Special Issue

Extensional Rheology and Processing of Polymeric Materials

Message from the Guest Editor

Processing operations are essentially governed by rheological properties. While shear rheology has widely been used for a better understanding and the modeling of processes, extensional properties of polymer melts are very sparsely discussed in these fields. This Special Issue intends to compile and assess the role of elongational flow in processing operations, such as fiber spinning, film blowing, film extrusion, blow molding, thermoforming, and foaming. Experimental results are welcome, as well as quantitative descriptions making use of models and finite element methods. To attain a broadly-based understanding, different experimental methods should be compared and results on the time and stress dependences of elongational flow should be discussed with respect to the conditions of the various processes. Fundamental experiments with respect to the influence of the molecular structure on the extensional behavior and, in particular, to the role of long-chain branches are seen as a base for a better understanding of the processing performance of various materials.

Guest Editor

Prof. Dr. Helmut Münstedt

Department of Materials Science and Engineering, Institute of Polymer Materials, Friedrich-Alexander-University Erlangen-Nürnberg, Martensstr. 7, D-91058 Erlangen, Germany

Deadline for manuscript submissions

closed (30 June 2020)

Polymers

an Open Access Journal by MDPI

Impact Factor 4.9
CiteScore 9.7
Indexed in PubMed

mdpi.com/si/33201

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

mdpi.com/journal/polymers

Polymers

an Open Access Journal by MDPI

Impact Factor 4.9
CiteScore 9.7
Indexed in PubMed

mdpi.com/journal/polymers

MDPI

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
Lehrstuhl für Polymermaterialien und Polymertechnologie, University of Potsdam, 14476 Potsdam-Golm, Germany

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, PubMed, PMC, FSTA, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank:

JCR - Q1 (Polymer Science) / CiteScore - Q1 (General Chemistry)