

## Special Issue

# Chitosan-Based Polymers as Promising Materials for a Variety of Biomedical Applications

### Message from the Guest Editors

Chitosan has numerous health benefits, including the alleviation of intestinal inflammation, the enhancement of cell-mediated immune responses, the inhibition of edema, the alleviation of allergic inflammation and diet-induced obesity, as well as antioxidative and antitumor effects. Chitosan has several properties that make it a promising adjuvant for oral vaccine delivery. Additionally, chitosan has been shown to stimulate both systemic and mucosal immune responses. While chitosan has been widely used in various fields, there are still many basic questions that need to be explored in order to fully understand its properties and potential applications. One major challenge in understanding the pharmacokinetics (PK) of chitosan is its molecular size and the way it is administered. To overcome this challenge, modification techniques have to be developed to improve its solubility and activity. This Special Issue will include—but will not be limited to—the potential effects and mechanisms of chitosan and modified chitosan on inflammation, tumors, intestinal flora, fat development, obesity, and diabetes in addition to targeted drug therapy.

### Guest Editors

Prof. Dr. Xianghong Ju

Prof. Dr. Ravi Gooneratne

Prof. Dr. A. M. Abd El-Aty

### Deadline for manuscript submissions

closed (25 March 2024)



## Polymers

an Open Access Journal  
by MDPI

Impact Factor 4.9  
CiteScore 9.7  
Indexed in PubMed



[mdpi.com/si/164217](https://mdpi.com/si/164217)

*Polymers*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[polymers@mdpi.com](mailto:polymers@mdpi.com)

[mdpi.com/journal/  
polymers](https://mdpi.com/journal/polymers)





# Polymers

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 9.7  
Indexed in PubMed



[mdpi.com/journal/  
polymers](https://mdpi.com/journal/polymers)



## About the Journal

### Message from the Editor-in-Chief

Since its foundation in 2009, *Polymers* has developed into an internationally renowned, extremely successful open access journal. The editorial team and the editorial board dedicatedly combine open-access publishing and high-quality rigorous peer reviewing. The performance of the journal has proven this strategy to be well-suited and highly successful. This is reflected in the increasing impact factor of *Polymers*, the most recent one being 4.7.

I would like to invite you to contribute to the success of the journal by sending us your high quality research papers. We would be pleased to welcome you as one of our authors.

---

### Editor-in-Chief

Prof. Dr. Alexander Böker

Lehrstuhl für Polymermaterialien und Polymertechnologie, University of Potsdam, 14476 Potsdam-Golm, Germany

---

### Author Benefits

#### Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, PubMed, PMC, FSTA, CAPlus / SciFinder, Inspec, and other databases.

#### Journal Rank:

JCR - Q1 (Polymer Science) / CiteScore - Q1 (General Chemistry)