

## Special Issue

# Modeling and Simulation of Polymer Composites

### Message from the Guest Editors

Polymer composites are multicomponent materials in which the major component (“matrix”) is a polymer and one or more additional components (“fillers”) are used to modify the matrix properties. Today, polymer composites (including nanocomposites, which have sub-100 nm particles as fillers) are widely used in many industries (transportation, gas separations, building and construction, packaging, etc.). Modeling, theory, and simulation are critical to the formulation design of polymer composites. For this Special Issue, we would like to invite contributions on various aspects of polymer composite modeling, from atomistic to mesoscale applications to continuum simulations, as well as AI/ML and other data-driven approaches. We are looking for papers describing the prediction of specific properties (modulus, strength, glass-transition temperature and local mobility, thermal and electrical conductivity, gas permeability and selectivity, adhesion, friction, viscosity, filler dispersion, etc.) as well as material designs for specific applications (adhesives, tires, packaging films, gas separation membranes, etc.)

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### Guest Editors

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### Deadline for manuscript submissions

closed (31 March 2024)



## Polymers

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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.

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### Editor-in-Chief

Prof. Dr. Alexander Böker

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