Special Issue

Friction and Wear of Ceramics

Message from the Guest Editors

Dear Colleague, Ceramics are the materials of choice as surface coatings or bulks in harsh environments due to their unique combination of good high temperature stability, high hardness and strength, light weight, and excellent corrosion resistance. The relatively high coefficients of friction and wear rates, however, have impeded their practical applications as mechanical moving parts. To overcome these obstacles, a fundamental understanding of the friction and wear behavior and failure mechanisms and vigorous efforts to develop ceramic-based lubricants have become important. As such, this Special Issue will provide a platform for scientists and engineers to present their recent achievements in tribological properties of ceramics and ceramic matrix composites, new ceramic-based lubricants and new material design paradigms. Papers on the design, fraction and wear, and lubricating properties of high-entropy ceramics, films and coatings are welcome. We expect that major developments are pursued to tackle the challenges in harsh environment lubrication.

Guest Editors

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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

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