







an Open Access Journal by MDPI

Advancing Polymer Science: Molecular Dynamics Simulations and Sustainable Recycling Innovations

Guest Editors:

Prof. Dr. Shigeru Yao

Department of Chemical Engineering, Faculty of Engineering, Fukuoka University, Fukuoka, Japan

Dr. Mohammed Althaf Hussain

Central Research Institute, Fukuoka University, Fukuoka 814-0180, Japan

Deadline for manuscript submissions:

15 June 2025

Message from the Guest Editors

The sustainable recycling of polymers has become urgent. Molecular dynamics (MD) simulations are indispensable in predicting polymer behavior and can facilitate the design of environmentally friendly materials and optimize recycling processes. MD simulations have been utilized in addressing several contemporary issues in polymer sciences and have assisted in justifying the hypothesis of experimentation. The articles included in this issue will highlight the crucial role of molecular dynamics simulations in advancing sustainable polymer recycling practices. This Special Issue focuses on the intersection of polymer science, molecular dynamics simulations, and sustainable recycling methods. These reviews emphasize the potential of MD simulations to drive innovation and propel the polymer industry toward a more sustainable future.













an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Alexander Böker

Lehrstuhl für Polymermaterialien und Polymertechnologie, University of Potsdam, 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 4.7.

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.

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