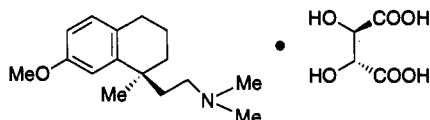


## Additions and Corrections

**Catalytic Asymmetric Synthesis of Benzylic Quaternary Carbon Centers. An Efficient Synthesis of (–)-Eptazocine** [*J. Am. Chem. Soc.* **1993**, *115*, 8477–8478]. TOSHIYASU TAKEMOTO, MIKIKO SODEOKA, HIROAKI SASAI, AND MASAKATSU SHIBASAKI\*

Page 8478, Scheme III: In this communication we assigned the absolute configuration of the alcohol (–)-**20** to be *R* based on what was reported earlier (*J. Chem. Soc., Chem. Commun.* **1990**, 290; and a personal communication from the authors). However, more recently X-ray examination of the tartrate salt shown below derived from (–)-**18** suggests otherwise and thus the configuration of **20** is opposite to that which we reported.



This correction of configuration also applies to the structures **1**, **12**, **13**, **17**, **18**, and **19** shown therein.

## Computer Software Reviews \*

**Scientific Reference System II. SRS II v2. Version 2.** GloMax Software: 3525 Lucia Crest, Madison WI 53705. Voice (608)264-5407. FAX (608)264-5275. E-mail: jralph@facstaff.wise.edu. ShareWare: \$15.00.

This macintosh reference manager, previously reviewed (*J. Am. Chem. Soc.* **1992**, *114*, 4949), is now ShareWare (\$15.00). The program, formerly marketed by Trinity Software and ACS Software, has reverted back to GloMax Software. Contact GloMax via mail or E-mail.

\*Unsigned computer software reviews are by the Computer Software Review Editor.

## Book Reviews \*

**Advances in Metal-organic Chemistry. Volume 3.** Edited by Lanny S. Liebeskind (Emory University). JAI Press: Greenwich, CT. 1994. xii + 322 pp. \$90.25. ISBN 1-55938-406-9.

This book is Volume 3 in the ongoing series covering stoichiometric and catalytic metal mediated synthetic organic processes. After a list of contributors, a preface by the editor, and an introduction to the series by Albert Padwa, there are five chapters with the following headings: Orthomanganated Aryl Ketones and Related Compounds in Organic Synthesis by Lyndsay Main and Brian K. Nicholson; Cyclopropylcarbene-Chromium Complexes: Versatile Reagents for the Synthesis of Five-membered Rings by James W. Herndon, Seniz U. Tumer, Leonard A. McMullen, Julius J. Matasi, and Wayne F. K. Schnatter; Palladium-catalyzed Vinylic Substitution by Richard C. Larock; Ruthenium-Catalyzed Oxidative Transformations of Alcohols by Shun-Ichi Murahashi and Takeshi Naota; and Palladium-Catalyzed Carbonyl Allylation via  $\pi$ -Allylpalladium Complexes by Yoshiro Masuyama. There is a subject index.

**Cluster Ions. Wiley Series in Ion Chemistry and Physics.** Edited by Cheuk-Yiu Ng (Iowa State University), Tomas Baer (University of North Carolina at Chapel Hill), and Ivan Powis (University of Nottingham). John Wiley & Sons: Chichester and New York. 1993. xiv + 479 pp. \$104.00. ISBN 0-471-93830-0.

\*Unsigned book reviews are by the Book Review Editor.

