Special Issue

Recent Advances in Lubricated Tribological Contacts

Message from the Guest Editors

In the 21st century, applications of tribology can be observed in many fields, such as automotives, biomechanics, manufacturing, renewable energy, aviation, healthcare, transportation, and many more in daily human activities. In general, two types of lubricated tribological contacts are found; conformal and counterformal (non-conformal or concentrated) in various machine elements, for instance, gears, seals, hip and knee joints, bearings (rolling element bearings) and journal bearings), cam/followers, piston/ring liner conjunctions, etc. Primarily, these machine components are lubricated using solid or liquid lubricants to reduce friction and wear and, consequently, increase energy efficiency and the service life of machine components. Due to the large progress in modern computer efficiency, tribological contacts nowadays can be successfully analyzed by performing macro-to-atomiclevel simulations. Recent advances in the analysis of aforementioned tribological contacts include, but are not limited to:

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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.

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