

Book Reviews

Progress in Atrial Peptide Research. Edited by Barry M. Brenner and John H. Laragh. Raven Press, New York. 1989. xxix + 683 pp. 16 × 24 cm. ISBN 0-88167-543-2. \$140.00.

This volume, the third in the American Society of Hypertension Symposium Series, encompasses the progress in atrial peptide biochemistry, molecular biology, basic physiology, and clinical pathophysiology presented at the Third World Congress on Biologically Active Atrial Peptides in New York City in May 1988. This volume contains 19 state of the art reviews (chapters) written by symposium participants. Topics include processing of precursor peptides, atrial peptide receptors, and second messengers; interactions of atrial peptides with other endocrine mechanisms; and the actions of atrial peptides in cardiac, renal, and hepatic failure syndromes. These chapters range from four to 20 pages each (average = 12), are generally well written and illustrated, and are extensively referenced. The remainder of the volume includes 107 extended abstracts (two to 13 pages, average = 4, with approximately 10 references each) loosely organized into five sections: Synthesis, Storage, Secretion, and RIAs; Receptors and Second Messengers; Endocrine and Nervous Systems; Heart Disease and Hypertension; and Kidney and Liver. The abstracts address specific topics and are more variable with respect to quality and significance. Both chapters and abstracts are type set and are indexed separately by both subject and author. Overall, this volume is representative of the high-quality end of the spectrum of published proceedings of biological research symposia, consistent with its price. [However, in the copy received by this reviewer the references listed on p 109 were printed without reference numbers, an item those who purchase the book may wish to discuss with the publisher.]

Progress in Atrial Peptide Research is of principal interest to researchers and students working in the field and to clinicians following the significance of atrial peptides in various pathological states. Perhaps the most significant contribution of this volume is its comprehensive review and assessment of the clinical pharmacology and pathophysiology of atrial peptides (four chapters and 32 abstracts). This volume, like its predecessors in the series, focuses upon the cutting edge of atrial peptide research, an area that has experienced sustained growth and interest over the past 5 years, and like its predecessors, may have a relatively short period of impact. The book is a desirable addition to public, academic, and industrial libraries and to personal libraries with a focus on atrial peptides.

Smith Kline Beecham Pharmaceuticals **Lewis B. Kinter**
Department of Investigative Toxicology
King of Prussia, Pennsylvania 19406

The Software Encyclopedia 1990. A Comprehensive Guide to Software Packages for Business or Personal Use. Compiled by R. B. Bowker. New York. 1990. xxxiii + 2252 pp. 21.5 × 28 cm. Volume 1. Titles/Publishers: ISBN 0-8352-2763-4. Volume 2. System Compatibility/Applications: ISBN 0-8352-2764-2. Set: ISBN 0-8352-2762-6. \$189.95.

This annual edition of *The Software Encyclopedia* is a guide to 21 192 available microsoftware packages from 4268 publishers. It provides comprehensive information on not only chemistry but all subjects available on computer software. The 1990 volumes have been completely revised with 3448 totally new and 6129 updated entries including 228 new desktop publishing and 145 new word processing and related programs. Accessibility to the programs is facilitated by the organization of the two volume set into five indexes, namely, Title Index, Publisher/Title Index, Guide to Systems, Guide to Applications, and System Compatibility/Applications Index. The Guide to Applications Index lists available software under 38 major applications. In the Guide to Systems software for 14 microcomputer hardware manufacturers

are listed alphabetically by application. Full information is provided for each entry in the Title Index.

This sourcebook will be of value to all who use a microcomputer; it should be made available in all institutional libraries.

Staff

Studies in Natural Products Chemistry. Volume 5. Structure Elucidation (Part B). Edited by Atta-ur-Rahman. Elsevier, New York. 1989. xiii + 906 pp. 17 × 24.5 cm. ISBN 0-444-88336-3. \$244.00.

This latest volume of *Studies in Natural Products Chemistry*, edited by the distinguished Pakistani natural products chemist, Professor Atta-ur-Rahman, contains 22 chapters of varying length, but all of interest, by a group of distinguished natural products chemists from 13 countries. In particular, the applications of modern spectroscopic techniques, with particular reference to biologically important natural products, are covered in many of the chapters. Although, as might be expected, considerable attention is placed on various alkaloids, many other compounds including flavonoids, pyrazines, polysaccharides, antitumor polyethers, phenylpropanoids, coumarins, ligands, and carotane sesquiterpenes are included.

