

Book Reviews

Essays in Biochemistry. Volume 28. Edited by K. F. Tipton. Portland Press Ltd., London. 1994. xvi + 169 pp. 17 × 24.5 cm. ISBN 1-85578-016-X (paperback). \$30.00.

This series is intended to provide a single source of information on the latest developments in rapidly advancing areas of biochemistry and molecular biology. In the present volume, authoritative reviews of 10 subjects are presented. These are titled: (1) metabolic control; (2) the role of mitochondrial HMG-CoA synthase in regulation of ketogenesis; (3) motor neurone disease; (4) carnitine and its role in acyl group metabolism; (5) folate/vitamin B₁₂ inter-relationships; (6) protein kinase inhibitors; (7) mitochondrial DNA and disease; (8) PIG-tailed membrane proteins; (9) horseradish peroxidase: the analyst's friend; and (10) the renin-angiotensin system.

Each section makes extensive use of illustrative figures, diagrams, and tables and provides a carefully selected bibliography to give useful leads to the original literature. Biographical sketches are provided for the authors, and a detailed subject index is included.

This volume should benefit students, teachers, and researchers in biochemistry and molecular biology.

Staff

The BioBusiness Handbook. By Michael G. Pappas. Humana Press Inc., Totowa, NJ. 1994. xviii + 461 pp. 27 × 29 cm. ISBN 0-89603-218-3. \$189.50.

This loose-leaf bound handbook is intended for scientists who want to learn more about the biotechnology business and for business people who want to view the overall biotechnology picture. It aims to provide information needed to start and conduct a biotechnology business. The book consists of 24 chapters titled (1) the world biotechnology industry; (2) preparing to enter the biotechnology industry; (3) corporate organization; (4) management considerations; (5) legal issues in biotechnology; (6) biotechnology funding; (7) biotechnology project development; (8) biotechnology product development; (9) quality control; (10) quality assurance; (11) manufacturing; (12) regulatory compliance; (13) marketing the technology; (14) troubleshooting products after release; (15) safety in the biotechnology workplace; (16) support services and facilities; (17) immunodiagnostic assays; (18) nucleic acid probe assays; (19) human genome initiative; (20) bioremediation; (21) gene therapy biotechnology; (22) the biotechnology of transgenics; (23) vaccine, drug, antisense, and third-strand therapies; and (24) allografts, artificial tissues, and organs. This book contains many useful references, tables, and figures, as well as addresses of public health service SBIR contract and grant officials, a list of abbreviations and acronyms, a glossary, and a comprehensive subject index.

This very readable handbook should be of interest not only to those interested in the business of biotechnology, but also to workers in the biotechnology industry who want to better understand how their roles fit into their company's overall scheme for developing, manufacturing, and marketing biomedical products.

Staff

Tactics of Organic Synthesis. By Tse-Lok Ho. John Wiley & Sons, Inc., New York. 1994. xi + 450 pp. 16 × 24 cm. ISBN 0-471-59896-8. \$59.95.

While there are numerous books written about synthetic organic chemistry, few approach the subject from a tactical point of view. In this book, the latest in his series of texts devoted to various aspects of organic chemistry, Dr. Tse-Lok Ho covers this subject with the thoroughness and readability that we have come to expect from him.

The book contains nine chapters which are subdivided into specific areas. The individual chapters are titled (1) Convergency and Reiterative Processes, (2) Activity Modulation, Group Protection, and Latent Functionalities, (3) Umpolung, (4) Tandem Reactions, (5) Cyclic Arrays for Structural and Stereochemical Manipulations, (6) Intramolecularization and Neighboring Group Participations, (7) Template and Chelation Effects, (8) Symmetry Considerations, and (9) Miscellaneous Tactics. Each chapter contains numerous examples of syntheses (primarily natural products) from the literature (as recent as 1993) that illustrate the particular tactical approach. The table of contents, index, and references (with nearly 1400 entries) combine to provide easy referencing and cross-referencing of the subject matter. In addition, I found the abundance of clear, concise structures to be invaluable while "skimming" the book for a particular topic.

Dr. Ho's appraisal and organization of the material makes for enjoyable reading. I recommend this book to all who are fascinated by the beauty in planning and executing an organic synthesis.

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Trends in Drug Research. Pharmacochimistry Library Volume 20. Edited by V. Claassen. Elsevier, Amsterdam. 1993. xii + 322 pp. 17 × 24.5 cm. ISBN 0-444-89664-3. Dfl. 450.00.

This book presents the full text of almost all invited lectures in the 9th Noordwijkerhout-Camerino Symposium, held in Noordwijkerhout, the Netherlands, May 23-28, 1993. After an amusing and thought-provoking introductory lecture on "Chirality in drug research: Stereomania, stereophobia, and stereophilia", by B.

Testa, P.-A. Carrupt, L. Christiansen, P. Christoffersen, and M. Reist and a plenary lecture, "Receptors, G-proteins and post receptor networks", the volume is divided into sections on specific topics: Carbohydrate Medicinal Chemistry; Serotonin; Chemical Structure Databases in Drug Design; Free Radicals in Medicinal Chemistry; Post Receptor Interactions; Steroid Receptors; Hot Topics; and Teaching Medicinal Chemistry. Each section comprises several short chapters on a specific aspect of the subject. Authors submitted "photoready" manuscripts; thus, type faces vary from chapter to chapter. However, all of the volume is clearly printed and legible, and this reviewer noted few typographical errors or errors in chemical structures. In general, the contributions were well-written.

The "Hot Topics" section addresses Medicinal Chemistry of Taxol, Gastrin/CCK-B Receptor Antagonists, and Melatonin Receptor Agonists and Antagonists, which indeed seem to be hot topics.

All of the presentations contain much useful "state of the art" information, and overall, the volume provided enjoyable and profitable reading. It is highly recommended for medicinal chemists, pharmacologists, and others involved in drug research. The various sections should be required reading for graduate students in medicinal chemistry, pharmacology, and pharmaceuticals.

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Books of Interest

Nitroalkenes: Conjugated Nitro Compounds. By V. V. Perekalin, E. S. Lipina, V. M. Berestovitskaya, and D. A. Efremov. John Wiley & Sons, Inc., New York. 1994. vi + 256 pp. 15.5 × 23.5 cm. ISBN 0-471-94318-5. \$95.00.

Polymeric Drugs and Drug Administration. ACS Symposium Series 545. Edited by Raphael M. Ottenbrite. American Chemical Society, Washington, DC. 1994. ix + 245 pp. 15.5 × 23.5 cm. ISBN 0-8412-2744-6. \$69.95.

Chemical Safety. International Reference Manual. Edited by Mervyn Richardson with a message from HRH the Prince Philip. VCH Publishers, Inc., New York. 1994. xvii + 613 pp. 17.5 × 24.5 cm. ISBN 3-527-28630-6. \$145.00.

Biomembranes. Structural and Functional Aspects. Edited by Meir Shinitzky. VCH Publishers, Inc., New York. 1994. vii + 383 pp. 17.5 × 24.5 cm. ISBN 3-527-30022-8. \$135.00.

WHO Expert Committee on Biological Standardization. Forty-third Report. World Health Organization, Geneva, Switzerland. 1994. v + 218 pp. 16 × 24 cm. ISBN 92-4-120840-6. \$27.90.

Infrared Characteristic Group Frequencies, Tables, and Charts. Second Edition. By George Socrates. John Wiley & Sons, Inc., New York. 1994. viii + 249 pp. 16 × 23 cm. ISBN 0-471-94230-8. \$74.95.