# **Special Issue**

# Multiphysics and Multiscale Models of Tribology

## Message from the Guest Editor

This Special Issue, "Multiphysics and Multiscale Models of Tribology", in the open access journal *Lubricants*, is open for submissions presenting modelling and simulations involving the multiphysics and/or multiscale nature of tribological interfaces found in bearings, gears, seals, etc. While it encourages a broad spectrum of contribution in tribology, its core interest lies in issues concerning the development, verification and validation of the models and their numerical solution procedures. Papers of transdisciplinary nature presenting and connecting fundamental research with more applied are particularly welcome. **Keywords** 

- Elastohydrodynamic lubrication
- Contact mechanics
- Leakage/percolation
- CFD
- Fluid-structure interaction
- Mechanical deformation
- Thermal expansion
- Roughness
- Cavitation

#### **Guest Editor**

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### Deadline for manuscript submissions

closed (30 June 2018)



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## **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

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#### **Author Benefits**

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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).