



## Environment-Friendly Polymers and Composites: Synthesis, Processing and Applications

Guest Editor:

**Dr. Francesca Ferrari**

Department of Engineering for  
Innovation, University of Salento,  
73100 Lecce, Italy

Deadline for manuscript  
submissions:

**closed (25 June 2023)**

### Message from the Guest Editor

In recent years, growing environmental awareness has motivated researchers from both industry and academia to replace petroleum-derived polymers and additives with bioplastics by developing environmentally friendly thermoplastic polymers from bio-based and biodegradable raw materials. The use of petroleum-based raw materials for the synthesis of starting monomers is also a strong limit for thermoset matrices, which are often used for the production of composites. Recently, innovative feedstocks obtained from food scraps, algae biomass and industrial or municipal waste have been used for the production of bio-polymers, thus allowing the valorization of the waste. New procedures for the synthesis of precursors from natural renewable resources have also emerged which aim to decrease or remove the use of organic solvents, thus developing a truly green approach.

Hence, polymers obtained from renewable resources are becoming increasingly important as highly sustainable, eco-efficient, and biodegradable products.

This Special Issue aims to investigate the synthesis, processing and applications of bio-based polymers. Both original contributions and comprehensive reviews are welcome.





an Open Access Journal by MDPI

## 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

## 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.

## 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](http://www.mdpi.com)

[mdpi.com/journal/polymers](http://mdpi.com/journal/polymers)  
[polymers@mdpi.com](mailto:polymers@mdpi.com)  
[X@Polymers\\_MDPI](#)