



## Development and Application of Bio-Based Polymers

Guest Editors:

### Dr. Masoud Ghaani

Department of Civil, Structural & Environmental Engineering,  
School of Engineering, Trinity  
College Dublin, Dublin, Ireland

### Prof. Dr. Stefano Farris

DeFENS, Department of Food,  
Environmental and Nutritional  
Sciences, Università degli Studi di  
Milano, Milan, Italy

Deadline for manuscript  
submissions:

**25 August 2024**

### Message from the Guest Editors

As the world grapples with environmental challenges, bio-based polymers, derived from renewable sources, have emerged as a promising solution. This Special Issue will serve as a dynamic platform to disseminate cutting-edge research, innovative methodologies, and real-world case studies that delve into the synthesis, processing, recycling, characterization, and application of bio-based polymers. By presenting a comprehensive view of their potential, we hope to foster a deeper understanding of the opportunities and challenges surrounding these sustainable materials.

The scope of this Special Issue encompasses an array of fascinating topics, including, but not limited to, biodegradable polymers that break down harmlessly in the environment, biocomposites that combine biopolymers with natural fibers or fillers for enhanced properties, bioplastics with diverse applications in various industries, bio-based nanomaterials with exceptional properties, and their use in packaging, biomedical devices, agriculture, textiles, and many other sectors.





an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Alexander Böker

Lehrstuhl für Polymermaterialien  
und Polymertechnologie,  
University of Potsdam, 14476  
Potsdam-Golm, Germany

## 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 5.0.

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.

## 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)

## Contact Us

---

*Polymers* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
www.mdpi.com

mdpi.com/journal/polymers  
polymers@mdpi.com  
X@Polymers\_MDPI