

Book Reviews

Food Biotechnology. Edited by R. D. King and P. S. J. Cheetham. Elsevier Applied Science, London, 1987. xii + 321 pp. £42.00. ISBN 1-85166-0291-1.

This is a wide ranging and diverse book which, out of seven articles, includes two from project engineering companies, four from research institutions or universities and one from a major manufacturing company. The book seeks to address aspects of biotechnology of relevance to the food processing industries. It is therefore necessary to review this book in the light of the great number of books and series which are invading the biotechnology market. As a biotechnology book there is little that is specialist or original which hasn't been published elsewhere in the form of review articles. What the book does attempt is to answer the question of what biotechnology has to offer to the industrialists, engineers or scientists in the food industry. In this aspect the book both justifies its existence and gives greatest cause for disappointment.

The specialist articles have been well chosen to emphasise the depth of knowledge available especially in the basic biosciences. Chapters on polysaccharides, detoxifying enzymes, organic acid formation, protein functionality and genetic engineering of crops are all relevant and useful in their own right. They do not, however, sit comfortably together. The two more general articles on bioreactors and protein recovery are disappointing. While they are thorough and well written they do leave the reader to deduce what is relevant to the food industry. For example the relevance of a section on the recovery of human blood plasma proteins to the food industry is not explained. However, all the chapters are well prepared with the provision of long lists of references for those needing further insight. Unfortunately it

would appear that the value of the referencing is somewhat reduced by the fact that for a book published in 1987 there are virtually no references to articles published in 1986 and only very few to articles from 1985.

With the eventual promise of more specialist articles in the food biotechnology area this book series will fill a useful gap in the literature available to food process engineers and scientists. It should ultimately provide an excellent reference source and as such is recommended to libraries but cannot be recommended for individual purchase. If special themes were to be established for each of the monographs, a welcome trend in many other book series, then the individual might be encouraged to purchase a part of the series.

M. Hoare

Corn: Chemistry and Technology. Edited by Stanley A. Watson and Paul E. Ramstad, American Society of Cereal Chemists, 1987. 605 pp. \$95.70. ISBN 0-913250-48-1.

This book, *Corn: Chemistry and Technology*, achieves the aim of its editors, S. A. Watson and P. E. Ramstad, to provide a comprehensive guide to all aspects of corn (*Zea mays* L.).

The presentation is excellent and the book has a superb photograph on the cover. The figures and tables are clear and informative, and the text is laid out well.

The book will be useful for a wide audience of students and scientists working in all areas of corn from research and development to marketing. The many uses to which all parts of the corn plant can be put are well covered, and also its structure and composition, breeding and genetics, harvesting, quality controls and the economics of its production, marketing and utilization. The carbohydrates, proteins and lipids of the kernel are described in detail, and the dry and wet milling processes are well-documented.

The reference list for each chapter is comprehensive and up-to-date and the index is good. Cross-referencing between the chapters is a very useful inclusion.

On the whole an interesting and informative book.

Deidre M. Thorn