Special Issue

Coarse-Grained Models for Polymers

Message from the Guest Editors

To cope with the large spectrum of characteristic length and time scales characterizing structure and dynamics in polymers, an approach that is often invoked is coarsegraining. In coarse-graining, collections of atoms are lumped into a new type of entities, referred to as superatoms or particles or beads or even blobs (implying a cruder representation). Coarse-graining is accompanied by a significant reduction in the number of degrees of freedom, and can be realized by a variety of schemes for mapping atoms or repeat units to larger groups, depending on the properties of interest. Recognizing the importance of coarse-graining in polymer science, this Special Issue of Polymers invites contributions highlighting several recent developments and applications of the method in addressing a variety of systems: entangled polymers, polymers with nonlinear architectures, polymer blends and copolymers. semiconducting conjugated polymers, polymer networks, polymer hydrogels, polymer nanocomposites, ring polymers, polymers for biological or medical applications, and many others.

Guest Editors

Prof. Dr. Vlasis Mavrantzas

- 1. Department of Chemical Engineering, University of Patras & FORTH-ICE/HT, GR 26504 Patras, Greece
- 2. Particle Technology Laboratory, Department of Mechanical and Process Engineering, ETH-Z, CH-8093 Zürich, Switzerland

Prof. Dr. Doros Theodorou

School of Chemical Engineering, National Technical University of Athens (NTUA), GR-15780 Athens, Greece

Deadline for manuscript submissions

closed (30 November 2022)



Polymers

an Open Access Journal by MDPI

Impact Factor 4.9
CiteScore 9.7
Indexed in PubMed



mdpi.com/si/85502

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)

