

Special Issue

Smart and Bioactive Polymers for Next-Generation Biomedical Applications

Message from the Guest Editor

This Special Issue focuses on the development and application of smart and bioactive polymeric and polymer-based materials and coatings in biomedical engineering. Advances in polymer science have enabled the design of materials with tailored biological interactions, stimuli-responsive behavior, and enhanced biocompatibility. Key topics in this issue will include polymers that respond to pH, temperature, or enzymes, biofunctional implant coatings, biodegradable tissue engineering scaffolds, and polymer-based drug delivery systems. Special attention will be given to translational research efforts that facilitate the clinical application of these materials, addressing challenges such as scalability, regulatory approval, and long-term biostability in medical environments.

Guest Editor

Prof. Dr. Sylwia Rodziewicz-Motowidło

Department of Biomedical Chemistry, Faculty of Chemistry, University of Gdańsk, Wita Stwosza 63, 80-308 Gdańsk, Poland

Deadline for manuscript submissions

25 December 2025



Polymers

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.7
Indexed in PubMed



mdpi.com/si/239134

Polymers
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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)