Special Issue

Valorization of Polymers in Wood

Message from the Guest Editors

Lignocellulose consists of cellulose, hemicellulose and lignin. These components can be upgraded into fuels, chemicals and materials, with the potential of substituting petroleum-based products in part or in whole. Due to their complex hierarchy and chemical structures, technologies aiming to separate their main components in biomasses are desired for obtaining pure cellulose/hemicellulose and high-quality lignin, which are the starting materials used for downstream utilizations. Moreover, the processes responsible for converting lignocellulose into high-value chemical products (sugars, ethanol, phenols, etc.) and high-performance functional materials (film, foam, hydrogel, etc.) in thermochemical or biochemical pathways are focal points of current research and need to be further explored. Therefore, the goal of this Special Issue is to highlight the advanced biorefinery technologies utilized in the conversion of lignocellulose, which is a highly relevant topic for all researchers in the field of biorefinery.

Guest Editors

Dr. Chen Huang

1. Institute of Chemical Industry of Forest Products, Chinese Academy of Forestry, Jiangsu Province Key Laboratory of Biomass Energy and Materials, Nanjing 210042, China
2. Co-Innovation Center for Efficient Processing and Utilization of Forest Resources, Nanjing Forestry University, Nanjing 210037, China

Dr. Xuelian Zhou

1. Institute of Chemical Industry of Forest Products, Chinese Academy of Forestry, Jiangsu Province Key Laboratory of Biomass Energy and Materials, Nanjing 210042, China
2. Co-Innovation Center for Efficient Processing and Utilization of Forest Resources, Nanjing Forestry University, Nanjing 210037, China

Deadline for manuscript submissions

31 October 2025

Polymers

an Open Access Journal by MDPI

Impact Factor 4.9
CiteScore 9.7
Indexed in PubMed

mdpi.com/si/213343

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)