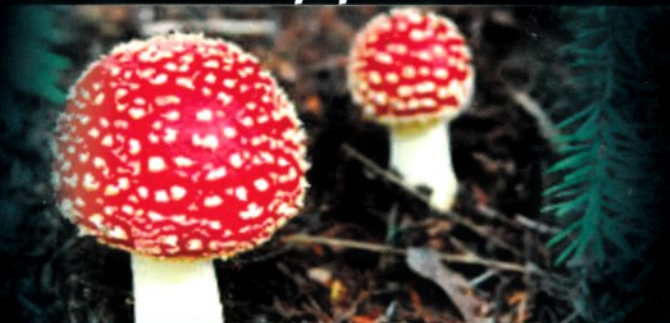


The background of the cover features a faint, light blue chemical structure of a chitin repeating unit, showing a six-membered ring with hydroxyl groups and an amino group.

CHITOSAN

*Derivatives, Composites
and Applications*



Edited by

**Shakeel Ahmed
Saiqa Ikram**



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Unique book presenting the latest advancements and applications of chitosan-based hydrogels and composite materials in biotechnology, environmental studies, food, medicine, water treatments, drug delivery.

This book delves deeply in to the preparation, characterization and multiple applications of chitin and chitosan. The 17 chapters written by leading experts is an excellent reference source and state-of-the-art review for researchers and scientists using chitosan or biopolymers in their respective areas.

This book is divided into following sections:

- Production and derivatives of chitosan
- Chitosan in the textile and food industries
- Chitosan in biomedical applications
- Chitosan in agriculture and water treatment

The book is practical and readers will be able to see descriptions of chitosan production methods as well as techniques that can be used to estimate and modify their physical and chemical properties. It provides a full description not only of the traditional and recent developments in the applications of chitosan in the fields of biotechnology, environmental studies, food, medicine, water treatments, drug delivery, but it includes all of the therapeutic usages as well.

Audience

The book will have a wide readership among academic researchers and industrial engineers and technologists working on chitosan-based solutions in chemistry, biotechnology, nanotechnology, pharmaceutical sciences, polymer science, food science, environmental engineering, agriculture and the biomedical field.

Shakeel Ahmed is a Research Fellow at Bio/Polymers Research Laboratory, Department of Chemistry, Jamia Millia Islamia, New Delhi. He obtained his PhD in the area of biopolymers and bionanocomposites. He has published several research publications in the area of green nanomaterials and biopolymers for various applications including biomedical, packaging, sensors, and water treatment. He is an associate member of Royal Society of Chemistry (RSC), UK and life member of Asian Polymer Association and Society of Materials Chemistry (India).

Saiqa Ikram is an Assistant Professor in Department of Chemistry, Jamia Millia Islamia, New Delhi. She was awarded her PhD from the Faculty of Technology, University of Delhi, India in the area of polymer technology. Her research area of interest is in green chemistry especially biopolymers, biocomposites and green synthesis of nanoparticles. Her work has been recognized at national level and sponsored in the form of Innovative Minor and Major Research Projects by the Ministry of Science & Technology, Government of India. She has authored more than 45 research articles and five book chapters.

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