



## Biopolymers: Biomedical and Environmental Applications

Susheel Kalia, Luc Avérous

E-Book	ISBN: 978-1-118-16477-8	September 2011	<b>£154.99</b>
Hardcover	ISBN: 978-0-470-63923-8	October 2011	<b>£172.00</b>
O-Book	ISBN: 978-1-118-16479-2	September 2011	<b>Available on Wiley Online Library</b>

### DESCRIPTION

This handbook focuses on biopolymers for both environmental and biomedical applications. It shows recent advances in technology in all areas from chemical synthesis or biosynthesis to end use applications. These areas have not been covered in a single book before and they include biopolymers for chemical and biotechnological modifications, material structures, characterization, processing, properties, and applications.

After the introduction which summarizes the importance of biopolymer in the market, the book covers almost all the topics related to polysaccharides, biofibers, bioplastics, biocomposites, natural rubber, gums, bacterial and blood compatible polymers, and applications of biopolymers in various fields.

### ABOUT THE AUTHOR

**Susheel Kalia** is Assistant Professor in the Department of Chemistry, Bahra University (Shimla Hills), India. He received his PhD from Punjab Technical University Jalandhar, India. He has 33 research papers to his credit in international journals along with 45 publications in proceedings of national & international conferences as well as several book chapters. He is a life member of the Asian Polymer Association and Indian Cryogenics Council. He has edited the book, *Cellulose Fibers, Bio- and Nano- Polymer Composites* (Springer 2011). He is currently working in the field of polymer composites, cellulose nanofibers, hydrogels and cryogenics.

**Luc Avérous** is Director of the Laboratory of Engineering Polymers for Advanced Technologies at the University of Strasbourg, France. He obtained his PhD in science and polymer engineering from the School of Mines of Paris in 1995. For the last 15 years his major research projects have dealt with multiphase systems (blends, multilayers, biocomposites and nano-biocomposites) based on agro-resources (starch, lignins, chitosan, cellulose etc.) and biopolyesters (PLA, PHA, PCL etc.). He has been particularly involved in the study of the materials-process-properties chain. He has published more than 60 journal articles, 15 book chapters, has 2 patents to his name, and has co-edited 3 books. With his expertise in starch-based materials, and more generally in biopolymers, he is regularly invited to organise symposia and conferences.

---

 **SERIES**

Wiley-Scrivener

---

For additional product details, please visit <https://www.wiley.com/en-gb>