

Book reviews

Bioinorganic Chemistry of Copper

K.D. Karlin & Z. Tyeklar (eds)
Chapman & Hall, New York, London
1993, £65.00
ISBN 0-412-03631-2(HB)

Summarizes the results of a symposium held at John Hopkins University, Baltimore, MD, USA in 1992. This book is highly recommended to the readers to BioMetals. Thirty-nine contributions representing a collection of detailed abstracts, written by experts in the field, dealing with major developments in the inorganic biochemistry of copper.

Brief description of content:

- A competent introduction on the coordination chemistry of copper in both copper proteins and mimetic compounds
- Specificity of electron transport in type I copper binding centres
- Copper dependent regulatory aspects of gene expression
- Structural and functional aspects of dicopper-centre proteins
- Copper mediated oxidation-reduction pathways
- Dioxygen-binding and oxygenation reactions
- Nitrogen oxide chemistry and biochemistry
- Copper-dependent 4 electron transport on dioxygen (copper oxidases)

In summary, well-written and most helpful book for both newcomers and experts to the Cu-biochemistry field.

Manganese in Health and Disease

D.J. Limis-Tavantzis (ed)
CRC Press Inc, Boca Raton
1994, US\$135.00
ISBN 0-8493-7841-9

This book is one of a series on Modern Nutrition (Series editors: Ira Wolinsky and James F. Hickson, Jr.) and contains the following chapters:

- Biochemical and nutritional role of manganese: an overview
- Bioavailability of manganese
- Models to study manganese
- Manganese, lipid metabolism, and atherosclerosis
- Manganese metabolism and diabetes
- Manganese and bone metabolism
- Role of manganese in congenital malformations
- Manganese and epilepsy
- The role of manganese in wound healing
- Manganese and iron metabolism
- Manganese nutrition in infants
- Manganese toxicity in humans and experimental animals

The chapters survey the existing literature and critically discuss the results and hypotheses in manganese nutrition. This book will be of particular interest to those concerned with the medical aspects of nutrition, and biochemists involved in basic metabolic research.

Metal Compounds in Cancer Therapy

S. P. Fricker (ed)
Chapman & Hall, New York, London
1994, £55.00
ISBN 0-412-54280-3

This book is the first volume of the "Metals in Health and Disease Series" and contains the following articles:

- Introductory article of S. P. Fricker
- Platinum anticancer drugs
- Gold
- Ruthenium compounds in cancer therapy
- Rhodium, iridium and palladium compounds as experimental anticancer drugs
- Organometallic titanium, vanadium, niobium, molybdenum and rhenium complexes - early transition metal antitumor drugs
- Antitumor activity of tin compounds
- Gallium compounds in cancer therapy
- Bleomycin and metal interactions
- The *in vivo* use of metallic radioisotopes in cancer detection and imaging

An interesting volume written by a variety of experts ranging from basic mechanistic aspects of metal based drugs to their application in clinical studies. The perspective of this book is different from many previous ones in this area. As such it is highly recommended reading for chemists, biochemists, pharmacologists, toxicologists and clinicians