Special Issue

Dynamic Covalent Polymers: Synthesis, Characterization, and Applications

Message from the Guest Editor

Dynamic covalent bonds are ubiquitous in nature, and they are continuously being utilized in biotic settings to provide a wide range of functions, such as protein folding by reversible disulfide bonds and dynamic imine-based human vision. In the last decade, the application of dynamic covalent chemistry in the fields of polymeric materials and macrocyclic molecules has become the topic of an increasing number of studies. This is attributable to the fact that polymers containing dynamic functions possess a structure that affords recyclability, reprocessability, and peculiar self-healing properties inconceivable in traditional polymer networks. This Special Issue covers developments in the synthesis, characterization, and applications of dynamic covalent macrocycles and polymers.

Guest Editor

Prof. Dr. Toshihiko Matsumoto

Department of Industrial Chemistry, Graduate School of Engineering, Tokyo Polytechnic University, Atsugi, Kanagawa 243-0297, Japan

Deadline for manuscript submissions

closed (15 March 2024)



Polymers

an Open Access Journal by MDPI

Impact Factor 4.9
CiteScore 9.7
Indexed in PubMed



mdpi.com/si/161945

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



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

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)

