## Special Issue

## Preparation and Performance Study of Polymer-Based Textile Composites

## Message from the Guest Editors

With the awareness of the importance of composite performance under a variety of conditions in relation to mechanical behaviours across scales, this Special Issue of Polymers invites contributions addressing several aspects of polymer-based textile composites in view of mechanics analyses under different processes, such as: interpreting the weaveability or braidability of fibres, especially for hard and brittle polymer fibres, capable of being utilized to manufacture near-shaped reinforcements; the study of mechanical behaviours on textile reinforcements during preforming processes. ranging from yarn to fabric scales (mesoscale and macroscale, respectively), in order to figure out how to optimize the preforming process, taking into consideration textile reinforcement properties; simulations based on a new modelling method to advance our knowledge of mechanical behaviours of textile reinforcements: the advanced structure of textile reinforcements and its relation to composite mechanical performance; research regarding the relationship between the polymer resin injection process and composite mechanical properties; etc.

#### **Guest Editors**

Prof. Dr. Peng Wang ENSISA, University of Haute-Alsace, Mulhouse, France

Dr. Shenglei Xiao

School of Mechanical Engineering, Dalian University of Technology, Dalian, China

## Deadline for manuscript submissions

closed (15 December 2022)



## **Polymers**

an Open Access Journal by MDPI

Impact Factor 4.9 CiteScore 9.7 Indexed in PubMed



mdpi.com/si/108186

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



## **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 4.7.

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

Lehrstuhl für Polymermaterialien und Polymertechnologie, University of Potsdam, 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)

