

# Special Issue

## Tribology of High-Performance Polymer Composites in Extreme Conditions

### Message from the Guest Editor

Multifunctional, multiscale and tailor-made thermoplastic polymer composites, to be used in extreme tribological conditions, are gaining tremendous attention. The focus here will be on the design and development of materials to improve machinery/components' friction, wear and lubrication in extreme/challenging conditions (including temperature, environments and tribological conditions). This Special Issue will report the current research and future trends in friction, wear and lubricant (dry condition and/or oil-free lubrication) of multifunctional and multiscale high performance self-lubricating thermoplastic composites in life science, automotive, space engineering, wind turbine, and hydropower applications. Topics of interest generally include (but not limited to):

- Thermoplastics
- Polymer composites
- Self-lubricating/solid lubrication
- Lubricant additives
- Water lubricant
- Coating
- Friction
- Wear
- Oil-free lubricants
- Extreme condition

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### Guest Editor

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### Deadline for manuscript submissions

closed (20 November 2018)



## Lubricants

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## About the Journal

### Message from the Editor-in-Chief

Friction, wear, and lubrication are tribological phenomena that govern the behavior of interacting surfaces in a wide range of machine components. Understanding the physical and chemical nature of these phenomena is critical to achieving long component lifetime and economical operation. Research in the field of tribology is highly interdisciplinary, and encompasses the fields of physics, chemistry, engineering, and mathematical modeling. *Lubricants* invites contributions on new advances in all areas of tribology for publication as peer-reviewed research articles, reviews of current research, letters, and communications. We are committed to providing timely reviews of all articles submitted. Please consider sharing your work with the scientific community through publication in *Lubricants*.

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### Editor-in-Chief

Prof. Dr. Homer Rahnejat  
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indexed within Scopus, SCIE (Web of Science), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q2 (Engineering, Mechanical) / CiteScore - Q2 (Mechanical Engineering)

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 14.8 days after submission; acceptance to publication is undertaken in 1.9 days (median values for papers published in this journal in the first half of 2025).