Biocoordination Chemistry: Coordination Equilibria in Biologically Active Systems, edited by Kalman Burger, Ellis Horwood Series in Inorganic Chemistry, 1990, 350 pp., $90.00. ISBN 13-179912-6.

This very readable volume covers a good selection of biochemically relevant equilibria involving ligation of biochemical molecules to simple metal ions as well as ligation of simple ligands to metalloproteins. Despite separate authors for each chapter, the style and quality is uniformly good throughout.

After an introduction to acid–base properties of bio-ligands (Bela Noszal), including macro and micro equilibria, chapters covering complexes of amino acids (Tamas Kiss), peptides (Imre Sovago), carbohydrates (Kalman Burger and Laslo Nagy), and nucleic acids/nucleosides (Harri Lonnberg) are presented. The chapter on thermodynamic and kinetic aspects of metalloproteins (Junzo Hirose and Yoshinori Kidani) draws from data for carboxypeptidase, carbonic anhydrase, superoxide dismutase, and transferrin to illustrate nicely the structure/function relationships in metalloproteins from a quantitative point of view.

Anyone interested in quantitative aspects of metals in biology will benefit from this text.

D.V. Stynes