

quantitative methods, dose, metabolism, and an abstract of the referenced toxicology literature.

Following the monographs are individual collations of each identity test. Drugs are grouped under the standard chromatographic systems. Melting points, UV maxima, and IR bands are listed numerically with the drugs entered opposite. Color test data are compiled by observed reaction. Such devices are familiar and welcome to those experienced in qualitative organic analysis. Hundreds of IR spectra are reproduced, six to a page, and the transparent plastic bookmark carries wavelength and wavenumber grids to be superimposed on the spectra. This is attractive, but of questionable value in view of the difficulty in obtaining sufficiently pure samples and the ready availability of spectra elsewhere. Problems caused by the polymorphism of some categories of drugs also are not signaled. Appendixes include preparation of many reagents, description of color tests, the bibliography, and a good index.

Ten introductory chapters supply general discussion in support of the contents of the monographs. The first chapter contains rapid screening procedures for drug types known to account for most of drug ingestion cases brought to hospitals. Subsequent chapters discuss the three monograph chromatographies, spectrophotometric techniques, the older color and crystal tests, extraction procedures, and drug metabolism. At first notice, Smith's chapter on patterns of drug metabolism may appear unrelated to some readers. Further thought reveals the necessity of knowing excretion and metabolic aspects of drugs in humans. Little value to haphazard searching of the wrong tissues or fluids for evidence of a drug or more commonly, overlooking major metabolites while searching only for unchanged drug. An observation may be made that the monographs and tables are concerned with unchanged drugs and the general omission of metabolite identification is a weakness in this work. This is partly editorial, but also reflects the limited information in this area.

The major weakness of the volume lies in the area of sample isolation. As now offered, the book is largely one of identification methods. Common clean-up techniques aren't presented in a usable form. Isolation methods from pharmaceuticals just aren't treated. It is not a text for isolation and purification of samples.

Clarke's compilation is a practical fusion of qualitative organic analysis and toxicology in monograph form. The reference value of this work is unquestionable. This and the several innovations strongly recommend the volume to laboratories handling compounds of biomedical interest.

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Marine Pharmacology. By MORRIS H. BASLOW. Williams and Wilkins Co., Baltimore, MD 21202, 1969. xiv + 286 pp. 18 × 26 cm. Price \$19.75.

The text represents the first comprehensive coverage of the embryonic field of marine pharmacology. It is the outgrowth of the author's interest in this field developed from a graduate course on the subject presented at the University of Hawaii for three years. In its comprehensive overview coverage, one finds chapters ranging from the antibiotic activity of sea water, through the biodynamic principles of various phyla of microorganisms, algae, sponges, jellyfish, marine worms, molluscs, arthropods, echinoderms, and finally culminating in the various higher vertebrates.

Since no other basis for classification is yet reasonable, the taxonomic one used by the author is very effective. Each chapter on a particular phylum is logically arranged and follows a smooth progression of subcategories so designed as to point out bioactive data in an easily readable fashion. References are at the end of each chapter and are numerous and current. For example, the chapter on blue-green algae starts with a brief consideration of the characteristics of the group and the history of reviews on the subject then proceeds through the known chemistry performed on bioactive algal principles, the pharmacology and toxicity of their active substances, and a conclusion based on the potential for the development of useful drugs or other agents from the phylum.

The chapters are profusely illustrated with tables containing pertinent condensed data from numerous investigators. Many

chemical structures of known substances are also given as well as reproductions of kymograph and physiograph recordings of effects of the more important marine principles on various test organisms. The final chapter summarizes in table form (10 pages), the pharmacological potential of substances isolated from marine organisms. The index is excellent and complete so that one can start with the name of an organism, the chemical principle, or type of activity and find a summary on these as well as appropriate references in the current scientific literature.

The text is to be highly recommended for use by pharmacologists, pharmaceutical chemists, and pharmacognosists as a prime reference on the subject. The main, and perhaps only, undesirable feature is the high price for this publication. If the publishers wish to make it readily available at all levels of interest, the price should be reduced considerably. In addition, the first eight pages (two of which contain four-color photographs of marine organisms), are printed on glossy paper while the remainder of the text is printed on less expensive yellowish stock paper.

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NEW JOURNALS

Comparative and General Pharmacology. Edited by G. A. KERKUT and G. N. WOODRUFF. Scientechica Ltd., 823-825 Bath Road, Bristol, England BS4 5NU, 1970. i + 128 pp. 18 × 24.5 cm. Price: Annual Subscription \$40, Single Copies \$11. (*English*)

This quarterly journal will publish original research on all aspects of pharmacology with special emphasis on comparative pharmacology. Occasional review articles and short communications will also be published. The editor, Professor G. A. Kerkut, is in the Department of Physiology and Biochemistry, University of Southampton, Southampton, England. ■

NOTICES

Pharmaceutical Handbook. Edited by R. G. TODD. The Pharmaceutical Press, 17 Bloomsbury Square, W. C. 1 London, England, 1970. xv + 702 pp. 12.5 × 19 cm. Price \$9.50.

Chirurgenverzeichnis. By BURKLE DE LA CAMP. Springer-Verlag, Heidelberger Platz 3, 1 Berlin 33, Germany, 1970. viii + 1088 pp. 14.5 × 21 cm. Price \$20.90. (*German*)

Gas-Liquid Reactions. By P. V. DANCKWERTS. McGraw-Hill Book Co., 330 West 42nd St., New York, NY 10036, 1970. xiii + 276 pp. 15.5 × 23.5 cm. Price \$11.50.

Methods of Biochemical Analysis, Vol. 18. Edited by D. GLICK. Wiley, 605 Third Ave., New York, NY 10016, 1970. vi + 421 pp. 15 × 23.5 cm. Price \$16.50.

Ingredient X. The Production of Effective Drugs. By LOUIS C. SCHROETER. Pergamon Publishing Co., Maxwell House, Fairview Park, Elmsford, NY 10523, 1969. vii + 157 pp. 13.5 × 20.5 cm. Price \$7.75.

Mutation as Cellular Process. Edited by G. E. W. WOLSTENHOLME and MAEVE O'CONNOR. J. & A. Churchill Ltd., 104 Gloucester Place, London, England, 1969. xi + 244 pp. 15.5 × 23.5 cm.

Homeostatic Regulators. Edited by G. E. W. WOLSTENHOLME and JULIE KNIGHT. J. & A. Churchill Ltd., 104 Gloucester Place, London, England, 1969. viii + 327 pp. 15.5 × 23.5 cm.

Foetal Autonomy. Edited by G. E. W. WOLSTENHOLME and MAEVE O'CONNOR. J. & A. Churchill Ltd., 104 Gloucester Place, London, England, 1969. x + 326 pp. 15.5 × 23.5 cm.

Microbiologie Industrielle et Genie Biochimique. By P. SIMON and R. MEUNIER. Masson et Cie, 120 Boulevard Saint-Germain, Paris, France, 1970. vi + 567 pp. 16.5 × 25 cm. Price 180 fr. (*French*)