

Additions and Corrections

Zinc(II) Complexes and Aluminum(III) Porphyrin Complexes Catalyze the Epoxidation of Olefins by Iodosylbenzene [*J. Am. Chem. Soc.* **1990**, *112*, 4977–4979]. WONWOO NAM and JOAN SELVERSTONE VALENTINE*

The reported catalytic activity of AlTPPCl and AlTPPOH in the epoxidation of olefins by iodosylbenzene is incorrect. Repetition of these experiments with AlTPPCl synthesized from ultrapure aluminum gave substantial catalysis of iodosylbenzene decomposition but little or no epoxide product. Apparently the traces of iron present as contaminants in the original sample (see ref 12) were sufficient to cause the observed epoxidation.

Control experiments with FeTPPCl alone as catalyst at concentrations calculated on the basis of the level of iron impurity in our sample of AlTPPCl gave some epoxide but less than the levels observed in the original experiments. We do not at this time understand the discrepancy. We are grateful to Professor John T. Groves for communicating to us his results concerning the ability of FeTPPCl to catalyze the epoxidation of *cis*-stilbene by iodosylbenzene at extremely low catalyst concentrations.

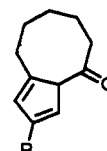
These results do not affect the majority of our conclusions in this paper concerning the ability of Lewis acidic non-porphyrin metal complexes to catalyze olefin epoxidation by iodosylbenzene.^{1,2}

(1) Yang, Y.; Diederich, F.; Valentine, J. S. *J. Am. Chem. Soc.* **1990**, *112*, 7826.

(2) Yang, Y.; Diederich, F.; Valentine, J. S. *J. Am. Chem. Soc.* In press.

Unusual Reactivity of Small Cyclophanes: Nucleophilic Attack on 11-Chloro- and 8,11-Dichloro[5]metacyclophane [*J. Am. Chem. Soc.* **1990**, *112*, 6638–6646]. PAUL A. KRAAKMAN, JEAN-MARC VALK, HARM A. G. NIEDERLÄNDER, DEBORAH B. E. BROUWER, F. MATTHIAS BICKELHAUPT, WILLEM H. DE WOLF, FRIEDRICH BICKELHAUPT,* and CASPAR H. STAM

Page 6643: Structure **22** in Scheme IX shows the wrong arrangement of double bonds in the five-membered ring and should be replaced by



22

The conversion of **22** to **21** and the mechanistic implications are not affected by this correction.

Complexation Control of Pericyclic Reactions: Supramolecular Effects on the Intramolecular Diels–Alder Reaction [*J. Am. Chem. Soc.* **1991**, *113*, 382–383]. SIMON C. HIRST and ANDREW D. HAMILTON*

Page 383: Footnote 16 should be modified to read as follows: (16) Activation parameters for the simple IMDA reaction, measured for a more soluble derivative of **1** (*N*-octyl in place of *N*-benzyl) in CDCl₃ at 298 K, were $\Delta G^\ddagger = 22.9 \text{ kcal mol}^{-1}$, $\Delta H^\ddagger = 19.3 \text{ kcal mol}^{-1}$, and $\Delta S^\ddagger = -12.1 \text{ cal K}^{-1} \text{ mol}^{-1}$.

Book Reviews*

Comprehensive Analytical Chemistry. Volume XXIV. Energy Dispersive X-ray Fluorescence Analysis. By B. Dzunikowski (Academy of Mining and Metallurgy, Warsaw). Edited by G. Svehla. Elsevier Science Publishers: New York and Amsterdam. 1990. 451 pp. \$215.50. ISBN 0-444-98897-1.

The writing of this volume was innovated by the major developments in the subject since 1971, when it was reviewed in a chapter in Volume 11C of this series by G. L. MacDonald. The fourteen chapters start with one on fundamentals, after which sources, secondary radiation, and detection are treated. A chapter on X-ray spectrometry in general is followed by chapters on selection of optimum conditions, disturbing effects, methods for eliminating matrix effects, and other sources of errors. A chapter on processing of measurement data is followed by four chapters on applications, from geological prospecting to medical applications. The subject index is extensive.

Copper Bioavailability and Metabolism. Advances in Experimental Medicine and Biology. Volume 258. Edited by C. Kies (University of Nebraska). Plenum: New York and London. 1989. xii + 307 pp. \$72.50. ISBN 0-306-43373-7.

Biology of Copper Complexes. Edited by J. R. J. Sorenson (University of Arkansas for Medical Sciences). Humana: Clifton, NJ. 1987. xix + 598 pp. \$79.50. ISBN 0-89603-123-3.

Both of these volumes are proceedings of symposiums that examined aspects of the biochemistry and metabolism of the element copper. As such they represent one-time snapshots rather than in depth, critical examinations of the status of this field. *Copper Bioavailability and Metabolism* is from the American Chemical Society Symposium of this name held in April 1989, while *Biology of Copper Complexes* is from

a conference held at the University of Arkansas in 1986 and includes transcripts of oral discussion and twelve poster presentations. The latter volume is unfortunately already somewhat out of date.

As the individual titles suggest, the emphasis of these two volumes is different. Specific topics such as antiinflammatory, analgesic, antimicrobial, anticarcinogenic, and radioprotective effects of particular copper complexes as well as copper complexes in nutrition are covered at length in *Biology of Copper Complexes*. More general topics such as the regulation of specific copper enzymes (ceruloplasmin, superoxide dismutase), copper transport (role of ceruloplasmin), and the mechanistic role of copper in copper enzymes (lysyl oxidase) are only briefly covered in this work. *Copper Bioavailability and Metabolism* includes extensive coverage of aspects of copper in foods and factors affecting its bioavailability (including an exhaustive table of copper contents of foods), copper absorption and transport (ceruloplasmin, metallothionein, and transcuprein), and the physiological effects of dietary copper (e.g. on the modulation of long chain fatty acid unsaturation or on immune function and disease resistance). The effects on copper status of some pathological or other conditions (e.g. lung injury or exercise training) are also covered.

Of these two volumes the much more recent *Copper Bioavailability and Metabolism* is of greater general interest due to its broader scope both in terms of the topics covered and in the depth with which they are treated. This volume and the references it contains can serve as a useful starting point for the aspects of copper metabolism and nutrition it covers.

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Methods of Surface Analysis: Techniques and Applications. Edited by J. M. Walls (VG Ionex). Cambridge University Press: Cambridge. 1989. x + 342 pp. \$24.95. ISBN 0-521-38690-X.

This book is aimed at the nonspecialist who wants to gain an overall appreciation for modern surface analytical techniques and the ways these techniques are used in research, development, and practical problem

*Unsigned book reviews are by the Book Review Editor.