This volume is the first in a reference book series on ion chemistry and physics. This volume cuts various swaths through the field of cluster ion research in seven chapters authored by active researchers. Chapter 1 by W. Kamke details experimental methods, and in particular electron-ion coincidence techniques, used in the study of the photoionization and ensuing fragmentation of clusters. The chapter follows up with examples of applications and results for clusters of ammonia, rare gases, and nitrous oxide (the latter two also mixed with aromatic compounds). In Chapter 2, C. Lifshitz surveys dissociation processes and kinetic energy release for proton bound clusters and the cationic carbon clusters. In Chapter 3, M. Jarrold describes theoretical and experimental results on silicon cluster ions and discusses results on dissociation, mobility, and chemical reactivity of these cluster ions with a slant toward inferences on the existence of isomers and their structure. In Chapters 4 and 5, experimental methods and results on the spectroscopy of cluster ions are covered. Chapter 4 by J. Lisy is concerned with vibrational spectroscopy and describes work from Y. T. Lee's lab on protonated molecular clusters and from Lisy's own lab on solvated metal ions, while Chapter 5 by J. Farrar deals with electronic photodissociation spectroscopy of ionic clusters including solvated metals ions, anionic water clusters, and rare gas cluster ions. Chapter 6 by I. Last and T. George has a perspective more on theory and describes the calculation of the electronic structures of rare gas clusters by the diatomics-in-ionic-systems method. In chapter 7, B. Brunetti and F. Vecchiocattivi present an extensive description of experimental

techniques, theoretical considerations, and studies of collisional auto-ionization by excited state rare gas atoms. There are also author and subject indexes.

As is often typical for a collection of individual contributions, the familiarity with the subject needed by the reader to appreciate each chapter is uneven, but every chapter contains a substantial and relatively up-to-date (citations into 1992) reference list. If one reads the book from cover to cover, some of the discussion is repetitive but probably justifiable within the structure of each contribution. A more unified treatment that brought together, for instance, the various discussions on rare gas clusters ions may have been more satisfying. The entire volume perhaps is not as focused on cluster ions as the reader may expect for a volume so entitled. The last chapter especially seems out of place, but it does complement the first chapter in demonstrating further utility of ion-electron coincidence experiments. In fact, Chapters 1 and 7 are the two lengthiest chapters and together constitute nearly one-half of the text. Most of the chapters, however, do pick up on the theme of clusters as a bridge between the gaseous and condensed phases. In this regard, the volume succeeds in demonstrating some of the significant contributions that investigations on cluster ions have made in the last few years to understanding the ionic environment in the condensed phase.

**Robert G. Keesee**, *State University of New York at Albany*

**Dimensional Scaling in Chemical Physics.** Edited by Dudley R. Herschbach (Harvard University), John Avery (University of Copenhagen), and Osvaldo Goscinski (Uppsala University). Kluwer Academic Publishers: Dordrecht, The Netherlands. 1993. 510 pp. \$56.50. ISBN 0-7923-2072-7.

This book is a multi-authored work developed from the papers presented at the workshop held at the Ørsted Institute in Copenhagen in June 1991. After a preface by the editors, there are 12 chapters organized under the following headings: Basic Aspects, The Research Frontier, and Related Methods. There is also an epilogue and index.

**Studies in Surface Science and Catalysis. 82. New Developments in Selective Oxidation II.** Edited by V. Cortes Corberan and S. Vic Bellon. Elsevier: Amsterdam. 1994. xvi + 884 pp. \$214.25. ISBN 0-444-81552-x.

This book was developed from the papers presented at the 2nd World Congress and 4th European Workshop Meeting on New Developments in Selective Oxidation held on 20–24 September, 1993, in Benalmadena, Spain. After a preface by the editors and a list of organizers, there are 93 chapters organized under the following headings: C<sub>3</sub>-C<sub>4</sub> Olefins Oxidation; Oxidative Dehydrogenation of Alkanes; C<sub>3</sub>-C<sub>4</sub> Paraffins Oxidation; Methane Activation; Oxidation by Supported Metals; Liquid Phase Oxidations; Bio-, Electro-, and Photo-oxidations; Gas-Phase Aromatics Oxidation; Alcohols Oxidation; and Gas-phase Oxidation of Other Compounds. There are author and subject indexes.

**The Chemistry of Functional Groups. The Chemistry of Organic Arsenic, Antimony, and Bismuth Compounds.** Edited by Saul Patai (Hebrew University, Jerusalem). John Wiley and Sons: New York. 1994. xvi + 962 pp. \$425.00. ISBN 0-471-93044-x.

This book is part of the series *The Chemistry of Functional Groups*. It covers the literature up to the beginning of 1992 of organometallic compounds containing arsenic, antimony, and bismuth. After a foreword and a preface by the editor, there are 21 chapters with emphasis on preparation, properties, and reactions of the functional group and its effects in the immediate vicinity. There is also an author index and a subject index.