An excellent chapter dealing with proton and carbon-13 NMR assignments of biologically active natural products by Blasko and Cordell deals with the utilization of recently developed NMR techniques to the structures of a variety of selected natural products. In particular, NMR correlation spectroscopy is presented in great detail. Moreover, the utilization of new CSCM ID and selective INEPT techniques is covered in detail, along with a number of other methodologies applicable to the small quantities of natural products. In this chapter are found many tables and diagrams of various ¹H and ¹³C NMR assignments and diagrams of various 2D experiments. As would be expected from the presentation of relatively new techniques, most of the references deal with papers from 1985 or from 1984-1988.

The chapter by Van Der Heijden and Verpoorte deals with the mass spectrometry of the large numbers of *Tabernaemontana* indole alkaloids and the detailed correlations will be useful to workers in this area. One hundred and forty-one references, for the most part in the 1980's, are presented.

A chapter dealing with the studies in the indole alkaloid field by Atta-ur-Rahman and his colleagues is somewhat more varied, dealing not only with various 2D NMR procedures for the structure elucidation of a number of alkaloids but also, to some extent, with synthetic methods. A large number of references are from Atta-ur-Rahman's laboratory and are quite recent.

Two chapters dealing with bioactive metabolites of marine origin, one by T. Higa and the other by M. Guyot, review this very active field. Particularly impressive was the report from Guyot's laboratory on the structures of various didemnin-type peptides.

Two chapters on the flavonoids appear, one from Tomas-Barberan's laboratory which gives detailed UV/MS data on a variety of flavonoids and also goes into some detail on methodology, which will be useful to those working in this field. The chapter by Fang and Mabry is of a more limited nature, dealing with the work of this group on 3,2'-dioxygenated flavonoids.

A few of the chapters may be of more interest to biochemists than natural products workers, particularly a short chapter dealing with fluorine probes in the studies of the carcinogenicity of estrogens, a report on naturally occurring prostaglandin synthetase inhibitors, and a discussion of avian hemoglobin.

The book has a particularly useful index, which enables the reader interested in various analytical techniques to quickly locate procedures and the compounds to which these techniques apply. In addition, the names of the plant genera and species are listed alphabetically. Hence, the large numbers of plants studied and

methods which have been applied to their study can be located in an unusually precise manner.

The reviewer recommends that this volume be included in the libraries of all institutions with interest in natural products. Unfortunately, the high price for this volume may put it beyond the means of many individual researchers.

Research Triangle Institute

P.O. Box 12194

Research Triangle Park, North Carolina
27709

Monroe E. Wall

Studies in Natural Products Chemistry. Volume 4: Stereoselective Synthesis, Part C. Edited by Atta-ur-Rahman. Elsevier, Amsterdam and New York. 1989. xii + 760 pp. 17 × 24 cm. \$236.75.

Stereoselectivity in synthesis is a vital element in the rational and efficient preparation of biologically active natural products and their analogues. This book represents a "learning by doing" approach to the topic, as a number of practitioners, all authorities in their fields, present the results of their research. The chapters cover alkaloids, terpenoids, carbohydrates, peptide-derived antibiotics, and oligonucleotides, as well as incorporating discussions of specific methods, such as ylide reactions, prenylation methods, and utilization of benzyne cyclizations.

Despite their diversity, the chapters have in common that they enable the reader rapidly to gain knowledge in areas with which he or she has been hitherto unfamiliar; the book could serve as a rich source of advanced course material as well as an up-to-date reference text.

Northeastern University

Boston, Massachusetts 02115-5096

Philip W. Le Quesne

Vogel's Textbook of Practical Organic Chemistry. Fifth Edition. Revised by Brian S. Furniss, Antony J. Hannaford, Peter W. G. Smith, and Austin R. Tatchell. Longman Scientific & Technical, Essex. Copublished in the United States with John Wiley & Sons, Inc., New York. 1989. xxx + 1514 pp. 15.5 × 24 cm. ISBN 0-582-46236-3. \$84.95.

This is the fifth edition of the classic text first published by the late Dr. A. I. Vogel in 1948. It is the second revision by the current authors following their fourth edition in 1978. Despite the enormous changes in philosophy and practice of organic chemistry since the first edition of *Vogel's Textbook of Organic Chemistry*, the authors have pursued the aims of the originator to teach in a very practical way the methods of organic chemistry. Although considerable reorganization and rewriting of the text has been required, the present edition admirably achieves the objectives of the earlier editions. The book offers a very effective bridge between mechanistic theory and the strategy and methodology of synthesis.

