Special Issue

Tribological Characteristics of Bearing System

Message from the Guest Editor

Bearings are widely used in automobile transmission, rail transit, aerospace and equipment manufacturing. They are the key mechanical components for bearing and transmitting motion. Under the influence of severe service environments, such as large load, high speeds and wide temperature ranges, the study of bearing friction and wear characteristics and fatigue damage mechanism plays an important role and is significant for promoting the high reliability, durability and long life of bearings. Through advanced intelligent manufacturing technologies, such as bearing material alloy optimization, heat treatment process optimization, deformation prediction, surface modification and intelligent simulation, new technical support and development ideas can be provided for the bearing system. This Special Issue will present a collection of papers on bearing friction and wear, fatigue durability and rotor dynamics, representing the latest research progress in the field of bearing systems. I am pleased to invite researchers in related fields to contribute to this Special Issue.

Guest Editor

Prof. Dr. Yong Chen

- 1. School of Mechanical Engineering, Guangxi University, Nanning, China
- 2. New Energy Vehicle Research Center, Guangxi University, Nanning, China

Deadline for manuscript submissions

closed (31 July 2023)



Lubricants

an Open Access Journal by MDPI

Impact Factor 2.9 CiteScore 4.5



mdpi.com/si/121633

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).