Publications

Book reviews

Organophosphorus Chemistry, Volume 12 (The Royal Society of Chemistry, Burlington House, London W1 VOBN, 1982, 276 pp., \$120).

Publication in the field of organophosphorus chemistry during 1980-81 has continued at a rapid pace and more and more complex studies have been undertaken. Organophosphorus Chemistry, Volume 12 is a welcome addition to the organophosphorus literature. Subjects discussed in this volume under the general direction of Senior Reporters D.W. Hutchinson and J.A. Miller are as follows: Phosphines and Phosphonium Salts (D.W. Allen); Quinquecovalent Phosphorus Compounds (S. Trippett); Halogenophosphines and Related Compounds (J.A. Miller); Phosphine Oxides and Related Compounds (J.A. Miller); Tervalent Phosphorus Acids (B.J. Walker); Quinquevalent Phosphorus Acids (R.S. Edmundson); Phosphates and Phosphonates of Biochemical Interest (D.W. Hutchinson); Phosphoryl Transfer from Phosphomonoesters and Adenosine 5' Triphosphate (F. Ramirez and J.F. Marecek); Nucleotides and Nucleic Acids (J.B. Hobbs); Ylides and Related Compounds (B.J. Walker); Physical Methods (J.C. Tebby). In the current volume, the first of a series of occasional reviews appears. The review contained in this volume deals with phosphoryl transfer (F. Ramirez and J.F. Marecek) and is a highly credible review. Volume 12 has an excellent balance between biochemistry and organic chemistry, with considerable space devoted to physical methods. In spite of its high quality, the book is only of marginal interest to lipid chemists (with the exception of those who work with phospholipids and related substances) and is clearly priced well above the level that would appeal to the working chemists. All libraries should have this excellent volume.

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Thin-Layer Chromatography-Techniques and Application, Chromatographic Science Series, Volume 17, by B. Fried and J. Sherma (Marcel Dekker, Inc., 270 Madison Avenue, New York, NY 10016, 1982, 308 pp., \$49.50).

According to the preface: "Although we feel this book is a valuable source of practical information for any scientist currently using or contemplating the use of TLC, it was written with special consideration for those without extensive training in analytical chemistry. This includes the majority of biology students and graduate biologists, for whom we feel this book will be especially valuable. After reading our book these people should be better equipped to examine more critically the more comprehensive texts already published on TLC." In a chromatographic science series one more frequently encounters texts that lean too far in the opposite direction. Fried and Sherma have indeed produced a highly simplified, elementary coverage of TLC. *Practice of Thin-Layer Chromatography* by Touchstone and Dobbins (Wiley-Interscience, 1978) probably has been the text of choice for the beginning technician and the Fried and Sherman volume offers a possible option.

Electron-Capture: Theory and Practice in Chromatography, Journal of Chromatography, Library Volume 20, edited by A. Zlatkis and C.F. Poole (Elsevier Scientific Publishing Company, Amsterdam, 1981, 428 pp., \$76.50).

This volume contains a "reminiscence" by Lovelock and 15 technical chapters: design and operation; theory of electron-capture; selective electron-capture sensitization; oxygen doping of the carrier gas; wide range calibration; response to compounds with natural electrophases; sensitive derivatives of organic compounds, detection of inorganic and organic metallics; environmental applications-pesticides; dioxins; atmospheric halocarbons, biomedical applications; negative ion atmospheric pressure ionization mass spectrometry and the EC detector; electron-capture process and ion mobility spectra in plasma chromatography; and the EC detector in liquid chromatography. Many readers will find the early chapters rather heavy going but there is a great deal of valuable information in the applications sections. The electron-capture detector provides excellent sensitivity for the appropriate compounds or derivatives. Extensive data are provided on relative response factors. This detector has significant uses beyond the traditional polychlorinated hydrocarbon pesticides and PCBs. Suitable reagents are available to confer electron-capture properties on most types of compounds.

The book is well produced on good quality paper with clear figures and tables. Material of extremely direct interest to the oil chemist is perhaps somewhat limited (sterols). Gas chromatography, however, is an analytical technique extensively utilized by lipid chemists. This is an invaluable reference work for the analytical laboratory.

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Errata

Biological Aspects on Long Chain Fatty Acids in Fish Oil and Other Fats, edited by R. Marcuse, was incorrectly listed as free in a review published in the April issue of JAOCS. The book is available for 70 Swedish krona (approximately \$12 U.S. currency) plus postage. The soft cover 85-page volume is published by the Scandinavian Forum for Lipid Research and Technology, Box 5401, S-402 29, Göteborg, Sweden.