The book is divided into 10 chapters. Chapter 1, Organic Synthesis, reviews important concepts to be considered in planning the synthesis of a compound in the most modern terms. The next three chapters describe in a very practical way experimental techniques for safe and effective practice of organic synthesis, spectroscopic methods and the interpretation of structure, and the preparation and purification of solvents and reagents. Chapters 5-8 deal with the preparation of aliphatic, aromatic, alicyclic, and heterocyclic compounds. In keeping with previous editions, many detailed experimental descriptions are presented. In fact, about 100 new experiments have been introduced into these preparative methods from the chapter previously entitled Qualitative Analysis. The tables of physical constants in the last chapter remain unchanged, and the appendices have been updated. The index is comprehensive.

All chemists concerned with the synthesis of new organic compounds will welcome this latest edition of this classic text. It will be a valued addition to the personal libraries of all practical organic chemists.

Staff

Comprehensive Organic Transformations. A Guide to Functional Group Preparations. By Richard C. Larock. VCH Publishers, Inc., New York. 1989. xxxiv + 1160 pp. 18 × 26 cm. ISBN 0-89573-710-8. \$55.00.

Every day useful new reagents for organic synthesis are reported in the worldwide chemical literature. As a result it is increasingly difficult for the organic chemist to keep up with the latest synthetic organic methodology. The intent of this compilation is to provide a comprehensive, highly condensed, systematic collection of synthetic methodology that is useful to both students and advanced practitioners of organic chemistry. Functional group preparations are systematically organized according to the functional group being synthesized. Within each group the methodology is subdivided into major processes, e.g. oxidation, reduction, alkylation. Literature coverage is complete through 1987. Over 160 primary chemical journals and a number of books and reviews have provided the material for the group transformations which are presented in very brief abstract form with selected references.

Probably the most difficult task for users of this guide will be locating the desired transformation among the enormous number of those abstracted. Toward this objective it is recommended that the user skim the detailed table of contents. An extensive transformation index is also included.

This book is a reference source which will be of value to all synthetic organic chemists. Full utilization of the book will require that users practice locating references from the multitude of functional group preparations that are outlined.

Staff

Patents, Copyrights & Trademarks. By Frank H. Foster and Robert L. Shook. Wiley, New York. 1989. xi + 236 pp. 18.5 × 26 cm. ISBN 0-471-50851-9. \$39.95.

The protection of new ideas, inventions, and artistic and literary creations and the legal assignment of trademarks has been provided for centuries. Such a temporary monopoly of one's intellectual or commercial property, recognized in many national and international laws including the bill of rights of the United States, rewards innovation economically and enables inventive individuals and industries to accumulate earnings for future research and development. The present book teaches in highly readable and easily understandable language the mechanics and philosophy of obtaining such protection. It points out advantages, pitfalls, legal complications, and procedural methods of applying for patents, in a manner useful both to inventors and patent attorneys. These sections are richly illustrated by facsimiles of documents issued by the U.S. Patent Office. The final chapters offer many amusing and instructive examples of famous and notorious personages in connection with patent-related cases.

Medicinal chemists who are routinely called upon to submit their work to patent attorneys for elaboration of claims will find this book unusually helpful. Administrators of pharmaceutical firms will appreciate the sections on how to secure and maintain proprietary names for their products. Scientists in such industries and editors who publish their results in journals and books will find the simple explanations of copyrights useful.

510 Wiley Drive

Charlottesville, Virginia 22901

Alfred Burger

Transition Metal Complexes as Drugs and Chemotherapeutic Agents. By Nicholas Farrell. Kluwer Academic Publishers, Norwell, MA. 1989. xi + 291 pp. 16 × 23 cm. ISBN 90-227-2828-3. \$89.00.

