



## Multi-Functional Polymer-Based Nanocomposites

Guest Editors:

**Dr. Anna Szymczyk**

Faculty of Mechanical  
Engineering and Mechatronics,  
West Pomeranian University of  
Technology, Piastów 19 Av., 70-  
310 Szczecin, Poland

**Dr. Sandra Paszkiewicz**

Department of Materials  
Technologies, Faculty of  
Mechanical Engineering and  
Mechatronics, West Pomeranian  
University of Technology, 70-310  
Szczecin, Poland

Deadline for manuscript  
submissions:

**closed (31 May 2022)**

### Message from the Guest Editors

Multifunctional nanocomposite materials can be fabricated by combining a range of nanoscale reinforcement materials with a polymer matrix. Carbon nanostructures such as fullerenes, carbon nanotubes, carbon nanofibers, and graphene derivatives have attracted a great deal of attention in the last three decades. Their outstanding mechanical, electrical, thermal, and optical properties, as well as their large aspect ratios and higher specific surface area make them very attractive as ideal nanofillers, which can contribute to the development of composites with improved mechanical and special properties (e.g., electrical conductivity, thermal conductivity, magnetic permeability, barrier properties). The synergistic effect of nanofiller hybrids including graphene nanoplatelets and carbon nanotubes, metal or metal-oxide nanoparticles anchored on a graphene surface in a hybrid can be also applied to obtain functional polymer nanocomposites.

This Special Issue aims to attract high-quality research and/or review articles that will help us to further understand the properties of polymer-based multifunctional nanocomposites containing carbon nanostructures or their hybrids.





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)