

ing the present status of affinity chromatography as a tool in the study of biomolecules and developments being undertaken to use it on the preparative scale for the production of new biologically-active substances.

This book is a complete summary of the theory, principles and applications of affinity chromatography, particularly in the field of biochemistry. It is fully recommended for students, lecturers and researchers in chemistry, biochemistry, chromatography, biology and in other allied sciences, who want to have knowledge of, or added information on, this specific type of chromatography.

John F. Kennedy
Zenaida Rivera

Topics in Enzyme and Fermentation Biotechnology. Vol. 10. Edited by A. Wiseman. Ellis Horwood Ltd, Chichester, 1986. 218 pp. ISBN 0-85312-767-0. Price £32.55.

This book is the tenth volume of a successful series which was given its initial impetus by the *Handbook of Enzyme Biotechnology*, also edited by Alan Wiseman and published (first edition) by Ellis Horwood in 1975 (a fully revised second edition was published in 1985). The current volume contains six chapters and the cumulative index of volumes 6-9, with chapter 1 forming a general informative introduction to this volume.

Outlines of the production and use of immobilised living microbial cells in chapter 2 ensure that in the biotechnological era of the future, immobilised cells will play an increasingly important role. Chapter 3 presents a more specialised review on immobilised plant cell cultures and describes the advantages claimed for immobilised cells and the progress made towards exploiting such cells in biotechnological processes. This chapter, together with chapter 2, provides a valuable overview of a field of growing importance in biotechnology.

An interesting application of solid state fermentation and kinetic responses relating to the Koji process is discussed in chapter 4, and chapter 5 reviews in general terms the production of xanthan gum by fermentation techniques with economic considerations and fermentation parameters approaches. This chapter demonstrates the considerable increase in interest in biotechnological aspects of carbohydrate chemistry, with the industrial production of carbohydrate polymers and their utilisation as key ingredients in many processed foods is very important. For example, xanthan gum, a carbohydrate polymer, is produced industrially for food and non-food use.

A detailed description of the nature and application of covalent chromatography is given in chapter 6. This technique has a wide range of applications such as protein sequence analysis, reversible immobilisation of enzymes etc., and it is important in biochemistry and biotechnology, being discussed in this volume by the pioneers of this field.

Maintaining the tradition of the series, this volume gives valuable information on the field of biochemistry and biotechnology and it can be recommended to biochemists, biologists, biotechnologists and industrialists, and also to academic lecturers, students and other interested workers who will gain an insight into the overall potential of biotechnology, enzymes and biopolymers.

John F. Kennedy
Eduardo Melo