

## Book Review

EDITED BY ASTRID SIGEL and  
HELMUT SIGEL

**Metal ions in biological systems, Vol. 41, Metal ions and their complexes in medication**

CRC Press, 2004

price £ 106

ISBN 0824753518 (hardcover)

The 41st volume, *Metal Ions and their Complexes in Medication*, of the series *Metal Ions in Biological Systems*—the first volume of which appeared 30 years ago—contains 13 chapters written by well known specialists in the field. The interesting first chapter by David Williams *et al.* is devoted to speciation-dependent intake and uptake of essential elements. Magnesium and calcium in human therapy, zinc deficiency, iron chelators, the use of zinc in wound healing and vanadium compounds in treating diabetes are the topics of following chapters. Hans-Georg Classen, who wrote one of the chapters of Vol. 26 of this series, wrote the basic Chapter 2 on magnesium, and Lasse Larsson wrote Chapter 3, devoted to calcium. Ananada Prasad, who contributed to volume 14 of this series, is the author of Chapter 4, devoted to zinc, and David Williams is the author of the excellent Chapter 5, also devoted to the same metal. Chapter 6 is devoted to iron chelators and written

by Bob Crichton and Bobbie Ward, and Chris Orvig is one of the contributors to Chapter 7 on vanadium. Medical uses of copper, gold, lithium and bismuth are also reviewed respectively by Trevor Hambley, Luigi Messori, Nicholas Birch and Hongzhe Sun. The last two chapters of the book describe the use of metal complexes against tropical diseases and in nitrogen monoxide modulation, and are written by Roberto Sánchez-Delgado and Simon Fricker, respectively.

This important volume, edited like the former ones by Astrid and Helmut Sigel, can be considered as a book that every scientist working in this rapidly developing area will have to buy or at least consult to become aware of the potential of metallotherapeutic agents. Several previous books of this series have already been devoted to topics related to or developed in this volume:

Vol. 14: *Inorganic Drugs in Deficiency and Disease*

Vol. 15: *Zinc and its Role in Biology and Nutrition*

Vol. 17: *Calcium and its Role in Biology*

Vol. 23: *Nickel and its Role in Biology*

Vol. 24: *Aluminium and its Role in Biology*

Vol. 26: *Compendium on Magnesium and its Role in Biology, Nutrition and Physiology*

Vol. 37: *Manganese and its Role in Biological Processes*

Vol. 31: *Vanadium and its Role in Life*

Vol. 39: *Molybdenum and Tungsten: Their Roles in Biological Processes*

The reason why boron, silicon, germanium, titanium, tin, rhodium, palladium, rhenium and platinum do not appear in Vol. 41 is probably due to the fact that Vol. 42 of this series is devoted to *Metal Complexes in Tumour Diagnosis and as Anticancer Agents*, that can probably be considered as an updated version of Vol. 11 of this series, which is out of print now, and had the same title.

*Metal Ions and their Complexes in Medication* focuses on the rapidly developing research area of metal ions and their complexes in medicine, and offers an authoritative account of this fascinating subject. This volume is easy to read and covers perfectly the different topics developed therein. The basic concepts needed to understand what is presented are clearly defined so that this volume can also be read by non-specialists in the field.

**Marcel Gielen**

HNMR Unit,

Faculty of Applied Chemistry,  
Vrije Universiteit Brussel, Brussels,  
Belgium

DOI:10.1002/aoc.897