

Special Issue

Mechanical Behavior of Polymers

Message from the Guest Editor

This Special Issue on the mechanical behavior of solid polymers will contain original research and review papers on key topics, including:

- The physics that underlies mechanical behavior
- Constitutive equations: nonlinearity, time-dependence and viscoplasticity
- Fracture phenomena and modelling
- Novel experimental methods, for both mechanical and structural investigations
- Molecular orientation, including biaxial states and shape memory polymers
- Application of numerical techniques, including the Finite Element Method
- Application areas with structural relevance

We believe that a Special Issue that addresses these interlocking areas of interest will be timely. Recent advances in the understanding of the physics of both amorphous and semicrystalline polymers can and do govern the development of constitutive models. The implementation of such models to practical applications becomes increasingly feasible with advances in computing hardware and software. Further, experimental techniques, such as image capture and analysis, continue to become cheaper and more accessible.

Guest Editor

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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 4.7.

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

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