Special Issue

Advances in Ceramic-Based Lubricants

Message from the Guest Editors

Ceramic materials have many excellent properties such as high strength, high hardness, high temperature resistance, corrosion resistance and light weight, making them valuable as surface coatings or monolithic components for use as motion components in harsh environments (high temperature, strong corrosion, etc.). However, ceramic materials also have some disadvantages as mechanical moving parts, such as relatively high coefficients of friction and wear rates. This Special Issue will highlight recent advances in ceramicbased lubricants. We invite 10 high-quality research papers about the lubrication methods, tribological properties and mechanisms of ceramic based materials. We expect these studies to provide advanced ceramic-based lubricating materials in the future to solve some of the harsh lubrication challenges.

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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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