

Special Issue

Developments in Polymer Processing and Rheology

Message from the Guest Editor

Rheology is the science of mechanics to understanding the interrelationships between stresses, strains, and their rates. It is an important tool to understand and instruct polymer processing. It is also an important tool to relate the construction of polymers and their properties. For polymers in the form of long macromolecules, the flexibility of polymer chains provides novel features in rheology, interconnected with polymer physics: configurations and conformations of macromolecules, long relaxation times and their spectra, high elastic deformations, memory effects, and so on. A lot of constitutive rheological equations have been developed, which allow for the prediction of basic rheological behavior of polymers. However, with the appearance of novel polymers such as the macromolecules of complex shapes, chemical and physical blends as well as polymer composites and nanocomposites have led to the development of new rheological approaches and new theories to describe their flowing behavior. Thus, some novel special rheology behavior has been found in polymer science. Both the fundamentals and applications concerning polymer processing will be considered in this Special Issue.

Guest Editor

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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

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