Stereochemistry of organometallic and inorganic compounds, Vol. 5 *Chains, Clusters, Inclusion Compounds, Paramagnetic Labels, and Organic Rings,* edited by P. Zanello, Elsevier, Amsterdam, 1994, 661 pp., Dfl.535.00. ISBN 0-444-81581-3.

This is the conclusion of a series initiated by Ivan Bernal and taken over by the current editor. It contains six chapters.

The first chapter, by Averbuch-Pouchot and Durif, deals with the "Crystal chemistry of cyclophosphates", and presents a wealth of structural and phase data for a far wider variety of cyclic phosphates than are commonly encountered in inorganic texts. Chapter 2, by the editor, deals with "Stereochemical aspects of the redox propensity of homometal carbonyl clusters" and contains a critical compendium of electrochemical data for a broad assortment of metal cluster systems. Both these chapters are very long and extensive.

The remaining chapters are rather smaller. Chapter 3, by Harada, deals with the "Preparation, properties, and stereochemical aspects of inclusion compounds of organometallic complexes with cyclodextrins". The cyclodextrins are naturally occurring macrocyclic molecules made up of at least six sugar residues, with a large central cavity into which many species may be included. This is a useful review of organometallic species which have been encapsulated by the cyclodextrins; a new field which is growing rapidly.

Chapter 4 deals with the "Metal–nitroxyl interactions as probes of stereochemistry" (Eaton and Eaton), showing how the nitroxyl spin labels, as monitored by electron spin resonance spectroscopy, can provide dynamic information about stereochemistry and comformation.

Chapter 5 on "Recent developments on stereocontrol via (η^6-arene)-chromium complexes", by Uemura, shows how the chromium tricarbonyl arene moiety can act as a useful stereochemical template with widespread application in organic syntheses, leading to stereoselective products.

Chapter 6 closes the volume with the "Stereochemistry of palladium catalyzed cyclization reactions" (Heumann) and illustrates the variety of palladium-catalyzed ring closure synthetic pathways.

The Editor's Desk