



## Book Review

### Biopolymers

Polysaccharides I—Polysaccharides from Prokaryotes, Vol. 5; E.J. Vandamme, S. De Baets, S.A. Steinbüchel (Eds.); Wiley-VCH Verlag GmbH, Weinheim, Germany, 2001, x + 532 pages, ISBN 3-527-30226-3 (£150.00)

Biopolymers occur in organisms as structural components of cells, tissues and whole organisms, and possess a wide range of different essential or beneficial functions. Polysaccharides are a distinct class of biopolymers that exhibit a variety of unique, and in most cases rather complex, chemical structures, different physiological functions and a wide range of applications. They are renewable resources which offer a wide variety of potentially useful products to man and exhibit diverse properties that are utilised directly or indirectly for various applications, and are interesting candidates for industry.

This volume deals specifically with polysaccharides from prokaryotes, covering both Eubacteria and Archaea, and attempts to view what is currently known about these fascinating bacterial (exo) polysaccharides, with respect to their discovery, occurrence among bacteria, chemical and physical properties, analysis, biosynthesis, molecular genetics, physiological role, fermentation and production, isolation, purification and applications. The most recently published scientific data has been collected in this

volume. Many new polysaccharides from bacteria and microorganism, such as glycogen, cellulose, glycolipids, curdlan, succinoglycans, alginates, poly-(1 → 4)-β-D-glucuronan, sphingan group, xanthan, dextran, alternan, levan, hyaluronan, murein, etc. are described with respect to their biological, chemical, physical, and material properties, production, recovery processes, synthesis, new products and applications. Contributions are provided by authors from several universities and institutes throughout the world.

This series will hopefully be helpful to many students, scientists, physicians, pharmaceutical engineers and other experts in a wide variety of different disciplines, in academia and in industry. It is suitable to support research and development and teaching. In compiling this volume, it has been the intention to provide the scientific and industrial communities with a comprehensive view of the current state of knowledge on polysaccharides of prokaryote.

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