Latest in Lipids

Scheduled for JULY

- Effect of Garlic (Allium sativum Linn) on Serum Lipoproteins and Lipoprotein Cholesterol Levels in Albino Rats Rendered Hypercholesteremic by Feeding Cholesterol
- Plasma High Density Lipoprotein Subgroup Distribution in Rats Fed Diets with Varying Amounts of Sucrose and Sunflower Oil
- The Metabolism of Lithocholic Acid and Lithocholic Acid-3-α-sulfate by Human Fecal Bacteria

Methods

- A Simple Method for Labeling Lipids in the Bile Lipoprotein Complex
- Direct Estimation of Dolichyl Phosphate in Rat Liver by High Pressure Liquid Chromatography

Communications

- Effect of Age and Cholestyramine Feeding on Rat Liver 3-Hydroxy-3-methyl Glutaryl CoA Reductase, Sterol Carrier Protein 1 and Sterol Carrier Protein 2 Activities
- Saturated Fatty Acids $>C_{20}$ Are Not Activated by Acid: CoA Ligase in Rat Brain or Liver?
- Antioxidant Activities of Tocopherols on Fe²⁺-ascorbate-Induced Lipid Peroxidation in Lecithin Liposomes

New publications

- The Prevention of Occupational Skin Diseases, edited by D.J. Birmingham, The Soap and Detergent Association, 475 Park Avenue South, New York, NY 10016; 56 pp., 1981, \$2.50, quantity discounts available. Covers statistics on occupational dermatitis, time lost, cost and causal agents.
- The Chemical Industry, edited by D.H. Sharp and F.T. West, Halsted Press, John Wiley & Sons, Inc., 605 Third Ave., New York, NY 10016, 1982, 643 pp., \$95.95.
- Fats in Feeds and Feeding, edited by Reinhard Marcuse, published by Scandinavian Forum for Lipid Research and Technology, c/o SIK, Box 5401, S-402 29 Göteborg, Sweden, 1982, 140 pp., \$20. Contributions from a Lipidforum Seminar in Göteborg, March 9-10, 1981.

Polymer Degradation: Principles and Practical Applications,

by W. Schnabel, Hanser International, Macmillan Publishing Co., Inc., 866 Third Ave., New York, NY 10022, 1982, 227 pp., \$32.

- Designing Machines and Dies for Polymer Processing with Computer Programs, FORTRAN and BASIC, by Natti S. Rao, Hanser International, Macmillan Publishing Co., Inc., 866 Third Ave., New York, NY 10022, 1982, 207 pp., \$29.
- Plastics Technical Dictionary, Parts 1 and 3, by A.M. Wittfoht, Hanser International, Macmillan Publishing Co., Inc., 866 Third Ave., New York, NY 10022, 1982. Part 1-Alphabetical Dictionary, English-German, 550 pp., \$59. Part 3-Reference Volume, 508 pp., \$49.
- Sodium Intake-Dietary Concerns, edited by T.M. Freeman and O.W. Gregg, The American Association of Cereal Chemists, Inc., 3340 Pilot Knob Road, St. Paul, MN 55121, 1982, 161 pp., \$18 members, \$20 nonmembers. Presentations from the 1981 Flavor and Additives Division's Symposium, "Sodium Intake-Dietary Concerns," held Oct. 26, 1981, in Denver, CO.
- Developments in Food Proteins, Volume 1, edited by B.J.F. Hudson, Applied Sciences Publishers, Ltd., Ripple Road, Barking, Essex, England, 1982, 335 pp., \$70.
- Sulfur Reports-Alpha, Beta-Unsaturated Thioketones: Some Problems of Synthesis and Structure, by Vladimir A. Usov and Mikhail G. Voronkov, Harwood Academic Publishers, P.O. Box 786, Cooper Station, New York, NY 10276, 1982, 85 pp., \$22.50.
- Free Radicals in Biology, Volume V, edited by William A. Pryor, Academic Press, Inc., 111 Fifth Ave., New York, NY 10003, 1982, 283 pp., \$48.
- Interfacial Phenomena in Enhanced Oil Recovery, edited by Darsh Wasan and Alkis Payatakes, American Institute of Chemical Engineers, 345 East 47th St., New York, NY 10017, 1982, 126 pp., \$15 Institute members, \$30 nonmembers. Presentations from a symposium at the American Institute of Chemical Engineers' national meeting in Houston, TX, in 1981.
- Volume 2C: Toxicology, edited by George D. and Florence E. Clayton, John Wiley & Sons, Inc., 605 Third Ave., New York, NY 10158, 1982, 1296 pp., \$100. This is the final installment of the *Third Revised Edition*, *Patty's Industrial Hygiene and Toxicology*.
- Nutrients in Foods, by Gilbert A. Leveille, Ronald M. Deutsch, Mary E. Zabik and Karen J. Morgan, The Nutrition Guild, P.O. Box 397, Cambridge, MA 02238, 1982, 310 pp., \$29.95.
- Computer-Aided Process Plant Design, edited by Michael Leesley, Gulf Publishing Company Book Division, Box 2608, Dept. A6, Houston, TX 77001, 1982, 1400 pp., \$125.
- Microcomputer Data-Base Management, by E.G. Brooner, Group Technology, Ltd., P.O. Box 87, Check, VA 24072, 1982, 158 pp., \$12.95.
- Microcomputer Design and Troubleshooting, by Eugene M. Zumchak, Group Technology, Ltd., P.O. Box 87, Check, VA 24072, 1982, 350 pp., \$17.95.