

Special Issue

Advances in Biodegradation of Plastics

Message from the Guest Editors

The low rates of recycling have made plastic pollution one of the biggest waste problems faced by today's society. In fact, relevant fractions of plastic cannot be (economically) recycled with conventional technologies, and new solutions are urgently needed. In addition to mechanical and chemical recycling, new studies are now investigating biochemical recycling routes, mainly through enzyme technology and protein engineering. These technologies might represent a much-needed cornerstone for a more circular use of plastic and have the potential to complement the already existing technologies, by targeting the currently non-recycled fractions. However, the hydrophobicity and high crystallinity of plastics are still of major concern, often leading to slow kinetics and incomplete degradation, thus requiring further research and process optimization. Considering that biotechnological degradation of plastics is still at a very early stage, these results are very promising and stimulate further research and development.

Guest Editors

Dr. Cristiano Varrone

Department of Chemistry and Bioscience, Aalborg University, Fredrik Bajers Vej 7H, 9220 Aalborg, Denmark

Dr. Alessandro Pellis

Department for Agrobiotechnology, IFA-Tulln, Institute for Environmental Biotechnology, University of Natural Resources and Life Sciences, Vienna, Konrad Lorenz Strasse 20, A-3430 Tulln an der Donau, Austria

Deadline for manuscript submissions

closed (10 March 2023)



Polymers

an Open Access Journal
by MDPI

Impact Factor 4.9
CiteScore 9.7
Indexed in PubMed



mdpi.com/si/82278

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

Fraunhofer-Institut für Angewandte Polymerforschung, Lehrstuhl für Polymermaterialien und Polymertechnologie, Universität Potsdam, Geiselbergstraße 69, 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, CAPIus / SciFinder, Inspec, and other databases.

Journal Rank:

JCR - Q1 (Polymer Science) / CiteScore - Q1 (General Chemistry)