Journal of Organometallic Chemistry, 255 (1983) C18 Elsevier Sequoia S.A., Lausanne — Printed in The Netherlands

## **Book review**

Metal Ions in Biological Systems, Volume 15: Zinc and its Role in Biology and Nutrition; edited by Helmut Sigel. Marcel Dekker, New York, 1983, ISBN: 0-8247-1750-3, xxii + 493 pages, Sw.Fr. 198.

This book is a multi-author compilation of ten chapters. The last three deal with absorption and excretion of zinc, and with the effects of zinc deficiency, in animals and man. The other seven are concerned in one way or another with the interaction between zinc and proteins. Zinc is a component of many enzymes: sometimes it assists the catalysis directly, sometimes its role is structural or regulatory. It is not a particularly easy metal to study in proteins by some of the spectroscopic methods available, and information has often been sought by replacing it with more "visible" divalent cations. There is a whole chapter on this, another on synthetic models designed to mimic the binding of zinc in proteins, and another on the curious metallothioneins, small proteins rich in cysteine that seem to function as storehouses for zinc by forming thiolate clusters.

On the whole, the book documents what little is known for certain and indicates possible avenues of progress. The reader will find many more questions than answers, but will get a good idea of the state of the art up to 1981-2. The price is outrageous for a sparsely printed book of 500 pages; presumably the publishers expect to sell few copies.

School of Chemistry and Molecular Sciences, University of Sussex, Brighton BN1 9QJ (Great Britain) J.W. CORNFORTH