



Biomass-Derived Polymers

Guest Editors:

Prof. Dr. Barbara Gawdzik

Department of Polymer
Chemistry, Institute of Chemical
Sciences, Faculty of Chemistry,
Maria Curie-Skłodowska
University, 20-031 Lublin, Poland

Dr. Olena Sevastyanova

Department of Fiber and Polymer
Technology, KTH Royal Institute
of Technology, Stockholm,
Sweden

Deadline for manuscript
submissions:

closed (31 October 2020)

Message from the Guest Editors

Most of the currently used polymers, such as polyethylene or polypropylene, are petroleum derivatives whose durability is an important feature. However, this is not always an advantage due to disposal problems after use. With the objective of a more sustainable circular economy, the utilization of renewable resources, including biomass, as feedstock for the production of polymer-based materials is becoming increasingly important. Although conventional biomass-derived polymers are relatively soft and weak and lacking thermoplasticity, new approaches have been developed to obtain biomass-derived polymers with high mechanical and thermal stability and improved thermal processability.

This Special Issue will highlight recent advances in the understanding of the structure of polymers available in nature, such as cellulose, hemicellulose, lignin, chitin, and pectins in the form of biomass constituents or as byproducts from various technological processes; chemical and physical modification techniques for biomass and fiber processing to improve their properties and compatibility; material properties; and most importantly, their possible applications.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Alexander Böker

Fraunhofer-Institut für
Angewandte Polymerforschung,
Lehrstuhl für Polymermaterialien
und Polymertechnologie,
Universität Potsdam,
Geiselbergstraße 69, 14476
Potsdam-Golm, Germany

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.

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)

Contact Us

Polymers Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/polymers
polymers@mdpi.com
X@Polymers_MDPI