Special Issue

Bacterial-Origin Polymers: The Relationship between Biomedical Properties and Natural Functions

Message from the Guest Editor

Polymers synthesized by bacteria have great potential for biomedical application due to their unique properties. A series of biomedical properties of bacterial-origin polymers are completely determined by their natural properties, e.g., biocompatibility, biodegradability, superior biomechanical properties, specific biological activity (osteogenic, chondrogenic, fibrogenic, neurogenic, prebiotic), antimicrobial activity, ability of chemical functionalization, loading by drugs for their sustained or/and controlled delivery.

Bacteria synthesize a number of structural and storage polymers, which are components of the bacterial wall, their capsule mucosa and biofilm, as well as polymers stored in special cell granules.

The aim of this Special Issue is to highlight the urgent problem of the relationship between biomedical properties and natural functions of bacterial-origin polymers and their functional analogues to search for their new applications in medicine, pharmacology, and bioengineering.

Guest Editor

Dr. Anton P. Bonartsev
Faculty of Biology, M. V. Lomonosov Moscow State University, 119234 Moscow, Russia

Deadline for manuscript submissions

closed (30 April 2022)

Polymers

an Open Access Journal by MDPI

Impact Factor 4.9
CiteScore 9.7
Indexed in PubMed

mdpi.com/si/49856

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

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 4.9.

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.

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

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)