Special Issue

Friction and Lubrication of Sliding Bearings, Volume II

Message from the Guest Editor

Every year, billions of bearings of all kinds are used worldwide. Bearings are by far the most common machine elements. From miniature bearings used in watches to huge sliding bearings used in hydro turbines, bearings are present in almost every possible aspect of our lives. The role of bearings is to guide and support surfaces in relative motion and, at the same time, to reduce friction. At first glance, this may seem to be a simple task. However, not only does this task involve complex physical, chemical, mechanical, and energetic phenomena, its role is of paramount importance in our current efforts to increase the efficiency of machines, to extend their working lives, and to protect the environment. The current Special Issue focuses on the latest developments in lubrication mechanisms and lubricants and the effect of working parameters on their functionality and the modelling of their behavior.

Keywords

roller/ball bearing; hydrodynamic bearing; hydrostatic bearing; gas bearing; magnetic bearing; sliding modeling and simulations; monitoring; maintenance; materials; lubricants and any other related topics

Guest Editor

Prof. Dr. Shih-Chieh Lin

Department of Power Mechanical Engineering, National Tsing Hua University, Hsinchu 30013, Taiwan

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

mdpi.com/journal/ lubricants





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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

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

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