

Book Review

An Introduction to Polysaccharide Biotechnology.
M.P. Tombs & S.E. Harding. London: Taylor & Francis,
1997, 183pp., £29.95, ISBN 0-7484-0516-X

The rapid growth in the breadth and scope of biotechnology has been marked, not only by the recent introduction of many university courses in which it forms the core content, but also by the incorporation of much of this material into traditional biological sciences courses. Similarly, the last few years have rapidly expanding interest in the biotechnological usefulness and diverse applicability of polysaccharides, particularly as these non-toxic materials can be produced in large quantities at low cost.

An Introduction to Polysaccharide Biotechnology gives a detailed account of the production and uses of polysaccharides, showing how current work may lead to major future developments based on genetic engineering and enzymic modification of raw plant materials. A comprehensive account of their characterisation shows that this is the only way of assessing the suitability of novel polysaccharides to their potential use.

A general overview of the structure and potential uses of the materials is followed by successive chapters on structural, storage, marine and bacterial/synthetic polysaccharides. Each of the chapters gives an account of their basic chemistry, and a review of their industrial uses and existing biotechnology-based processes. Consideration of biosynthetic pathways and opportunities for modification of molecular structures are related to the enhancement of their applications.

The book is highly recommended not only for students studying biochemistry, biotechnology, and other related disciplines, but also for anyone who wants a compact, but nevertheless comprehensive, account of polysaccharide biotechnology.

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