



## Advances on Assessment and Application of Polymer Composites

Guest Editors:

**Prof. Dr. Cheng Li**

School of Mechanical and  
Electronic Engineering,  
Zhengzhou University,  
Zhengzhou 450001, China

**Prof. Dr. Qiaoxin Zhang**

School of Mechanical and Power  
Engineering, Wuhan University of  
Technology, Wuhan 450001,  
China

**Prof. Dr. Ying Tie**

School of Mechanical and Power  
Engineering, Zhengzhou  
University, Zhengzhou 450001,  
China

Deadline for manuscript  
submissions:

**closed (25 December 2023)**

### Message from the Guest Editors

Dear Colleagues,

This Special Issue aims to highlight the latest original results (experimental and numerical) in the assessment and new application of polymer composites in industrial fields, including design, service testing, damage evaluation, and repair. Original articles, comprehensive reviews, and communications of cutting-edge polymer composite technology are all acceptable. Non-exclusive topics include:

numerical and experimental study of polymer composite mechanical behaviours;  
study on carbon fibre-reinforced polymer composites for multifunctional applications;  
research and design of self-healing polymers composites;  
numerical and experimental investigation on repairing polymer composite;  
non-destructive testing of polymer composites;  
study on polymer composite joint;  
thermal shock response of polymer composite;  
hygrothermal aging effect of function polymer composite;  
study on polymer composite-based lightweight design.

Prof. Dr. Cheng Li  
Prof. Dr. Qiaoxin Zhang  
Prof. Dr. Ying Tie  
Guest Editors





an Open Access Journal by MDPI

## 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

## 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.

## 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, Grosspeteranlage 5  
4052 Basel, Switzerland

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

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