This is volume 11 in the *Catalysis by Metal Complexes* series. It was initiated at a time when the biological properties of metal, particularly platinum and gold, complexes were of expanding interest. Recognition of the importance of this field has continued to increase during the preparation of this volume. After an introduction which describes the approach and organization of the book, an overall survey of the wide variety of biological properties of metal complexes is presented in 12 carefully ref-

erenced chapters. These chapters address the interaction of metal complexes with DNA, platinum complexes of various kinds, and the antitumor, antibiotic, antibacterial, antiviral, and antiparasitic effects of a variety of metal complexes. Following a comprehensive description of the utility particularly of gold and copper complexes in arthritis, the book concludes with a chapter in which miscellaneous uses of metal complexes are described. An appendix gives the structures of the nucleic acid precursors and analogues and a glossary explains uncommon or unusual terms and definitions. An adequate subject index is included.

Clearly, metal complexes have provided useful therapeutic agents in the past. Medicinal chemists will want to review these achievements as an inspiration to potential new drugs. The book is recommended for all medical and chemistry libraries.

Staff

Methods In Neurotransmitter Receptor Analysis. Edited by H. I. Yamamura, S. J. Enna and M. J. Kuhar. Raven, New York. 1990. x + 267 pp. 16 × 24 cm. ISBN 088167-609-8. \$55.00.

According to the editors, the present monograph is designed as a companion to their highly successful volume *Neurotransmitter Receptor Binding* (2nd edition, 1985). As such, the present book is intended as a laboratory manual for the pharmacologist interested in studying receptors from a biochemical standpoint.

The first of the nine chapters comprising the book is on *Methods for Receptor Binding* by Bylund and Yamamura. The authors competently review practical issues related to conducting a binding assay using the dihydroalprenolol (DHA) assay for brain β -adrenoceptors as a step by step example. The subsequent chapter by Unnerstall, *Computer-Assisted Analysis of Binding Data*, reviews several PC-based programs focusing on a step by step walk through of Grant McPherson's popular EBDA program. Kendall and Hill review methods for PI analysis followed by a similar chapter by Strada, Duman, and Enna on adenylate cyclase. Hollenberg has contributed an excellent chapter on *Receptor Solubilization, Characterization, and Isolation*, which is followed by one by Pfenning and Richelson on *Methods for Studying Receptors with Cultured Cells of Nervous Tissue Origin*. This includes valuable information of cell culture techniques and on cell sources for individual receptor systems. Kuhar and Unnerstall review *Receptor Autoradiography* in their usual excellent manner followed by a chapter by Uhl on *in situ hybridization techniques using mRNA probes*. The final chapter by Kinnier is entitled *Receptor Binding as a Method for Drug Discovery* and provides a good overview of the mechanics involved in Nova Pharmaceuticals' contract screening operation as well as the only comprehensive table in this volume listing ligands and their receptors with citations to the original papers. Indeed, one of the major strengths of the volume is its comprehensive bibliography.

The inclusion of chapters on electrophysiology, molecular modeling and receptor site-directed mutagenesis would have considerably enhanced the value of this volume as would the distinguished (and highly experienced) panel of authors sharing some of their "trouble shooting" methods. In the first chapter some examples of the "poor choice of drug...to determine non-specific binding" (p 6) or of the "oil" used for centrifugation isolation (p 8) would be appropriate. Similarly, trouble shooting tables for both binding techniques and computer analysis would have been useful. What does the user do when LIGAND has crashed for the 10th time for no apparent reason and he or she is ready to either trash the computer or go searching for a career in merchant banking?

Within the scope of its uniquely biochemical focus, this volume is useful at the undergraduate and graduate levels, an intent reflected in the comment in Kuhar and Unnerstall's chapter that they "would especially like to hear from students' on any suggestions for improvement". For the practicing pharmacologist and medicinal chemist interested in receptors, volume 3 of Hansch's superb series, *Comprehensive Medicinal Chemistry*, is a more appropriate source book.

Pharmaceutical Products Division
Abbott Laboratories
Abbott Park, Illinois 60064-3500

Michael Williams

Novel Drug Delivery. Edited by L. F. Prescott and W. S. Nimmo. John Wiley & Sons, New York. 1989. xvi + 367 pp. 15.5 × 23.5 cm. ISBN 0-471-92154-8. \$94.00.

This multiauthored book records the Proceedings of the Third International Conference on Drug Absorption, held in Edinburgh in 1988. The purpose of this conference was to apply novel drug-delivery systems to improvements in the treatment of disease. The 32 chapters range from current needs through drug-delivery systems of the future.

