Special Issue

Condition Monitoring and Simulation Analysis of Bearings

Message from the Guest Editors

Bearings are widely used in aerospace, automotive, railway vehicle, ship, and other mechanical systems. The service status of bearings usually has an important impact on the operation safety of the above-mentioned mechanical systems. The condition monitoring and simulation analysis of bearings during operation are essential to ensure the operation safety of mechanical systems. In the actual operation process, bearings are often subjected to the combined effect of internal and external excitations. How to accurately grasp the dynamic response and fault feature under such complex excitations and effectively carry out condition monitoring are the major challenges currently being faced. Solving this problem requires innovative approaches that combine theoretical foundations such as tribology, dynamics, and signal processing. The aim of this Special Issue is to share advances in the topic of dynamics modeling, simulation analysis, condition monitoring, signal processing, and other related novel aspects in the field of roller-and sliding bearings. Both experimental and theoretical investigations are highly welcome.

Guest Editors

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Deadline for manuscript submissions

closed (25 February 2024)

Lubricants

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Impact Factor 2.9
CiteScore 4.5

mdpi.com/si/136253

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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.*

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