loids is that is is not thoroughly referenced. It only has 480 references, fewer than 20 of which are from 1975 or later. In contrast, the earlier and somewhat shorter work by Pelletier, which dealt largely with alkaloid chemistry, boasted 1750 references. In the present work, the lack of references is made up to some extent by references to review articles at the end of each chapter, but these reviews are, of course, of even earlier vintage than the book itself. The book thus is not a good source for the latest information in alkaloid research, particularly in such rapidly developing fields as indole alkaloid biosynthesis. In addition, it also is not comprehensive; several classes of alkaloids are not discussed at all.

The book sets out to be a textbook, however, and it is within this framework that it should be judged. As the author modestly states in the epilogue, "The major objective . . . is to provide the beginning student with an appreciation of order in structure type and biogenetic reasoning. Hopefully, some chemistry was also learned." Any person who takes the time to work through this book is certain to achieve these objectives and much more. The discussion of both biosynthesis and chemistry is lucid and concise, and the structural diagrams are excellent in quality and abundant in quantity. The only minor improvements that could be suggested would be for the initial diagrams to carry the numbering system for that structural type and for more diagrams to be oriented so that the reader does not have to turn the book around to see them.

In conclusion, the author has written an excellent textbook on the alkaloids, and it can be recommended as the book of choice for any scientist wishing to become acquainted with this fascinating area of natural products. Persons needing detailed and up-to-date information in a specific area will have to supplement this book with material from review articles and the recent literature.

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The Pharmaceutical Codex, 11th Ed. The Pharmaceutical Press, One Lambeth High St., London SE1 7JN, England. 1979. 1101 pp. 17 × 25 cm. Price £27.

The 11th edition of "The British Pharmaceutical Codex," now called "The Pharmaceutical Codex," contains over 1400 entries in a single alphabetical sequence. Over 900 monographs on synthetic drug substances and natural products used in medicine are included. A typical drug substance monograph features the full chemical name, structural and molecular formulas, molecular weights, synonyms and trade names, physical characteristics such as solubility and specific rotation, stability and storage information, identification tests, metabolism, actions and uses, and preparations. Entries for drug classes also are included.

Diseases and minor ailments are discussed with respect to the cause and nature of the disorder, its major signs and symptoms, and its treatment with reference to the use of drugs. Entries on analytical techniques such as IR and UV spectrophotometry are included.

The first appendix describes the analytical reagents mentioned in the text. The second appendix gives reduced facsimile reproductions of IR spectra for more than 300 drug substances to aid in their identification. A comprehensive index with over 10,000 entries concludes the book.

This book is a useful reference for those concerned with the manufacture, formulation, distribution, dispensing, and quality control of drugs and medicines for human or veterinary use.

## Staff Review

## NOTICES

- Surface of Normal and Malignant Cells. Edited by RICHARD O. HYNES. Wiley, One Wiley Drive, Somerset, NJ 08873. 1979. 471 pp. 15 × 23 cm. Price \$65.00.
- Cell Substrates: Their Use in the Production of Vaccines and Other Biologicals. Edited by JOHN C. PETRICCIANI, HOPE E. HOPPS, and PAUL J. CHAPPLE. Plenum, 227 W. 17th St., New York, NY 10011. 1979. 220 pp. 16 × 25 cm. Price \$29.50.
- Reviews of Physiology, Biochemistry and Pharmacology, Vol. 86. Contributors, P. THORÉN, R. J. HOGG, J. P. KOKKO, and P. SCHEID. Springer-Verlag New York Inc., 44 Hartz Way, Secaucus, NJ 07094. 1979. 206 pp. 16 × 24 cm. Price \$48.40.
- Standard Operating Procedures in Toxicology. Edited by G. E. PAGET and R. THOMSON. University Park Press, 233 E. Redwood St., Baltimore, MD 21202. 1979. 650 pp. 21 × 30 cm. Price \$39.50.
- Common Medicines: An Introduction for Consumers. By DAVID J. GEORGE. W. H. Freeman, 660 Market St., San Francisco, CA 94104. 1979. 197 pp. 21 × 28 cm. Price \$6.00.
- Bailey's Industrial Oil and Fat Products, 4th Ed., Vol. 1. Edited by DANIEL SWERN. Wiley, One Wiley Drive, Somerset, NJ 08873. 1979. 841 pp. 15 × 23 cm. Price \$45.95.
- Circulating Catecholamines and Blood Pressure. Edited by W. H. BIRKENHAGER and H. E. FALKE. University Park Press, 233 E. Redwood St., Baltimore, MD 21202. 1979. 71 pp. 14 × 23 cm. Price \$12.50.
- Human Toxicology. Edited by AUBIN HEYNDRICKX. European Press, Ghent, Belgium. 1978. 221 pp. 17 × 24 cm.
- The Interpretation of Quantal Responses in Biology. By P. S. HEW-LETT and R. L. PLACKETT. University Park Press, 233 E. Redwood St., Baltimore, MD 21202. 1979. 82 pp. 14 × 23 cm. Price \$11.95.
- The Alkaloids, Vol. 9. A Specialist Periodical Report. Senior Reporter, M. F. GRUNDON. The Chemical Society. 1979. 273 pp. 14 × 22 cm. Price \$70.00. (Available from the American Chemical Society, 1155 16th St., N.W., Washington, DC 20036.)
- Inorganic Biochemistry, Vol. 1. A Specialist Periodical Report. Senior Reporter, H. A. O. HILL. The Chemical Society. 1979. 441 pp. 14 × 22 cm. Price \$61.50. (Available from the American Chemical Society, 1155 16th St., N.W., Washington, DC 20036.)
- Plant Metabolism. By GERHARD RICHTER. University Park Press, 233 E. Redwood St., Baltimore, MD 21202. 1978. 475 pp. 12 × 19 cm. Price \$22.75.
- Workshop on Ursodeoxycholic Acid. Edited by R. H. DOWLING, A. F. HOFMANN, and L. BARBARA. University Park Press, 233 E. Redwood St., Baltimore, MD 21202. 1979. 88 pp. 15 × 24 cm. Price \$9.95.
- Nucleosides As Biological Probes. By ROBERT J. SUHADOLNIK. Wiley, One Wiley Drive, Somerset, NJ 08873. 1979. 346 pp. 14 × 23 cm. Price \$37.50.
- Modern Organic Elemental Analysis. By T. S. MA and ROBERT C. RITTNER. Dekker, 270 Madison Ave., New York, NY 10016. 1979. 518 pp. 15 × 23 cm. Price \$45.00.
- Arachidonic Acid Metabolism in Inflammation and Thrombosis. Edited by K. BRUNE and M. BAGGIOLINI. Birkhäuser Boston Inc., 380 Green St., P.O. Box 2007, Cambridge, MA 02139. 1979. 301 pp. 17 × 24 cm. Price \$38.00.
- Against Ourselves: Disorders from Improvements under the Organic Limitedness of Man. By D. G. GARAN. Philosophical Library, 15 E. 40th St., New York, NY 10016. 1979. 310 pp. 14 × 22 cm. Price \$9.75.