Although not formally subdivided, the book can be logically broken into sections. The first section of the book consists of several chapters on current needs, pharmacodynamic background, and the needs of industry, particularly with regard to the delivery of proteins and peptides. The second section focuses on the absorption of drugs through the intestine, absorption enhancers, and the methods of determining absorption. A third section deals with questions of pharmacokinetics and compliance. The fourth section addresses specific routes of drug delivery, such as ocular, nasal, buccal, sublingual, rectal, transdermal, and others. The final section deals with specific novel drug-delivery systems and their effects, such as parenteral microspheres, colloidal particles, nonionic surfactant vesicles, liposomes, and self-regulating or feedback systems for the delivery of such molecules as insulin. This section includes chapters on the regulation of unique drug-delivery systems and the future of drug delivery.

Each chapter has an extensive bibliography which includes the title of the article cited. The book itself has an extensive subject index, as well. The chapters are authored or coauthored by some 63 scientists, representing academia, industry, and regulatory agencies, from the United States, Great Britain, Europe, and Japan, so a balanced view of drug delivery can be obtained from the book.

This book will be particularly useful to those looking for an introduction to the general field of drug-delivery systems. Since many specific applications covered by one chapter in this book have had entire books devoted to them, an in-depth review of any one application is beyond the scope of the present volume.

Nova Pharmaceutical Corporation
Baltimore, Maryland 21224

Mark Chasin

Atrial Natriuretic Peptides. Edited by Willis K. Samson and Remi Quirion. CRC Press, Boca Raton, FL. 1990. 304 pp. 18.5 × 26.5 cm. ISBN 0-8493-6249-0. \$159.95

This monograph consists of 20 reviews (chapters) written by scientists involved in atrial natriuretic peptide research. Eight chapters address the molecular biology of atrial peptides covering the synthesis, secretion, and processing of precursor peptides to the structure and function of atrial peptide receptors and second messenger systems. Nine chapters address physiological and pharmacological properties of atrial natriuretic peptides and include discussions of their roles in the regulation of vascular smooth muscle and cardiovascular hemodynamics, sodium excretion, the renin-angiotensin system, and central and peripheral nervous system functions. The final three chapters address the clinical pharmacology of atrial natriuretic peptides, focusing on their roles in the pathophysiology of hypertension and congestive heart failure. These chapters range from 8 to 22 pages each (average = 14 pp), are well illustrated (average of four figures and one table per chapter), and are extensively referenced (27 to 150 references per chapter, average = 70). The text and tables are type set and the contents are fully indexed by subject. Overall, this volume is representative of the high quality end of the spectrum of scientific monographs, consistent with its price.

Atrial Natriuretic Peptides is directed at wide spectrum of students, researchers, and clinicians. It will serve as both a source book for specialists and as a review text for students and researchers with which to acquaint themselves with the science, issues, and controversies surrounding atrial natriuretic peptides. While not an exhaustive treatment of the topic, the monograph represents a benchmark from which to survey the current state of the field. The book will have a longer useful life than most of the volumes published each year on atrial peptides and is a desirable addition to public, academic, and industrial libraries

and to personal libraries with a focus on atrial peptides.

SmithKline Beecham Pharmaceuticals **Lewis B. Kinter**
Department of Investigative Toxicology **Patrick M. Oates**
King of Prussia, Pennsylvania 19406

Progress in Medicinal Chemistry. Volume 27. Edited by G. P. Ellis and G. B. West. Elsevier, Amsterdam. 1990. 15 × 21 cm. v + 398 pp. ISBN 0-444-81309-8. DG 320.00.

Eight reviews are presented in this volume. Some of these are directed toward the medicinal chemistry of classes of compounds, namely pyridazines and 1-benzazepines, that have a broad spectrum of pharmacological activities. The review of fluoroquinolone antibacterial agents is, of course, much more narrowly focused toward a single therapeutic class. The other five reviews are concerned with up-to-date coverage of much broader areas of medicinal chemical importance. These reviews address antagonists of platelet-activating factor (PAF), the importance and dangers of mercury and nickel compounds, the deleterious effect of light on drugs, peptide regulation of mast cells, which play a pivotal role in inflammation, and overall developments in the antiemetic area, particularly in relation to cancer chemotherapy. The reviews are uniformly clear, concise accounts of the topics with many current references. A comprehensive index of the present volume plus cumulative author and subject indices for all 27 volumes enhance the value of the book.

As is true for its predecessors in the series, most medicinal chemists will derive benefit from at least institutional access to the present volume. Specialists in the specific areas reviewed will likely want a personal copy.

