



## Advances in Cellulose-Based Polymers and Their Composites

Guest Editors:

**Dr. Bijender Kumar**

Creative Research Center for  
Nanocellulose Future  
Composites, Inha University, 100,  
Inha-ro, Michuhol-gu, Incheon  
22212, Korea

**Prof. Dr. Jaehwan Kim**

Department of Mechanical  
Engineering, Inha University, 100  
Inha-ro, Michuhol-ku, Incheon  
22212, Korea

**Dr. Anuj Kumar**

School of Chemical Engineering,  
Yeungnam University, 280  
Daehak-ro, Gyeongsan 38541,  
Korea

Deadline for manuscript  
submissions:

**closed (5 August 2023)**

### Message from the Guest Editors

Dear Colleagues,

The demand for bio-resources has been constantly increasing in terms of developing environmentally friendly sustainable and renewable cellulose-based polymers and composites to reduce the use of petroleum-based polymers and mitigate global warming. Cellulose is one of the most abundant and widely distributed renewable polymers derived from plant biomass and algae worldwide. Thus, due to growing ecological and human constraints, cellulose-based polymers are an active research area. Using cellulose fibers, cellulose derivatives, and nanocellulose as fillers or matrices in polysaccharides/bio-based polymers is an efficient, alternative approach for developing environmentally friendly cellulose-based polymers and composites with functional properties. Materials based on cellulose are not only those derived from fillers or matrices but also cross-linked cellulose-based polymers and cellulose-based grafted polymers, which can deliver specific properties for multifunctional applications.

This Special Issue will focus on recent progress related to “Advances in Cellulose Based Polymers and their Composites.”





an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Alexander Böker

Lehrstuhl für Polymermaterialien  
und Polymertechnologie,  
University of Potsdam, 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 5.0.

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, St. Alban-Anlage 66  
4052 Basel, Switzerland

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

mdpi.com/journal/polymers  
polymers@mdpi.com  
X@Polymers\_MDPI