

Special Issue

Tribology for Lightweighting

Message from the Guest Editors

The emerging lightweighting solutions and tribological optimization are essential for decreasing emissions and the carbon footprint in automotive-related applications. Durability, friction control, wear protection and sustainability are interlinked. This Special Issue is aimed at the latest research on advanced lubricants for automotive parts subjected to harsh tribological requirements and for manufacturing processes of automotive components using advanced materials for lightweighting.

Guest Editors

Dr. Montserrat Vilaseca

Eurecat, Centre Tecnològic de Catalunya, Unit of Metallic and Ceramic Materials, Plaça de la Ciència 2, 08243 Manresa, Spain

Dr. Leonardo Pelcastre

Division of Machine Elements, Luleå University of Technology, SE-97187 Luleå, Sweden

Deadline for manuscript submissions

30 December 2025



Lubricants

an Open Access Journal
by MDPI

Impact Factor 2.9
CiteScore 4.5



mdpi.com/si/77476

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).