



## Synthesis and Application of Polymer-Based Nanofibers and Nanocrystals

Guest Editor:

**Prof. Dr. Rajaram Rajamohan**

School of Chemical Engineering,  
Yeungnam University, Gyeongsan  
38541, Republic of Korea

Deadline for manuscript  
submissions:

**closed (31 March 2024)**

### Message from the Guest Editor

Microfibrils can be separated from the fibers to form nanosized materials known as nanocrystals (NCs) and nanofibers (NFs) using new, efficient technologies. In addition to their regenerative behavior, the NCs and NFs exhibit very strong strength qualities, dimensional stability, thermal stability, and good optical properties, making them potential building blocks for new materials. By coating or combining conductive polymers with cellulose as well as native and modified cyclodextrins, hybrid composites of sustainable materials and inorganic functional materials are introduced to enhance the usefulness of sustainable materials.

This Special Issue will represent the recent advancement of nanocrystals and nanofiber, followed by their possibility for smart materials. Natural behaviors, extraction, and modification of nanocrystals and nanofibers are welcomed and their synthesis with nanomaterials is also introduced, which is necessary to meet the technological requirements for smart materials.





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](http://www.mdpi.com)

[mdpi.com/journal/polymers](http://mdpi.com/journal/polymers)  
[polymers@mdpi.com](mailto:polymers@mdpi.com)  
[X@Polymers\\_MDPI](https://twitter.com/Polymers_MDPI)