

BOOK REVIEW

Specialist Periodical Reports - Inorganic Biochemistry - Volume 1, Published by The Chemical Society, London, 1979; ISBN 0851865706; 442 pp and 2621 references.

I feel that the first volume of the specialist periodical reports devoted to inorganic biochemistry is an achievement for all researchers working in the field of bioinorganic chemistry, and we are thankful to the senior editor H. A. O. Hill and to all the contributors to the work.

The book contains a chapter dedicated to 'Inorganic Analogues of Biological Molecules' written by C. A. McAuliffe which reviews all the simple inorganic compounds which might have some connections with biological problems as well as models of some metalloproteins.

The models of some enzymes from both the structural and kinetic points of view are carefully reviewed by B. T. Golding and G. J. Leigh. Then the problem is brought up of how non-transition elements (M. N. Hughes) and transition elements (P. M. Harrison) are transported and stored in living cells, pointing out the role of membrane controlled mechanisms.

The description of metalloproteins follows in four chapters: Oxygen Transport Proteins (M. Brunori, B. Giardina and J. V. Bannister), Electron Transport Proteins (C. Greenwood and D. Barber), Oxydases and Reductases (B. E. Smith and P. F. Knowles) and Metalloenzymes (A. Galdes and H. A. O. Hill). The final chapter is dedicated to Inorganic Elements in Biology and Medicine with particular attention to the pharmacology of the metal ions.

The difficulty in presenting such subjects in an appropriate language for readers with both biochemical and physical chemical backgrounds is generally overcome rather well. Probably in accord with the aim of the editor, the first volume is largely biochemically oriented in order to set the general ideas of the field. Deeper insights into the spectroscopic and physical chemical aspects of the subjects here treated are now needed in the future volumes. However, the bases of this relatively new interdisciplinary area are firmly settled.

Beyond any personal expectation, this volume is a must for any researcher in the field of inorganic chemistry who has interests in biochemical problems as well as those working in the field of biochemistry and having interests in metal ions.

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