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Book Reviews

Enzyme Chemistry — Impact and Applications. Edited by C. J. Suckling, Chapman and Hall, London, 1990. 383 pp. Price: US$79.95. ISBN 0 412 34970 1.

Enzyme chemistry is a rapidly broadening and advancing field. Genetic engineering and other aspects of molecular biology have been brought into solve many problems in enzymology. The study of the structure of these biological catalysts has led to major innovations in the use of enzymes.

In industrial situations, the vast potential of genetically manipulated proteins or organisms in order to satisfy the requirements of chemical or food production is only just being realised.

The second edition of *Enzyme Chemistry* aims to take on board these new developments, whilst still keeping the main body of the original work. Suckling has managed to keep the overall feel of his first edition. The new items are indistinguishable from the older ones in style, if not in format of information.

The book covers all aspects of enzyme chemistry from 'enzymes in drug design' to 'the food industry', from more theoretical discussions of 'selectivity in synthesis' to 'the mechanisms of enzyme catalysis'. Chapters in the book may be written by several authors (although Suckling handles a lot of the writing himself), but there is no inconsistency as can so often happen with multi-authored volumes.

In conclusion, the first edition of Suckling's book was one of the essential enzyme chemistry reference volumes, and with this second edition he has confirmed its position at the front of the field. The book is an essential purchase for anyone involved in enzyme chemistry, and no

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scientific library would be complete without it. It is perfectly suited to those of advanced undergraduate level and beyond, although others will find it useful reading.

John F. Kennedy
David W. Taylor

High Performance Liquid Chromatography in Biotechnology. Edited by William S. Hancock, John Wiley & Sons Ltd, Chichester, 1990. x + 564 pp. Price: £74.35. ISBN 0 471 82584 0.

High performance liquid chromatography is far more important to the field of biotechnology than that of the previous chromatographic methods. It has become so important that it can, and has been, applied to most phases of biotechnological research and development, and is being used increasingly in product analysis.

High Performance Liquid Chromatography In Biotechnology gives a broad based overview of the applications of HPLC, covering the major techniques, e.g., reversed phase, ion exchange, affinity and hydrophobic interaction chromatogrpahy. There are also more detailed looks at specific examples of separations e.g., polypeptide sample purification of HPLC or antigenic proteins and vaccines. This balance between the theoretical and the in-depth application of HPLC provides an excellent summary of the uses, both actual and potential, which the biotechnology field has for HPLC. The book then describes in detail how HPLC is utilised for these tasks.

Although there are theoretical sections of the book, there is no escaping the fact that Hancock has designed his volume to be practically based. There is a great deal of technical data and information that will make the book far more suited to the scientist who is working with PLC and requires an analytical tool. It would be difficult to recommend this book to the scientist who requires only a theoretical introduction to the uses of HPLC in biotechnology. In fact, there is so much technical information in this book (most pages contain a table or spectra of some type) that many scientists new to the field could be confused or put off. For this reason the book will only have a valid place in the library of an HPLC chromatographer, or a scientist wishing to further improve his HPLC technique. Those wishing for an introduction to the field would