Book Review

Electron Transfer in Inorganic, Organic and Biological Systems

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This book is a publication of talks given at the Symposium on Electron Transfer in Inorganic, Organic and Biological Systems held in December 1989 at the meeting of the Chemical Congress of the Pacific Basin Society in Honolulu. The volume present results from many of the important laboratories in the United States, Canada and Japan that are studying electron-transfer reactions. The main emphasis of the papers is the study of intramolecular electron-transfer reactions in solution. Initial and final chapters were added to present unifying themes.

The book opens with a short review by Bolton and Archer of the conventional wisdom (Marcus-Hush theory) for electron-transfer reactions. The following three articles explore various ramifications of our current understanding and how experiments compare with these predictions. Most of the remaining thirteen papers present experimental results for electron transfer

between linked redox centers. The diversity of these studies is illustrated by the types of redox centers and bridging material used. The bridges considered are natural proteins (which normally contain one or more redox centers), synthetic 'micro' proteins and saturated or unsaturated organic spacers. Only one article (by Zhang et al.) explores the rapidly growing area of charge-transfer solvent dynamics. This book gives a good overview of the excitement and activity in modern electron-transfer research. The literature is cited up through 1989 with references to each author's more recent work.

The only problem with the current book is the cost (\$90) and time lapse (2 years) associated with the publication of a symposium proceedings. Scientists would be better served by a medium of publication for symposia that allows both for rapid publication and low cost. However, even with this reservation, the book contains many articles that researchers interested in electron-transfer reactions will want to consult.

Bruce Brunschwig Chemistry Department Brookhaven National Laboratory Upton, NY 11973, USA