

## Special Issue

# Recycling and Reuse of Polymers

### Message from the Guest Editor

Amidst the escalating global challenge of plastic waste, there is an urgent need for innovative recycling and reuse strategies for polymers. This Special Issue of *Polymers* aims to gather cutting-edge research addressing the synthesis, characterization, mechanisms, methodologies, and applications of polymer recycling and reuse. It encompasses a broad spectrum of topics, from mechanical and chemical recycling processes to thermal degradation and energy recovery. The scope of this Special Issue spans novel techniques for enhancing material properties, such as compatibilizers for mixed polymer blends, and green solvents and enzymatic catalysts for sustainable chemical recycling. Moreover, it explores the transformation of recycled polymers into high-value products across various sectors, including automotive, energy, agriculture, and construction, fostering a circular economy. This Special Issue serves as a platform to promote groundbreaking advancements, cultivating collaboration between academia and industry towards achieving a zero-waste future for polymers.

### Guest Editor

Dr. SK Faisal Kabir

School of Sustainable Engineering and the Built Environment, Arizona State University, 660 S College Avenue, Tempe, AZ 85281, USA

### Deadline for manuscript submissions

closed (30 June 2025)



## Polymers

an Open Access Journal  
by MDPI

Impact Factor 4.9  
CiteScore 9.7  
Indexed in PubMed



[mdpi.com/si/222645](https://mdpi.com/si/222645)

*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)