



an Open Access Journal by MDPI

Advances in Research and Preparation of High-Performance Polymer Fibers

Guest Editor:

Dr. Yumin Xia

College of Materials Science and Engineering, Donghua University, 2999 North Renmin Road, Shanghai, China

Deadline for manuscript submissions: 1 September 2024



mdpi.com/si/125409

Message from the Guest Editor

Dear Colleagues,

High-performance fibers have been widely used in many industrial applications due to their highly specialized physical properties, including a high tensile strength (and/or modulus), high thermal resistance, flame retardancy, chemical resistance, excellent electrical properties, etc. The most common organic highmechanical-performance fibers are ultra-high-molecularweight polyethylene (UHMWPE) fibers, para-aramid fibers, thermotropic liquid crystal polyester (TLCP) fibers and poly(phenylene benzobisoxazole) (PBO) fibers. They are ideal reinforcement materials and are usually used in cables/ropes, parachutes, bullet proof vests, cut-resistant fabrics and ballistic protective armor. Meta-aramid fibers and polyimide (PI) fibers are widely used in fireproof suits and firefighter garments due to good heat/thermal resistance.

Considering the key roles of high-performance fibers, the editors are pleased to launch this Special Issue and invite researchers to contribute original research papers/reviews associated with the main topic and title of this Special Issue.

Dr. Yumin Xia Guest Editor







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 highquality 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