oxide dismutase contributing to the antioxidant properties of biological systems. In addition, oxidative enzymes contribute to the loss of colour, flavour and nutrients from foods through the generation of reactive species such as hydrogen peroxide or free radicals. It is therefore appropriate that this group of enzymes should be the subject of a book. The seven chapters cover peroxidases and catalases; superoxide dismutase; amine oxidases and amino acid oxidases; lactoperoxidase; lipoxygenases; polyphenol oxidases; and carbohydrate oxidases.

Although each chapter is only able to discuss a small part of the large body of literature on each of these enzymes, the authors have discussed the major aspects of the enzymes and their reactions. Much of the more recent literature concerned with enzyme structure and mechanism is included, and each chapter has an extensive list of references.

The editors have assembled a group of well-known and respected contributors. The chapter on amine oxidases and amino acid oxidases is one of the last publications of the late James Burt, who was a much respected figure in the area of biochemistry relevant to fish.

This book will make a useful addition to the library of research scientists interested in oxidative enzymes that cause changes in the pigments, flavour components and nutrients in biological systems.

M. H. Gordon

Studies in Natural Products: Volume 9, Structure and Chemistry. Edited by B. Atta-ur-Rahman. Elsevier Science Publishers, Amsterdam, 1992. xviii + 714 pp. ISBN 0-444-89165-X. Price US$ 220·50.

This is the ninth volume in the series created in 1988 to provide timely reviews of all aspects of Natural Products' chemistry. Several of the reviews were first presented as papers at the 4th Symposium on Natural Products Chemistry. Most of the previous volumes have concentrated on synthesis, but this one (like volume 2) is devoted mainly to structural studies.

As usual, Atta-ur-Rahman has assembled a distinguished team of contributors, and the articles by Carl Djerassi (on the structure and biosynthesis of cyclopropane-containing marine sterols), and by Ian Scott (on vitamin B_{12} biosynthesis) are particularly welcome. Other highlights include an account of strategies (mainly using nmr) for the identification of trace amounts of indole alkaloids (J. Schripsema and R. Verpoorte); a chapter describing a plethora of structures from *Fusarium* species, many of economic significance (J. W. Apsimon *et al.*); and a fascinating account about self-inhibitors of fungal spore germination, which includes extensive experimental details (T. Ueno *et al.*). Another chapter with excellent experimental information is supplied by J. McLaughlin *et al.* on methodology for the rapid bioassay of bioactive natural products. A timely review of vitamin D_3 chemistry is provided by R. Neidlein, who also discusses the synthesis of several novel analogues; and there is a substantial review of the products of the various lipoxygenases (G. Veldink and J. F. G. Vliegenthart).

Finally, there are numerous chapters detailing spectroscopic studies of enough esoteric compounds to keep the synthetic chemists occupied for some considerable time.

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