



Microbial Biopolymers: Trends in Synthesis, Modification, and Applications

Guest Editor:

Dr. Shashi Kant Bhatia

Department of Biological
Engineering, Konkuk University,
Seoul 05029, Republic of Korea

Deadline for manuscript
submissions:

closed (5 March 2023)

Message from the Guest Editor

Microbes can act as a factory for the conversion of a variety of carbon and nitrogen sources into diverse kinds of intracellular and extracellular biopolymers. These biopolymers have a diverse biological role in a microbial system. Biopolymers have different chemical and morphological properties that make them suitable for industrial, environmental, and medical applications. Recent advances in molecular biology, transcriptomics, metabolomics techniques have improved the understanding related to mechanisms and regulations involved in biopolymer synthesis. Biopolymers produced by microbial systems are rich in various functional groups which can be exploited further to modify the polymers for a variety of applications. Biopolymer's production cost is the main challenge for its applicability at a commercial scale. Researchers are working on the utilization of diverse kinds of organic wastes as feedstock for microbial fermentation. Biopolymer production from the microbial system is a clean and green approach and has recently become a hot topic and has tremendous applications in the biotechnology sector.





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 (*Polymers and Plastics*)

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](https://twitter.com/Polymers_MDPI)