

Special Issue

High-Performance Polyurethanes

Message from the Guest Editor

Polyurethanes represent one of the most versatile classes of polymers, with tunable structures and properties that enable applications ranging from coatings, adhesives, and foams to biomedical devices and advanced composites. In recent years, the demand for high-performance polyurethanes has grown considerably due to the need for materials that combine durability, chemical resistance, mechanical robustness, and environmental adaptability and biocompatibility for use in biomedical devices and implants. This Special Issue aims to bring together recent advances and state-of-the-art developments in the synthesis, structural design, processing, and performance evaluation of high-performance polyurethanes. Of particular interest are approaches that expand the functionality of polyurethanes through novel chemistry, nanostructuring, hybrid materials, sustainable feedstocks, processing methods, and innovative applications, including biomedical devices and healthcare technologies. Contributions that explore structure–property relationships, bioactivity, biocompatibility, recyclability, durability, sustainability, advanced characterization, and modeling are also welcome.

Guest Editor

Dr. Muhammad Naveed

School of Packaging, Michigan State University, East Lansing, MI 48824, USA

Deadline for manuscript submissions

31 December 2026



Polymers

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.7
Indexed in PubMed



mdpi.com/si/255281

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 4.9.

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

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)