## Additions and Corrections

Total Synthesis of the Cytotoxic Macrocycle (+)-Hitachimycin [J. Am. Chem. Soc. 1992, 114, 8008-8022]. Amos B. Smith, III,\* Thomas A. Rano, Noritaka Chida, Gary A. Sulikowski, and John L. Wood

Pages 8010, 8011, 8016: Intermediates 24 and 25 were incorrectly designated as levorotatory; actually the (+) enantiomers were employed. For 25:  $[\alpha]^{25}_D + 2.7^{\circ}$  (c 0.69, CHCl<sub>3</sub>). In Schemes VI, VII, VIII, and X, systematic errors occurred in the drawings of 24, 25, 6, and the lithium alkoxide derived from 6. The correct structures are given here

Direct Proton Transfer between HCN and Nitrogen and Oxygen Bases [J. Am. Chem. Soc. 1985, 107, 7126-7134]. RODNEY A. BEDNAR AND WILLIAM P. JENCKS\*

Page 7128: Brackets should be added to eq 4 after  $t_2/3$  and at the end of the equation.

Dihydrogen Complexes of Metalloporphyrins: Characterization and Catalytic Hydrogen Oxidation Activity [J. Am. Chem. Soc. 1992, 114, 5654–5664]. James P. Collman, Paul S. Wagenknecht, James E. Hutchison, Nathan S. Lewis, Michel Angel Lopez, Roger Guilard, Maurice L'Her, Aksel A. Bothner-By, and P. K. Mishra

Page 5660: Equations 12, 13, and 14 were transcribed incorrectly in the paper. They should read:

$$D_{\rm HH} = -S_z \frac{\gamma_{\rm H}^2 h}{2\pi^2 r_{\rm HH}^3} \left( \frac{3}{2} \cos^2 \theta_{\rm HH} - \frac{1}{2} \right)$$
 (12)

$$\frac{{}^{3}/_{2}\cos^{2}\theta_{\rm HH} - {}^{1}/_{2}}{r_{\rm HH}} = (6.30 \times 10^{22})D_{\rm HH}$$
 (13)

$$\frac{{}^{3}/{}_{2}\cos^{2}\theta_{\rm HH} - {}^{1}/{}_{2}}{r_{\rm HH}}^{3} = \pm 0.309 \times 10^{24}$$
 (14)

The results and conclusions reported were obtained using the correct relations and remain unchanged. We are grateful to Dr. L. Werbelow for drawing our attention to these errors.

Synthesis of 1,2-Ditellurolane Derivatives [J. Am. Chem. Soc. 1993, 115, 885]. M. V. Lakshmikantham, Michael P. Cava,\* Wolfgang H. H. Gunther, Peter N. Nugara, Kenneth A. Belmore, Jerry L. Atwood, and Peter Craig

Page 885: The author listed as Peter Craig was inadvertently misspelled. The correct spelling is Peter J. Cragg.

## Book Reviews \*

Advances in Physical Organic Chemistry. Volume 27. Edited by D. Bethell (University of Liverpool). Academic Press: New York. 1992. vi + 311 pp. \$90.00. ISBN 0-12-033527-1.

This volume consists of four articles on organic reaction mechanisms and transition-state structure in solution. A. Williams (University of Kent, U.K.) discusses the development of effective charge in transition states, the experimental assessment of charge, and the interpretation of transition-state structure. I. Lee (Inha University, South Korea) reviews the use of cross-interaction terms in linear free energy relationships to probe transition-state structure in solution. C. F. Bernasconi (University of California, Santa Cruz) summarizes the principle of non-perfect synchronization and its applications to a variety of organic reactions. This extensive review provides many insights into substituent effects on transition-state structure. R. Ta-shma and Z. Rappoport (The Hebrew University of Jerusalem, Israel) review the influence of solvent on the selectivity of solvolysis reactions in aqueous alcohols and related mixtures. There is an author index and references into 1990. This volume provides a good update on modern applications of classical physical organic chemistry as it has evolved from the "Bema Hapothle" school.

K. N. Houk and Yi Li, University of California, Los Angeles

Chirality in Industry. The Commercial Manufacture and Applications of Optically Active Compounds. Edited by A. N. Collins, G. N. Sheldrake, and J. Crosby (ICI Specialties, U.K.). J. Wiley and Sons: New York. 1992. xvi + 410 pp. \$135.00. ISBN 0-471-93595-6.

This book is an overview of the large scale production of optically active compounds from an industrial perspective. After a list of contributors and a preface by the editors, the book opens with an extensive introductory chapter by Crosby, and the remaining 20 chapters are organized under the following processing options: Non-biological Resolutions; Biological Methods; Asymmetric Synthesis by Chemical Methods; and Immobilization Techniques and Membrane Bioreactors. This book also contains a subject index.

Chemical Processing of Advanced Materials. Edited by Larry L. Hench and Jon K. West (University of Florida). J. Wiley and Sons: New York. 1992. xi + 1048 pp. \$95.00. ISBN 0-471-54201-6.

This book is compiled from the Fifth Ultrastructure Processing Conference held in Orlando, FL, on February 17-21, 1991. The conference was in memoriam to Dr. Donald R. Ulrich for his lifetime leadership in this field. After a preface by the editors, the book contains 91 chapters organized under the following headings: Sol-Gel Science, Silica; Sol-Gel Science, Various Oxide and Multicomponent Systems; Sol-Gel Applications; Thin Films and Coatings; Micromorphology Science; Ultrastructural Polymers; Chemically Processed Fibers and Composites; Advanced Optical Materials; and Future Directions. This book contains an author index and a subject index. A list of contributors to the book, with their affiliations, is given at the beginning of the volume.

Fourier Transform Infrared: A Constantly Evolving Technology. By Sean F. Johnston (Laser Monitoring Systems Ltd.). Ellis Horwood: New York, London, Toronto, Sydney, Tokyo, and Singapore. 1992. 340 pp. \$71.25. ISBN 0-13-327479-9.

Mr. Johnston has compiled in a single reference a complete history of the major developments in the design of Fourier transform infrared spectrometers in the hardware/optics arena, as well as a perfunctory review of sample handling techniques and instrument evaluation methods for FTIR systems.

The first 10 chapters of the book cover basic optics and the early developments of interferometry prior to the availability of commercial spectrometers in the 1960s. These chapters provide those not conversant in the details of spectrometer design one of the few reviews of interferometry history which is not laden with equations and mathematical trivia. Chapters 10 and 11 cover the period of the 1970s and the development of the early "commercial" systems. These two chapters, as mentioned by the author, are very superficial in content. Any graduate student or novice researcher to the field interested in the details of the history of chemical FTIR will have to turn to one of the excellent reference books on chemical FTIR, such as that by Peter Griffiths of Ohio University.

Chapters 12-14 cover the development of commercial FTIR into the routine analytical method we are familiar with today. Chapter 12 is a very poor review of computer systems, signal processing hardware, and associated software used in FTIR systems. This chapter is the most disappointing of the book, given that FTIR systems are, for all practical purposes, computer assisted analytical infrared spectrometers and this

<sup>\*</sup>Unsigned book reviews are by the Book Review Editor.