

Book review

The Coordination Chemistry of Metalloenzymes; edited by I. Bertini, R.S. Drago, and C. Luchinat, pp. 391 + xix, ISBN 90-277-1530-0, D. Reidel Publishing Company, Dordrecht, Holland, 1983, D.fl. 130; US \$ 56.50.

This is an excellent book, though its appearance is slightly misleading. It does not deal with metalloenzymes in general, but represents the proceedings of a NATO Advanced Study Institute held at San Miniato, Pisa, Italy, in 1982. This covered the chemistry of zinc enzymes, principally carboxypeptidase and alcohol dehydrogenase, and certain oxidative enzymes containing copper and /or iron, such as amine oxidases, laccase, and the cytochromes c and P-450.

For those with a smattering of background, the book will prove very useful. It is in no way a text book, but is a mixture of reviews with experimental papers, all by researchers prominent in their field. Thus one can glean specific information on the enzymes covered as well as an insight into the methods used to unravel enzyme structure and function. X-ray analyses, and model studies, and EPR, NMR, and Mössbauer spectroscopy are all discussed in a range of applications at various levels of sophistication. This can give the discerning and educated reader an insight into how bioinorganic chemists work and the kind of problems they tackle.

Organometallic content is minimal, being restricted to derivatives of cytochrome P-450 and its models which are connected in some way with hydroxylation reactions of materials such as alkanes. Nevertheless, and despite the multiplicity of authors, this is a valuable addition to the literature. The editors and organisers of the Institute are to be congratulated.

*AFRC Unit of Nitrogen Fixation,
University of Sussex,
Brighton BN1 9RQ (Great Britain)*

G.J. LEIGH