Staff

Nitration. Methods and Mechanisms. By George A. Olah, Ripudaman Malhotra, and Subhash C. Narang. VCH Publishers, New York. 1989. xii + 330 pp. 15.5 × 24 cm. ISBN 0-89573-144-4. \$65.00.

This is the third book in the *Organic Nitro Chemistry Series* which is aimed toward reviewing the field of organic nitro chemistry in its broadest sense. In keeping with the objectives of the series, contributors to the present volume are active investigators who have provided concise presentations of recent advances in the methods and mechanisms of nitration. After a brief introductory chapter, there are four chapters that deal in turn with reagents and methods of aromatic nitration, mechanisms of aromatic nitration, and aliphatic nitration. Presentations reflect the significant recent progress not only in the development of new and improved methods of nitration, but also in the understanding of their mechanism. Each chapter is comprehensively, albeit not exhaustively, referenced. Following a brief consideration of perspectives for future research into the further extension of our understanding of nitration, one of the most fundamental reactions in chemistry, excellent author and subject indices are presented.

Synthetic organic chemists will certainly want library access to this excellent group of reviews.

Staff

Books of Interest

Cellular and Molecular Events in Spermiogenesis. Scientific Basis of Fertility Regulation. D. W. Hamilton and G. M. H. Waites. Cambridge University Press, Cambridge. 1990. viii + 334 pp. 15.5 × 23.5 cm. ISBN 0-521-37265-8. \$79.50.

Advanced Immunochemistry. Second Edition. Eugene D. Day. John Wiley & Sons, Inc., NY. 1990. xxiii + 693 pp. 18.5 × 26 cm. ISBN 0-471-56686-1. \$120.00.

Planar Chromatography in the Life Sciences. Joseph C. Touchstone. John Wiley & Sons, Inc., NY. 1990. ix + 199 pp. 16 × 24 cm. ISBN 0-471-50109-3. \$59.95.

Computer Graphics and Chemical Structure. Stanley V. Kasperek. John Wiley & Sons, Inc., NY. 1990. xxx + 798 pp. 18.5 × 26 cm. ISBN 0-471-62822-0. \$59.95.

Pharmaceuticals and the Sea. Charles W. Jefford, Kenneth L. Rinehart, and Lois S. Shield. Technomic Publishing Company, Inc., Lancaster, PA. 1988. vii + 160 pp. 22 × 28.5 cm. ISBN 0-87762-581-6. \$65.00.

Approved Drug Products and Legal Requirements. Vol. III Tenth Anniversary Edition. 1990. The U.S. Pharmacopeial Convention, Inc., Rockville, MD. 1990. xxiii + 955 pp. 21.5 × 27.5 cm. ISBN 0-913595-49-7. \$69.00.

Annual Drug Data Report. Volume X/1988. J. R. Prous. J. R. Prous Science Publishers, Barcellona. xii + 1081 pp. 21.5 × 30.5 cm. ISSN 0379-4121. \$550.00.

Insect Neurochemistry and Neurophysiology. 1989. A. B. Borkovec and Edward P. Masler. The Humana Press, Clifton, NJ. 1990. xii + 480 pp. 16 × 24 cm. ISBN 0-89603-168-3. \$79.50.

Genetics. A Molecular Approach. T. A. Brown. Routledge, Chapman & Hall, NY. 1989. xvii + 387 pp. 19 × 24.5 cm. ISBN 0-412-37970-8. \$29.00.

Pharmacological and Chemical Synonyms. 9th Edition. E. E. J. Marler. Elsevier Science Publishers, Inc., Amsterdam. 1990. viii + 562 pp. 20 × 27 cm. ISBN 0-444-90487-5. \$350.00.

Biomedical Applications of Mass Spectrometry. Volume 34. Methods of Biomedical Analysis. John Wiley & Sons, Inc., NY. 1990. xiii + 396 pp. 16 × 24.5 cm. ISBN 0-471-61303-7. \$45.00.

Amino Acids and Peptides. Volume 21. A Review of the Literature Published during 1988. Reported by J. H. Jones. Royal Society of Chemistry, Cambridge, U.K. 1990. xi + 334 pp. 14.5 × 22.5 cm. ISBN 0-85186-194-6. \$166.00.

