

Additions and Corrections

Chiral Synthesis via Organoboranes. 1. A Simple Procedure To Achieve Products of Essentially 100% Optical Purity in Hydroboration of Alkenes with Monoisopinocampheylborane. Synthesis of Boronic Esters and Derived Products of Very High Enantiomeric Purities [*J. Am. Chem. Soc.* 1984 106, 1797]. HERBERT C. BROWN* and BAKTHAN SINGARAM

Page 1798, left column, bottom: Add line— ... of 100% optical purity. Oxidation of the mother liquor gave the...

Page 1798, structure 6: Add H to the wedge bond over the benzene ring.

Reactions of Alkanediazotic Acids at Near Neutral and Basic pH in $[^{18}\text{O}]\text{H}_2\text{O}$ [*J. Am. Chem. Soc.* 1984, 106, 2072–2077]. BARRY GOLD,* ASHOK DESHPANDE, WENDY LINDER, and LANCE HINES

Page 2075, 2nd column, 14th line—the sentence should read as follows; ... thermolysis in dioxane of *N*-*sec*-butyl-*N*-nitroso....

Book Reviews*

Nuclear Chemistry—Theory and Applications. By G. R. Choppin (Florida State University) and J. Rydberg (Chalmers University of Technology, Sweden). Pergamon Press, New York. 1980. viii + 667 pp. \$87.00.

This appropriately titled, large book is a comprehensive textbook on nuclear and radiochemistry for use at the upper undergraduate level or introductory graduate level. The authors have succeeded in fulfilling their goal of covering a broad array of topics with adequate coverage in both depth and detail. The treatment of difficult concepts is simplified by a readable style and comparison with atomic analogies. Possible over-simplification by keeping the mathematics uncomplicated may be a possible concern for some users. The first portion of the book is devoted to the principles of nuclear chemistry, in which a blend of historical events assists in developing those ideas interestingly. The second portion is divided between topics of applications of nuclear chemistry to most areas of science including geological and cosmological settings. This section represents a particular strength of this book. The third portion, which is given in three chapters, is devoted to development of nuclear reactor theory and applications in nuclear reactors. Because nuclear technology changes so rapidly, some of the statistics used in this section may no longer be useful. The utility of this book as a reference book for non-nuclear chemists and nuclear chemists alike results both from the comprehensiveness of subject material and the integration across traditional disciplinary lines. Following each chapter are problems, with answers provided in the Appendix. Also, optional topics are marked by an asterisk in each chapter. The book contains a periodic chart, chart of the nuclides, and other pertinent appendix sections.

Moses Attrep, Jr., *East Texas State University*

Metal Ions in Biological Systems. Volume 16. Methods Involving Metal Ions and Complexes in Clinical Chemistry. Edited by Helmut Sigel (University of Basel). Marcel Dekker, New York, NY. 1983. XXV + 397 pp. \$75.00.

This 18-chapter volume containing contributions from 22 authors begins with chapters on some nutritional and immunological aspects of metal ions. These are followed by considerations of therapeutic metal-ion chelating agents which are used as antidotes for metal poisoning and to enhance pharmacological properties of metals. The major part of this book, some 10 chapters, deals with methods for the determination of metals encountered in clinical chemistry. A wide variety of analytical techniques are touched upon, and these include stable isotope dilution, neutron activation analysis, atomic absorption spectrophotometry, voltammetric methods, and a number of others. Also covered are methods

for measuring drugs in body fluids by metal-chelate formation. The book concludes with two chapters on the clinical uses of gallium, indium, and technetium radionuclides.

Because the many metal ions and complexes in their various oxidation states exhibit such varied chemistries and biochemistries, the material in this book necessarily presents an overview rather than a review of the diverse uses and determinations of metal ions and their complexes encountered in clinical chemistry. The chapters on the determinations of metal ions discuss both methods currently in use and new techniques that are gaining wider acceptance for their increased convenience, sensitivity, reliability, and accuracy. Most chapters generally include a reasonable biochemical, physiological, and clinical introduction for the use of the non-specialist. This book should be of general interest to researchers in a wide variety of disciplines and clinicians whose work involves the use of metal ions.

Brian B. Hasinoff, *Memorial University of Newfoundland*

A Treasury for Word Lovers. By Morton S. Freeman. ISI Press, Philadelphia, PA 19104. 1983. x + 333 pp. \$14.95 softbound; \$19.95 hardbound.

The more authors that read this book, the easier the job of editing journals will become. It is about choosing the right word and properly using it in writing and speech. It consists of an alphabetic collection of common words or expressions, from "A, an" (does one write "a UV spectrum" or "an UV spectrum?") to "Zoom", and for each it presents an engaging paragraph or two, explaining how the word should be used and giving examples of correct and incorrect use. Words found in almost any chemical paper, such as "due to", "marginal", "practically", "hopefully", "frequently", "case", "based on", "alternate", etc., but which are all too often used incorrectly, are explained with great clarity. In discussing when to use "reaction" and when "response", the author appropriately remarks "reaction is a term best restricted to science". An index provides access to many topics, such as "restricted clauses", that are buried in paragraphs on particular words.

Indoles. Part 4. The Monoterpenoid Indole Alkaloids. Edited by J. E. Saxton. John Wiley and Sons, New York. 1983. xii + 886 pp. \$200.00.

The monoterpenoid alkaloids are those derived from tryptophane and a monoterpenene skeletal unit, and include such important classes as the yohimba, strychnos, and cinchona alkaloids. Their importance is underscored by the fact that more than a thousand of them are known, and the task of dealing with them now requires a team of contributors. This volume consists of fourteen chapters written by eleven authors, who together have covered the subject reasonably completely. The literature has been surveyed up to mid-1981. Some of the information is presented

*Unsigned book reviews are by the Book Review Editor.