Additions and Corrections

Catalytic Asymmetric Synthesis of Quaternary Carbon Centers. Exploratory Investigations of Intramolecular Heck Reactions of (*E*)-α,*β*-Unsaturated 2-Haloanilides and Analogs To Form Enantioenriched Spirocyclic Products. [*J. Am. Chem. Soc.* **1998**, *120*, 6477−6487]. ATSUYUKI ASHIMORI, BENOIT BACHAND, LARRY E. OVERMAN, AND DANIEL J. POON

In Table 5 of this manuscript, the conversion associated with several table entries is ambiguous. The original version of this table, which is clearer and incorporates chemical structures for all conversions, is now available as Supporting Information.

Supporting Information Available: Table 5 showing the scope of asymmetric Heck cyclizations of (*E*)-α,*β*-unsaturated 2-haloanilides with Pd(*R*)-BINAP (PDF). This material is available free of charge via the Internet at http://pubs.acs.org.

JA995540E

10.1021/ja995540e
Published on Web 12/22/1999

Book Reviews

Handbook of Enzyme Inhibitors, Third Edition. Edited by Helmward Zollner. Wiley-VCH: New York. 1999. Four-volume set. $799.00 ISBN 3-527-30103-8.

This is the third edition of a useful, straightforward compilation of enzyme inhibitors, which first appeared in one volume in 1988. The new edition has expanded to four volumes listing over 5000 enzymes and 19 000 related inhibitors. The work is divided into two parts, each consisting of two volumes. Part A is an alphabetic listing of enzymes, each of which is accompanied by a list of inhibitors. Inhibitor data include the type of inhibition (competitive, noncompetitive, uncompetitive, mixed, etc.); the effective concentration (*K*i or *I*50 values); the substrate for which the kinetic parameters were determined, and/or the organism and tissue from which the enzyme was isolated; and the literature reference number. Literature references, including many added since the last edition, appear at the end of each enzyme's section. Part B simply reverses this arrangement and lists inhibitors alphabetically, and then lists the enzymes affected.

The greatest challenge in designing a reference book in this field is enzyme nomenclature. Enzymes are listed under the names recommended by the International Union of Biochemistry (*Enzyme Nomenclature*, Academic Press, 1992) and are accompanied by their EC numbers. An EC number index is found at the end of Part B. Unclassified enzymes are listed by the name used in the citing paper. Common (trivial) names of inhibitors are typically used in the tables, due to their brevity and greater familiarity among scientists. A glossary at the end of Part B cross-references trivial names to their respective systematic names. Unfortunately, the compiler has not included Chemical Abstracts Service registry numbers in this work, which would have made further literature searching much simpler.

Although only five years have passed since the previous edition, enough new data have been added to make the third edition a worthwhile, if somewhat expensive, purchase for libraries and laboratories that need this type of information frequently. Biochemists, enzymologists, and toxicologists will likely find this set to be a time-saving tool in their work with enzymes.

David Flaxbart, *University of Texas at Austin*

JA995754W

10.1021/ja995754w

Handbook of Drug Metabolism. Edited by Thomas F. Woolf. Marcel Dekker Inc.: New York. 1999. xi + 596 pp. $225.00. ISBN 0-8247-0229-8.

In this excellent book, the contributions of over 40 respected authors drawn from academia and industry provide a wide-ranging, informative, and highly readable account of drug metabolism from its principles to its current applications.

The book is divided into four sections, the first two of which outline the principles and concepts of drug metabolism. Part 1 (Fundamentals of Drug Metabolism) lays the foundations from kinetic and physiological viewpoints, with thorough chapters on the pharmacokinetics of drug metabolites and on hepatic morphology, respectively. The perspective then becomes more chemical, with four chapters describing oxidative bioactivation, the cytochrome P450 system, non-P450 oxidative systems, and glucoronidation reactions. Part 2 (Factors Affecting Drug Metabolism) contains a number of chapters covering topics of real, current significance in drug development, such as pharmacogenetics, inhibition and induction of drug metabolizing enzymes, and metabolism-based drug−drug interactions. The basis as well as the consequences of these factors is discussed. Part 3 (Technologies) is the largest section in the book, comprising nine chapters devoted to the latest techniques that are being developed and applied in the practice of drug metabolism today. Among the methods covered are the use of heterologous expressed and purified enzymes, metabolic models of cytotoxicity, Caco-2 cells, subcellular fractions, recombinant DNA technology, and NMR in drug metabolism studies. These chapters discuss the underlying principles of each method as well as their practical capabilities and limitations. The final section (Metabolism in Drug Discovery and Development) contains two chapters which help to put all that has gone before into context by outlining, in general terms, preclinical and clinical drug metabolism strategies.

Overall, the book is well organized and clearly indexed. Each chapter takes the form of a short review, some of which, due to space restrictions, are necessarily shorter than their subject matter deserves. If further reading is desired, however, the book is thoroughly referenced (up to 1997) throughout. The writing style and presentation are of high quality and are fairly consistent across all chapters, a pleasant surprise for a book with so many authors. By the editor's own admission, however, this book, extensive as it is, is not exhaustive. Coverage of topics such as phase 2 enzymes and enzyme pharmacophore modeling is promised in subsequent volumes.

This volume clearly has a place as a textbook for those studying drug metabolism, and the strong practical emphasis should also make it a valuable reference for those working in the area. For chemists whose work involves and interaction with, and understanding of, the discipline of drug metabolism, this book is highly recommended.

Kevin S. Currie, *Neurogen Corporation*

JA995736E

10.1021/ja995736e