Special Issue

Fretting Wear and Fretting Fatigue

Message from the Guest Editors

Fretting wear occurs when two surfaces are subjected to vibration with a small oscillatory relative motion. This phenomenon is considered a plague in many modern industrial applications, such as the transportation, energy and biomedical sectors, and can cause loss of functionality or initiate fatigue leading to catastrophic failures. Specific cases include but are not limited to riveted and bolted joints, dovetail joints, shrink-fitted couplings, wire ropes, bearing rings, flexible pipes, turbine blades, electrical connections and prosthetic implants. This Special Issue intends to share advances in the understanding of the damage mechanisms, specific phenomena, improved mitigation and other novel aspects in the field of fretting wear and fretting fatigue. Both experimental and theoretical investigations are welcome.

Guest Editors

Dr. Hilmar Kjartansson Danielsen

Department of Wind and Energy Systems, Technical University of Denmark, 4000 Roskilde, Denmark

Dr. Francisco Gutiérrez Guzmán

Institute for Machine Elements and Systems Engineering, RWTH Aachen University, 52062 Aachen, Germany

Deadline for manuscript submissions

closed (31 January 2024)



Lubricants

an Open Access Journal by MDPI

Impact Factor 2.9 CiteScore 4.5



mdpi.com/si/148536

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

mdpi.com/journal/ lubricants





Lubricants

an Open Access Journal by MDPI

Impact Factor 2.9 CiteScore 4.5





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).