

# Special Issue

## Advanced Polymeric and Colloidal Lubricants

### Message from the Guest Editors

Over the past two decades, our understanding of complex intermolecular interactions responsible for friction and wear reduction in mechanical and biomechanical systems has improved significantly. As a result, there has been a burst of novel materials and technologies designed and evaluated to improve efficiency and sustainability of these systems. Our objective in this Special Issue of *Lubricants* is to provide a platform for you to publish your most recent advances in designing and understanding state-of-the-art polymeric, colloidal and electrolyte-based friction-mediating materials and technologies. We welcome contributions on experimental, theoretical and computer simulation aspects of controlling friction and wear in such materials. We hope that this Special Issue will form a collection of multifaceted articles showcasing the advances in the field of lubricating soft materials. We look forward to reading your notable contributions to this field.

### Guest Editors

Dr. Vahid Adibnia

Department of Applied Oral Sciences, School of Biomedical Engineering, Dalhousie University, Halifax, NS B3H 4R2, Canada

Dr. Tianyi Han

State Key Laboratory of Tribology in Advanced Equipment, Tsinghua University, Beijing 100084, China

### Deadline for manuscript submissions

closed (30 April 2024)



## Lubricants

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.1  
CiteScore 3.6



[mdpi.com/si/163824](https://mdpi.com/si/163824)

*Lubricants*

MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[lubricants@mdpi.com](mailto:lubricants@mdpi.com)

[mdpi.com/journal/  
lubricants](https://mdpi.com/journal/lubricants)





# Lubricants

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.1  
CiteScore 3.6



[mdpi.com/journal/  
lubricants](https://mdpi.com/journal/lubricants)



## 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*.

---

### Editor-in-Chief

Prof. Dr. Homer Rahnejat  
School of Engineering, University of Central Lancashire, Preston PR1  
2HE, UK

---

### Author Benefits

#### High Visibility:

indexed within Scopus, SCIE (Web of Science), 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 14.6 days after submission; acceptance to publication is undertaken in 2.5 days (median values for papers published in this journal in the second half of 2024).