

## Special Issue

# Bio-Inspired Polymers: Synthesis, Properties and Applications

### Message from the Guest Editor

Bio-inspired polymers represent a new class of synthetic materials that draw inspiration from natural biological systems to mimic their structures, properties, and functions. These polymers combine the advantages of synthetic polymers, i.e., they are highly designable and easy to access, and the unique characteristics of biomaterials, such as self-assembly, responsiveness to environmental stimuli, specific molecular recognition, etc. By mimicking the structures and functions of natural biological materials, bio-inspired polymers can offer improved biocompatibility, bioactivity, and specificity for targeted applications. Bio-inspired polymers have been receiving more and more attention for their wide range of applications in biomedicine, materials science, and environmental technology. The Special Issue on “Bio-Inspired Polymers: Synthesis, Properties and Applications” invites original research articles, communications and reviews of a high quality. All topics related to bio-inspired polymers are welcome.

---

### Guest Editor

Prof. Dr. Li Guo

School of Materials Science and Engineering, Jiangsu University,  
Zhenjiang 212013, China

---

### Deadline for manuscript submissions

closed (15 September 2025)



## Polymers

---

an Open Access Journal  
by MDPI

---

Impact Factor 4.9  
CiteScore 9.7  
Indexed in PubMed



[mdpi.com/si/198877](https://mdpi.com/si/198877)

*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)