332 Book reviews

The price precludes the personal purchaser, but the volume is recommended as an essential reference work to practising carbohydrate chemists and biochemists from academic and industrial laboratories.

John F. Kennedy Charles A. White

Biotechnology: A New Industrial Revolution. By S. Prentis, Orbis Publishing Limited, London, 2nd edition, 1985. 212 pp. ISBN 0 85613 914 9, Price: £12·00.

Biotechnology, the wonder of wonders of the applied sciences has captured the interest of people from almost all walks of life — industrialists, investors, economists, governments, scientists and technologists. What is it anyway, that it is thought to be the solution to all problems — economic, health energy, etc...?

This book introduces the science, explains its applications and describes present researches and their impact on our lives. It is very comprehensible, readable, enlightening and up-to-date, and anyone, even a non-technical person will find it a mine of information and at the same time an entertaining and enjoyable book.

The author introduces the science by first familiarising the reader with the basic chemical principles of life, particularly the structure and function of proteins and of the genetic material, DNA. Next, he explains how these materials can be manipulated to manufacture useful goods for mankind. This is followed by a discussion of the application of biotechnology in the field of medicine for prevention, diagnosis and cure of diseases; application in the field of agriculture for higher-yielding disease-resistant, nitrogen-fixing plants; application in the field of nutrition for production of nutrients, vitamins, amino-acids, single-cell proteins and sugar substitutes; production of energy sources — alcohol, methane and hydrogen gas; application in the chemical, mining and oil extraction industries — production of acetone, organic acids, alcohols, polymers, xanthan gums; with the microchip industry for the manufacture of biosensors and biochips for analytical processes; and for the prevention of pollution.

After convincing the reader of the very great promise in biotechnology as a solution to a lot of our present problems, the book ends with a note of warning — a chapter on its social, political and ethical implications — on the potential danger/disadvantages of this fascinating and powerful science.

Book reviews 333

This book is greatly recommended for reading by anyone who in one way or the other has something to do with biotechnology, from industrialist, economist, financier, politician, to researcher, scientist, technologist, academic or student — that is, everybody.

John F. Kennedy Vivian M. Cabalda

Food Technology International. Edited by A. Turner, Sterling Publications, London, 1987. 308 pp. Distributed free to senior personnel in the Food Industry. ISSN 0950 4435, Price: £20.00.

The application of science and technology to improving the understanding of food in all its aspects is rapidly becoming a major aspect of biotechnology. With the ever increasing use of additives, preservatives, stabilizers, etc. there is a great need to study the interactions between these components and other food components, and to understand the implications of these interactions. *Food Technology International* sets out in this first issue of a proposed annual volume to examine many of these important issues which affect today's food industry.

This volume, which is distributed free to senior development, manufacturing and production personnel in the food preparation, processing and packaging industry in Europe, contains 58 short articles of two to four pages each on a wide range of topics. The topics are divided into seven sections covering the following: Why food technology?; Food processes; Food products; Food ingredients; Quality assurance and control; Product safety and wholesomeness; and Packaging. The range of subjects is vast and includes developments in processing such important polymers as starch, proteins and lipids. Anyone involved in food technology will find at least one article of direct interest and a number of additional articles of passing interest.

Whilst this volume is aimed essentially at senior personnel in the food industry, the recommended readership is much wider. Everyone involved in the food industry from the laboratory to sales department will benefit from access to this book, whilst students and academics in food technology, biotechnology and analysis will find the book of more than passing interest. The index of advertisers alone is a valuable aid to the industry.

John F. Kennedy Charles A. White