

Book Review

Metal Ions in Biological Systems. Volume 16. Methods Involving Metal Ions and Complexes in Clinical Chemistry. Edited by Helmut Sigel (Institute of Inorganic Chemistry, University of Basel, Switzerland) Marcel Dekker, Inc., New York, N.Y. and Basel, Switzerland, 1983. 397 pp., bound, illustrated.

This book is Volume 16 of a series devoted to understanding the role of metal ions in biological processes and the relationship between the chemistry of metals and life.

This volume focuses on the role of metal ions and complexes in clinical chemistry, starting from a discussion on the nutritional and immunological aspects of trace elements including a critical review of therapeutic chelating agents. The subject of this volume is of basic importance to pharmacologists, clinical chemists, physiologists, and toxicologists, as well as to advanced students engaged in bioinorganic, inorganic, and coordination chemistry, biochemistry, molecular biology and enzymology. In chapter 4 a computer-directed chelate therapy of renal stone

disease for obtaining the optimal treatment is described. The following ten chapters examine methods for metals determination by a variety of techniques including neutron activation analysis. The book also examines some methods for qualitative identification and quantification of phosphates, cannabinoids, and sulfanilamides *via* reactions with metal ions, showing new developments in coordination chemistry. The volume concludes with an evaluation of the chemical aspects of the use of gallium, indium and technetium in nuclear medicine emphasizing the chemical and biochemical factors involved in these uses and, based on animal studies, the mechanism that may be involved in their biodistributions.

The main interest in this volume is the possibility it presents to stimulate more interdisciplinary research in the field and to suggest new models for understanding the role of metal ions in biological processes.

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