

## Special Issue

# Progress in Lignin Value-Added Polymers

### Message from the Guest Editor

Lignin as a natural phenolic byproduct of the pulping process that composes 20%–30% of most woody resources and lignocellulosic biomass and is the second most abundant terrestrial biopolymer after cellulose. Currently, lignin from the pulping industries is around 70 m metric tons annually. However, it is highly underutilized, and only about 2% of lignin is commercially utilized for low-value products due to lack of value-added applications in the marketplace. This Special Issue is dedicated to addressing the latest progress in lignin value-added products. Compared to synthetic polymers, lignin has the advantage of being biocompatible, biodegradable, and sustainable. Lignin complexity and heterogeneity with a high cross-linked structure is its main issue for the high value application. The aim of this Special Issue is to discuss lignin fractionation for more homogeneous structures, modification for value-added products, lignin nanoparticles, and its application in drug delivery, as a UV blocker, as a flame retardant, and much other more advanced applications, including various physical and chemical applications in the biomedical and green industry fields.

### Guest Editor

Dr. Hasan Sadeghifar

1. Department of Forest Biomaterials, College of Natural Resources, North Carolina State University, Raleigh, NC 27695, USA
2. Product development lead, Hollingsworth & Vose, West Groton, MA, USA

### Deadline for manuscript submissions

closed (30 September 2020)



## Polymers

an Open Access Journal  
by MDPI

Impact Factor 4.9  
CiteScore 9.7  
Indexed in PubMed



[mdpi.com/si/34027](https://mdpi.com/si/34027)

*Polymers*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[polymers@mdpi.com](mailto:polymers@mdpi.com)

[mdpi.com/journal/  
polymers](https://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](https://mdpi.com/journal/polymers)



## 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)