

Special Issue

Advances in Modeling and Simulations of Polymers

Message from the Guest Editors

In recent years, the rapid design, development and deployment of components made of polymers have become essential because of their excellent structural, thermal and electrical properties. Tailoring polymers for specific applications is desirable. As these materials become more complex and critical to technological advancements, accurate modeling and simulation play a vital role in optimizing performance, reducing material waste, and accelerating the design process. This special issue focuses on the latest breakthroughs in computational techniques used to model and simulate the behavior of polymeric materials across multiple scales, from nanoscale to macroscopic performance. Special attention will be paid, among others, to the following topics:

- Molecular dynamics simulations of high-performance polymers;
- Applications of quantum simulations for modeling polymers;
- Multi-scale analysis of polymer matrix composites;
- Computational process modeling of polymers and/or their composites;
- Integrated modeling and experimental analysis of polymers and/or their composites;
- Reviews introducing the latest advances in modeling and simulations of polymer.

Guest Editors

Dr. Sagar Umesh Patil

Mechanical and Aerospace Engineering Department, Michigan Technological University, 1400 Townsend, Houghton, MI 49931, USA

Dr. Sagar Shah

Civil Engineering and Engineering Mechanics, Columbia University, 116th and Broadway, New York, NY 10027, USA

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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 4.9.

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

Fraunhofer-Institut für Angewandte Polymerforschung, Lehrstuhl für
Polymermaterialien und Polymertechnologie, Universität Potsdam,
Geiselbergstraße 69, 14476 Potsdam-Golm, Germany

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