

Special Issue

Structure-Property Relationships in Polymer Fibers

Message from the Guest Editor

Melt spinning is nowadays the most economic and preferred industrial method to manufacture polymeric fibers in the textile industry. Being able to tailor physical and chemical fiber properties is essential to meet the high demands of certain applications in e.g. biomedicine, filtration or architectural textiles. Mechanical properties of melt-spun fibers are influenced by spinning, drawing or annealing procedures. Stress, temperature and specific additives strongly affect the structure and thus also the mechanical performance of the polymer fibers. This Special Issue collects contributions that emphasize structure-property relationships in e.g. melt-spun, electrospun or natural polymer fibers. Of particular interest are structural investigations of polymer fibers with Wide- and Small-Angle X-ray Scattering (WAXS/SAXS) or other techniques such as Fourier Transform Infrared spectroscopy (FTIR) or Raman spectroscopy, that focus on molecular orientation, changes to crystalline and amorphous phases as well as mesophases. In general, experimental studies that focus on the interplay between structural and physical or chemical properties of polymer fibers are very welcome.

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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