

Special Issue

Mechanics of Polymeric Structures across Scales

Message from the Guest Editors

Ubiquitous natural and synthetic polymers play an important role in both daily life and industrial manufacturing. Due to the unique long chain conformation, polymers display various structures, such as chains, assemblies, fibers, films and bulk materials, ranging from the nanometer scale to meter scale.

Compared to small molecules, the polymeric structures produce special mechanical properties, which are strongly length scale-dependent. The key topic of the current Special Issue is the mechanics of polymer-based structures and materials across all length scales. The main focus is on the biological, physical and chemical properties. These include but are not limited to the elastic and rheological behaviors of the polymeric structure; the adhesive and tribological behaviors at the polymeric or polymer-coated surface and interface; the relationship between functionality and mechanics in relevant applications. Papers presenting theoretical models, simulations and experimental results at any scale are all welcomed.

Guest Editors

Dr. Wanhao Cai

Dr. Chen Xiao

Dr. Peichuang Li

Dr. Yuancong Zhao

Deadline for manuscript submissions

closed (25 November 2023)



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

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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

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