Additions and Corrections

Transverse ^{13}C Relaxation of CHD_2 Methyl Isotopmers To Detect Slow Conformational Changes of Protein Side Chains [*J. Am. Chem. Soc.* **1999**, *121*, 11589−11590]. RIEKO ISHIMA, JOHN M. LOUIS, AND DENNIS A. TORCHIA*

In our recent paper, we incorrectly stated that previous studies of slow sidechain motions in proteins have been limited to aromatic ring flips. LeMaster and Kushlan (LeMaster, D. M.; Kushlan, D. M. *J. Am. Chem. Soc.* **1996**, *118*, 9255−9264) prepared 50% deuterated oxidized *Escherichia coli* thioredoxin samples labeled with ^{13}C at alternating sites. They obtained evidence for millisecond to microsecond time scale motion at many monoprotonated ^{13}C sidechain sites in the protein from an analysis of ^{13}C T_1/T_2 ratios and NOEs.

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Book Reviews *

Electron Transfer: From Isolated Molecules to Biomolecules. Parts 1 and 2. Edited by J. Jortner and M. Bixon (Tel Aviv University). Advances in Chemical Physics Volumes 106 and 107. Series Edited by I. Prigogine (Université Libre de Bruxelles) and S. A. Rice (University of Chicago). John Wiley & Sons: New York. 1999. Part 1: xvii + 734 pp. $215.00. ISBN 0-471-25292-1. Part 2: xvii + 735 pp. $215.00. ISBN 0-471-25291-3.

This extensive two-volume set is intended to provide, in a single source, a comprehensive discussion of the modern understanding of nonradiative electron transfer. The breadth of the contributions incorporated is intended to include both theory and experiment, as well as to span the full range of relevant systems, from isolated molecules, to molecular clusters and condensed-phase materials, to biological molecules. Separate topics are discussed in individual contributions by separate authors.

The editors have done a commendable job of meeting these goals. The contributors of individual articles represent a collection of genuine expertise. The first part of the set focuses on molecules and clusters, as well as on a review of the roughly 50 years of development that has led to the rather advanced current level of understanding of the topic. This includes a discussion of the role of chemical structure in both synthetic and natural molecules as well as molecular assemblies, and the relationship between structure and electronic coupling. Part 2 emphasizes, first, the role of a solvent environment, including the critical issue of solvent dynamical effects and, second, the behavior of complex materials, ranging from molecular "wires", to proteins, to DNA.

The articles contained in the volumes are not simply a collection of individual topical discussions; instead, they form a coherent discussion of the topic. More importantly, the individual articles each provide a discussion in depth, including a self-contained description of "standard" material. Hence, the collection is not only valuable to an individual with considerable existing knowledge in the general field, but it is also accessible to a dedicated new student of the subject.

The contents of these volumes should be valuable both to those working on the chemical physics of electron transfer and equally to individuals with a desire to understand the principles underpinning such diverse processes as biological electron transfer, electrochemical reactions, scanning tunneling microscopy, and molecular electronic device function. While this source is likely not the best place to go if only a basic introduction to the topic of electron transfer is desired, it does represent an excellent unification of the available understanding of this ubiquitous topic. Such a unified presentation is not available elsewhere, and this collection serves a valuable purpose.

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Metal−Ion Separation and Preconcentration: Progress and Opportunities. ACS Symposium Series 716. Edited by Andrew H. Bond (Argonne National Laboratory), Mark L. Dietz (Argonne National Laboratory), and Robin D. Rogers (University of Alabama). Oxford University Press: New York. 1999. xii + 420 pp. $130.00. ISBN 0-8412-3594-5.

New technologies and concepts in the field of metal−ion separations are explored in this volume in the Symposium Series. The book is directed toward both new and experienced practitioners of separation science as well as scientists interested in the application of metal−ion separations to environmental problems. The book is organized into six sections: Aqueous Systems, Extractant Design and Synthesis, Separations Using Liquid−Liquid Systems, Separations Using Solid−Liquid Systems, Separations Using Membranes, and Separations Using Chromatographic and Supercritical Fluid Extraction Systems. Three overview chapters are also included.

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Chemistry of Wine Flavor. ACS Symposium 714. Edited by Andrew L. Waterhouse and Susan E. Ebeler (University of California, Davis). Oxford University Press: New York. 1999. x + 246 pp. $95.00. ISBN 0-8412-3592-9.

This 16-chapter volume, based on a 1997 symposium, covers the chemistry of wine flavors from several perspectives. The first five chapters examine flavors that are derived from grapes, whereas the next four chapters focus on flavors formed during the primary and secondary fermentation process. The effects of polyphenols on the properties of wine are explored in Chapters 10−12, and the remainder of the book covers such topics as aldehyde levels in wines as they age and the interactions between aroma compounds and nonvolatile components in wine and their effect on the overall aroma.

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*Unsigned book reviews are by the Book Review Editor.