**Studies in Surface Science and Catalysis. Volume 83. Zeolites and Microporous Crystals.** Edited by T. Hattori and T. Yashima. Elsevier: Amsterdam. 1994. xxviii + 504 pp. \$300.00. ISBN 0-444-98657-x.

This book was developed from the Proceedings of the International Symposium on Zeolites and Microporous Crystals sponsored by the Japan Association of Zeolites and the International Zeolites Association

held in Nagoya, Japan, on 22–25 August, 1993. After a list of organizers, list of contributors, and a preface, there are 68 chapters organized under the following headings: Synthesis, Structure, Modification, Adsorption, and Catalysis. There is no subject index.

**Organic Reactions. Volume 45.** Edited by Leo Paquette. John Wiley and Sons: New York. 1994. x + 672 pp. \$95.00. ISBN 0-471-03161-5.

This book is Volume 45 of the series with chapters, written by experts in the field, devoted to a single reaction or a definite phase of a reaction. After a preface to the series, there are two chapters: The Nazarov Cyclization by Karl L. Habermas, Scott E. Denmark, and Todd K. Jones; and Ketene Cycloadditions by John Hyatt and Peter W. Reynolds. There is also a list of the cumulative chapter titles (by volume), an author index (Volumes 1–45), and a chapter and topic index (Volumes 1–45).

**Fluorescence Spectroscopy. New Methods and Applications.** Edited by Otto S. Wolfbeis (Karl Franzens University, Graz, Austria). Springer-Verlag: New York. 1993. xx + 310 pp. \$190.00. ISBN 3-540-55281-2.

This edited volume contains the conference proceedings of a small meeting held in Graz, Austria, in 1991, on Methods and Applications of Fluorescence Spectroscopy. Most of the contributors are from European institutions. The book has 21 brief chapters grouped somewhat arbitrarily into five sections plus a subject index. The first section on New Methods includes papers on laser-based spectroscopies, single molecule detection, charge-coupled devices, optical sensors, twisted intramolecular charge transfer compounds, protein conformational dynamics, and light-scattering materials. The second section on New Applications includes examples from forestry, Langmuir monolayers, fluorescence lifetime imaging, ether phospholipids, pyrene-labeled lipids, and intracellular ion detection. These two sections comprise almost two-thirds of the book. The remaining one-third features a section on Fluorimetric Analyses, which includes papers on very near IR probes, flow injection analysis, and environmental water analysis. This is followed by a section on Immunoassay, which includes articles on polarization competition assay, luminescence assay with rare earth chelates, and chemiluminescence detection in environmental monitoring. The final section on Biomedical Sciences contains two chapters on voltage-sensitive dyes in neurobiology. The information content varies considerably among the chapters, ranging from broad surveys to narrowly-focused presentations of the work of the contributing authors. The reference lists contain citations through 1991, with some being more comprehensive than others. Overall, the book is overpriced and limited in scope; however, the chapters on environmental applications of fluorescence are among the most interesting.

**Mary D. Barkley**, *Louisiana State University*

**Advances in Strain in Organic Chemistry. Volume 3.** Edited by Brian Halton (Victoria University of Wellington). JAI Press: Greenwich, CT. 1993. xii + 282 pp. \$90.25. ISBN 1-55938-554-5.

This is an outstanding volume. Area experts have been enticed to write reviews which not only inform but also inspire. Dolbier's chapter focuses on the thermal rearrangements of fluorinated cyclopropanes with side by side comparisons to the hydrocarbon analogues to provide important insights into the reactions of both. Kabe and Ando contribute a very detailed chapter on small-ring organo-silicon, germanium, and tin compounds with 269 references. Toda provides an excellent overview of highly unsaturated four-membered ring systems, like dimethylenecyclobutene with proper attribution to the pioneering efforts of Huntsman. And who better to summarize the work on small and strained cyclophanes but Bickelhaupt and de Wolf? Finally, Luef and Keese's chapter on small fenestranes provides important analyses of approaches to planar carbon. Halton is to be congratulated for his selection of topics and authors in this volume. It is an excellent addition to one's library.

**Joseph J. Gajewski**, *Indiana University*