



## Tribological Characteristics of Bearing System

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)**

### **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.





an Open Access Journal by MDPI

## Editor-in-Chief

### **Prof. Dr. Homer Rahnejat**

School of Engineering, University  
of Lancashire, Preston PR1 2HE,  
UK

## 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*.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**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)

## Contact Us

---

*Lubricants* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
www.mdpi.com

mdpi.com/journal/lubricants  
lubricants@mdpi.com  
X@Lubricants\_MDPI