



## High Performance Polymeric Composite Foam: Design, Processing and Properties

Guest Editors:

**Dr. Jing Jiang**

**Prof. Dr. Qian Li**

**Dr. Feng Chen**

**Dr. Xiaofeng Wang**

Deadline for manuscript  
submissions:

**closed (15 August 2023)**

### Message from the Guest Editors

In this Special Issue, we present a collection of papers regarding the design, processing, and properties of high-performance polymeric composite foams.

Polymer composites are defined as composites with a polymer matrix, and that incorporate fillers that are shown in the micro/nano scale in at least one dimension. Polymer composites normally exhibit high mechanical performance and multifunctionality compared with neat polymers. Polymer composites can be used to create micro- and nanoporous foams, which are an intriguing class of materials that are lightweight, energy-saving, can act as thermal insulation and sound barriers, and have specific mechanical properties due to their excellent foamability. Nowadays, polymeric composite foams are widely used in the fields of automotives, building and construction, packaging, and biomedical science. New applications are also being developed in hydrogen storage, electromagnetic shielding, and sensors.

The aim of this Special Issue is to explore how fillers can be used to modify polymer structure and properties, and to improve our fundamental understanding of the processing–micro/nano foam structures–final properties relationship.





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 (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