

Chitin, Chitosan, Oligosaccharides and Their Derivatives

Biological Activities and Applications

Edited by Se-Kwon Kim

Biopolymers found in marine animals and plants offer tremendous, largely untapped pharmaceutical potential. Research shows that these biopolymers can be used to combat various infectious as well as inflammatory, oxidative, and carcinogenic factors. *Chitin, Chitosan, Oligosaccharides and Their Derivatives: Biological Activities and Applications* covers the key aspects of these therapeutically valuable biopolymers and their derivatives, namely, their properties, sources, production, and applications in food science and technology as well as biological, biomedical, industrial, and agricultural fields.

Written by 40 international contributors who are leading experts in the field of natural biomaterials, this book provides an overview of the sources and production of chitin and chitosan derivatives. It also covers their

- Physical and chemical aspects
- Structural modifications for biomedical applications
- Biological activities, in particular, antimicrobial, anti-inflammatory, antioxidant, antihypertensive, anticancer, and antidiabetic activities
- Biomedical applications, including their possible implications as drug, vaccine, and gene carriers
- Industrial and agricultural applications

With their wide range of applications, the world is looking to biopolymers to serve as the basis for functional food- and drug development. This book is an important resource for those leading this effort.



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