and Biochemistry)*. By ROBERT D. H. MURRAY, JESUS MENDEZ, and STEWART A. BROWN. Wiley. One Wiley Drive, Somerset, NJ 08873. 1982. 702 pp. 17 × 25 cm. Price \$162.00.
- Orphan Drugs*. Edited by FRED E. KARCH. Dekker, 270 Madison Ave., New York, NY 10016. 1982. 210 pp. 15 × 23 cm. Price \$49.50. (20% higher outside the U.S. and Canada).
- Patents For Chemists*. By PHILIP W. GRUBB. Oxford University Press, 200 Madison Ave., New York, NY 10016. 1982. 273 pp. 15 × 23 cm. Price \$39.95.
- Pharmacology of Histamine Receptors*. Edited by C. R. GANELLIN and M. E. PARSONS. John Wright-PSG Inc., Littleton, MA 01460. 1982. 521 pp. 15 × 24 cm. Price \$69.50.
- Problems of Drug Dependence, NIDA Research Monograph 41. (Proceedings of the 43rd Annual Scientific Meeting, The Committee on Problems of Drug Dependence, Inc)*. 1982. National Institute on Drug Abuse, Division of Research, 5600 Fishers Lane, Rockville, MD 20857. 561 pp. 14 × 23 cm.
- Quality Assurance in Diagnostic Radiology*. Geneva, World Health Organization Health & Biomedical Information Programme, World Health Organization, 1211 Geneva 27, Switzerland. 1982. 65 pp. 15 × 14 cm. Price Sw Fr. 11.
- Recent Developments in Cardiac Muscle Pharmacology*. Edited by SHOJI SHIBATA and LESLIE E. BAILEY. Igaku-Shoin Medical Publishers, Inc., 1140 Avenue of the Americas, New York, NY 10036. 1982. 128 pp. 17 × 26 cm. Price \$29.50.
- Steric Effects in Biomolecules. Studies in Physical and Theoretical Chemistry. Vol. 18. (Proceedings of the International Symposium. Eger, Hungary, 10/5-8, 1981)*. Edited by G. NARAY-SZABO. Elsevier Scientific Publishing Co., 52 Vanderbilt Ave., New York, NY 10017. 1982. 416 pp. 16 × 24 cm. Price \$107.00 (Dfl. 230.00).
- 1982 Year Book of Drug Therapy*. Edited by LEO E. HOLLISTER and LOUIS C. LASAGNA. Year Book Medical Publishers, 35 East Wacker Drive, Chicago, IL 60601. 1982. 437 pp. 15 × 23 cm. Price \$40.00.

## NEW JOURNALS

- Journal of Carbohydrate Chemistry*. Edited by DONALD E. KELLY. Dekker, 270 Madison Ave., New York, NY 10016. 1982. 128 pp. 14 × 23 cm. Price \$75.00 (Institutional); \$37.50 (Individual). Add postage (\$6.30, surface; \$12.75, airmail) outside the U.S.
- Journal of Toxicology. Vol. 1 No. 1: Cutaneous and Ocular Toxicology*. Edited by EDWARD M. JACKSON, Dekker, 270 Madison Ave., New York, NY 10016. 1982. 88 pp. 17 × 26 cm. Price \$111.50 (Institutional), \$55.75 (Individual). Add postage (\$8.40, surface; \$11.20, airmail) outside the U.S.