Special Issue

Recent Developments in Thermal and Catalytic Recycling of Plastic Waste

Message from the Guest Editors

Contemporary methods of thermo-chemical recycling plastic waste, such as pyrolysis, lead to the production of a series of secondary valuable products. The use of suitable catalysts is necessary for the synthesis of targeted products, such as hydrocarbons in common liquid fuels, or specific phenols. Furthermore, it is helpful to have a clear picture of the products obtained after the pyrolysis of real plastic waste, rather than model polymers/blends, since the existence of several additives in small quantities often leads to the formation of potentially harmful compounds. Is a pre-treatment step for plastic waste necessary before thermo-chemical recycling? Do contaminants affect the quality of the final product, i.e., pyrolytic oil? If so, to what extent, and what are the possibilities of its further usage? What are the possibilities of mixing pyrolytic oil and commercial transport fuels? These are just some of the issues that are of particular interest in the further commercialization of plastic waste pyrolysis technologies.

Guest Editors

Dr. Stefano Vecchio Ciprioti

Prof. Dr. Dimitris S. Achilias

Prof. Dr. Saša Papuga

Deadline for manuscript submissions

closed (30 August 2024)

Polymers

an Open Access Journal by MDPI

Impact Factor 4.9
CiteScore 9.7
Indexed in PubMed

mdpi.com/si/155346

Polymers
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
polymers@mdpi.com

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

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)

MDPI