

## Special Issue

# Biodegradable and Bio-Absorbable Polymers

### Message from the Guest Editors

This Special Issue aims to provide a comprehensive overview of recent developments, challenges, and future prospects in the design, synthesis, characterization, and applications of biodegradable and bioabsorbable polymers. Key themes and highlights:

- **Polymer Synthesis and Design:** novel synthetic/functionalization strategies and structure–property relationships for tailoring the properties of biodegradable and bioabsorbable polymers.
- **Degradation Mechanisms and Kinetics:** the degradation mechanisms and kinetics of biodegradable polymers under various environmental conditions, shedding light on their stability, degradation rates, and byproducts.
- **Biomedical Applications:** the utilization of biodegradable and bioabsorbable polymers in biomedical applications.
- **Environmental Impacts and Sustainability:** examine the environmental implications of biodegradable polymers.
- **Regulatory Considerations and Commercialization:** regulatory frameworks, standards, and guidelines governing the use of biodegradable polymers, as well as challenges and opportunities for their commercialization and industrial-scale production.

### Guest Editors

Dr. Ruairí P. Brannigan

School of Chemical Sciences, Dublin City University, Collins Avenue, Whitehall, Dublin 9, Ireland

Dr. James A. Wilson

School of Infrastructure and Sustainable Engineering, Aston Polymer Research Group, Aston University, Birmingham B4 7ET, UK

### Deadline for manuscript submissions

closed (30 September 2024)



## Polymers

an Open Access Journal  
by MDPI

Impact Factor 4.9  
CiteScore 9.7  
Indexed in PubMed



[mdpi.com/si/200190](https://mdpi.com/si/200190)

*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)