

## Special Issue

# Recent Advances in Natural Biopolymers

### Message from the Guest Editor

Natural biopolymers, such as proteins, polysaccharides, and cellulose, are gaining widespread attention due to their remarkable versatility, biodegradability, and potential to replace synthetic polymers in various applications. With increasing global emphasis on sustainability and environmental consciousness, these biomolecules offer compelling pathways for the development of functional, high-performance, and eco-friendly materials.

This Special Issue aims to highlight recent advances in the design, processing, modification, and application of natural biopolymers, with a focus on proteins (e.g., silk, collagen, zein, and casein), polysaccharides (e.g., chitosan, starch, alginate, and hyaluronic acid), and cellulose (including nanocellulose in its crystalline or fibrillated forms). These materials have found applications in biomedical devices, food packaging, environmental remediation, energy storage, 3D printing, and construction, among others.

---

### Guest Editor

Dr. Amin Babaei-Ghazvini

Department of Chemical and Biological Engineering, University of Saskatchewan, 57 Campus Drive, Saskatoon, SK S7N 5A9, Canada

---

### Deadline for manuscript submissions

closed (30 April 2026)



## Polymers

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 9.7  
Indexed in PubMed



[mdpi.com/si/236021](https://mdpi.com/si/236021)

*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 4.9.

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

Fraunhofer-Institut für Angewandte Polymerforschung, Lehrstuhl für Polymermaterialien und Polymertechnologie, Universität Potsdam, Geiselbergstraße 69, 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, CAPIus / SciFinder, Inspec, and other databases.

#### Journal Rank:

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