PHOTOCHEMISTRY AND PHOTOPHYSICS OF METAL COMPLEXES: APPLICATIONS TO SOLAR ENERGY CONVERSION

Preface

The photochemical and photophysical properties of transition metal complexes represent a research area currently receiving major attention from a number of laboratories around the world. Much of this interest stems from fundamental curiosity regarding the reactivities of molecules but another impetus for this activity is the view that metal complexes are logical mediators in the conversion of solar radiation into storable chemical potential energy. Strategies for doing this take many forms, ranging from the storage of energy by photoisomerization of organic molecules to highly strained isomers to the photochemical splitting of water to dihydrogen plus dioxygen. The papers published in this volume of Coordination Chemistry Reviews were presented as part of a Symposium of the 1984 International Chemical Congress of the Pacific Basin Societies which was held in Honolulu, Hawaii in December, 1984. The purpose of the symposium was to draw together a group of chemists, largely from the Pacific Basin countries, to discuss their mutual interests in the principles and applications of metal complex photochemistry. The chapters included in this volume comprise most of the invited lectures presented and are organized in the order of presentation.

The symposium was sponsored financially by the Inorganic Division of the American Chemical Society and by the ACS Petroleum Research Fund. Some financial support was also provided by Spectra Physics Corporation, by Lambda Physik Corporation and by E G & G Instruments for which the Organizing Committee and participants are grateful.

Peter C. Ford Santa Barbara, CA