Phosphorus. An Outline of its Chemistry, Biochemistry and Technology. (Fourth Edition) (Studies in Organic Chemistry, 10). By D. E. C. Corbridge. Elsevier Science Publishers, Amsterdam. 1990. xii + 1094 pp. 17 × 24 cm. ISBN 0-444-87438-0. \$333.25.

Annual Review of Pharmacology and Toxicology. Volume 30, 1990. Edited by Robert George, Arthur K. Cho, and Terrence F. Blaschke. Annual Reviews Inc., Palo Alto, CA. 1990. viii + 783 pp. 16 × 23 cm. ISBN 0-8243-0430-6. \$38.00.

Omega-3 Fatty Acids in Health and Disease (Food Science and Technology Series/37). Edited by Robert S. Lees and Marcus Karel. Marcel Dekker, Inc., New York. 1990. viii + 240 pp. 16 × 23.5 cm. ISBN 0-8247-8292-5. \$99.75.

Medical and Health Care. Books and Serials in Print. 1990. 19th Edition. An Index to Literature in the Health Sciences Volume 1. Subjects/Authors. xxiv + 1397 pp. **Volume 2, Titles/Serials/Publishers.** xxiv + 1142 pp. R. R. Bowker Company, New York. 1990. 22.5 × 28.5 cm. ISBN 0-8352-2758-8 (set). \$159.95 (set).

Brainstorming. By Solomon H. Snyder. Harvard University Press, Cambridge, MA. 1989. 208 pp. 16.5 × 23.5 cm. ISBN 0-674-08048-3. \$22.50.

The Chemist's English. Third revised edition with "Say It in English, Please!" By Robert Schoenfeld. VCH Publishers, New York. 1990. xii + 193 pp. 15.5 × 21.5 cm. ISBN 0-89573-946-1. \$19.95.

Solubility Behavior of Organic Compounds. Techniques of Chemistry. Volume 21. By David J. W. Grant and Takeru Higuchi. John Wiley & Sons, Inc., New York. 1990. liii + 600 pp. 16.5 × 21 cm. ISBN 0-471-61314-2. \$99.95.

Nitro Compounds. Recent Advances in Synthesis and Chemistry. Organic Nitro Chemistry series. Edited by

Henry Feuer and Arnold T. Nielsen. VCH Publishers, Inc., Deerfield Beach, FL. 1990. xvi + 636 pp. 16 × 24 cm. ISBN 0-89573-270-X. \$125.00.

Methods in Neurosciences. Gene Probes. Volume 1. Edited by P. Michael Conn. Academic Press, San Diego. 1989. xii + 464 pp. 20.5 × 23.5 cm. ISBN 0-12-785252-0. \$45.00.

Calcium-Sequestering Cell Organelles: In Situ Localization and Characterization. Series: Progress in Histochemistry and Cytochemistry. Volume 20. No. 2. By Bernd Walz and Otto Baumann. VCH Publishers, New York. 47 pp. 17 × 24 cm. ISBN 0-89574-300-0. \$33.00.

Pharmaceutical Dosage Forms: Tablets. Volume 2. Second Edition, Revised and Expanded. Edited by Herbert A. Lieberman, Leon Lachman and Joseph B. Schwartz. Marcel Dekker, Inc., New York. 1990. xviii + 616 pp. 18.5 × 26 cm. ISBN 0-8247-8044-2. \$99.75.

Dienes in the Diels-Alder Reaction. By Francesco Fringuelli and Aldo Taticchi. John Wiley & Sons, Inc., New York. 1990. xx + 348 pp. 16 × 24 cm. ISBN 0-471-85549-9. \$69.95.

Phthalocyanines. Properties and Applications. Edited by C. C. Leznoff and A. B. P. Lever. VCH Publishers, New York. 1989. 436 pp. 16 × 24 cm. ISBN 0-89573-753-1. \$135.00.

Peroxisomal Oxidases: Cytochemical Localization and Biological Relevance. Series: Progress in Histochemistry and Cytochemistry. Volume 20. No. 1. By Sabine Angermuller. VCH Publishers, New York. 1989. vi + 65 pp. 17 × 24 cm. ISBN 0-89574-298-5. \$43.00.

Biosensors. Applications in Medicine, Environmental Protection and Process control GBF Monographs. Volume 13. Edited by R. D. Schmid and F. Scheller. VCH Publishers, New York. 1989. xvii + 428 pp. 17 × 24 cm. ISBN 0-89573-955-0. \$76.00.