Methods of Protein and Nucleic Acid Research

Vol. 1: Electrophoresis, Isoelectric Focusing, Ultracentrifugation

Edited by Lev A. Osterman

Springer-Verlag; Berlin, Heidelberg, New York, Tokyo, 1984

x + 342 pages. DM 156.00, \$58.20

This volume is worth having for the excellent section on ultracentrifugation procedures. The author appears to have personal experience of most of the methods described here and the application of principle to practice is always evident. Criteria governing the choice of rotor and of media for use in gradients are clearly explained. The author is at pains to show how optimum conditions to effect particular fractionations can be calculated and this approach is emphasised by critical analysis of published procedures. This section should prove invaluable to Ph.D. students and others unfamiliar with recent developments in this area since it provides detailed information for the care, correct handling and setting up of rotors as well as the preparation of tubes and gradients in a clear logical fashion.

By contrast, the treatment of electrophoresis

and isoelectric focusing is patchy but again the essential principles of the methods are well explained and there is a lot of useful information to aid selection of the appropriate technique. This sections appears a little unbalanced because there is a wealth of material on electrophoretic procedures for nucleic acids whereas starch gel electrophoresis and staining procedures for detecting enzyme activity are barely mentioned. The short section in isotachophoresis would have been best omitted entirely.

The book could have been improved by careful proof reading and is occasionally marred by infelicitous usage which may have arisen in translation. Despite these reservations it is a useful addition to the literature of biochemical methods.

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Biochemistry of Plant Cell Walls

Society for Experimental Biology. Seminar Series: 28

Edited by C.T. Brett and J.R. Hillman

Cambridge University Press; Cambridge, 1985

312 pages. £19.50, \$34.50

This book is based on a symposium held at the University of Glasgow in July 1984. It consists of 12 review chapters, each by experts in their particular fields, covering aspects of plant cell-wall composition, structure, biosynthesis and growth.

The individual contributions are generally authoritative, well written and clearly illustrated. The inclusion of stimulating chapters presenting new ideas and approaches in relation to helicoidal structures in plant cell walls and immunological