

Special Issue

Lubrication Mechanism of Ionic Liquids

Message from the Guest Editors

This Special Issue will address experimental and theoretical insights, emphasizing how ionic liquids interact at interfaces, create boundary films, and affect friction and wear. Contributions will provide insights into nanotribology, surface chemistry, triboelectrochemistry, and rheology, underscoring the significance of ionic liquids in enhancing energy efficiency and reliability of mechanisms. The environmentally friendly ionic liquids will not be overlooked, and studies on their synthesis and tribological performance are encouraged. We also invite submissions regarding recent advancements in the tribological behaviour of ionic liquids subjected to applied electric potential. Both micro- and macro-scale behaviours are welcome. This Special Issue combines interdisciplinary research to enhance the understanding of ionic liquid-based lubrication and promote innovation in the creation of next-generation lubricants.

Guest Editors

Dr. Raimondas Kreivaitis

Prof. Dr. Jeng-Haur Horng

Dr. P S Suvin

Deadline for manuscript submissions

28 February 2026



Lubricants

an Open Access Journal
by MDPI

Impact Factor 2.9
CiteScore 4.5



mdpi.com/si/244912

Lubricants
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
lubricants@mdpi.com

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





Lubricants

an Open Access Journal
by MDPI

Impact Factor 2.9
CiteScore 4.5



[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), 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).