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Anti-Wear Lubricating Materials

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Message from the Guest Editors

Wear caused by friction is one of the main causes of mechanical component failure. Wear accidents usually start at the early stage of slight injury on the metal surface. Therefore, using lubricating protective materials to modify the worn surface of metals during the lubrication process is an effective method to reduce friction and wear on the mechanical component.

Over the past decades, some researchers have reported that plentiful materials, such as elementary substances, metallic oxides, metallic sulfides, borates, carbonates, rare earth compounds, silicate, macromolecular compounds, and so on, can be used as lubricating protective materials in lubricants to reduce friction and wear. With the continuous development of preparation technology, refinement technology, and surface modification technology of materials, more and more materials will be used as lubricating protective materials for the worn surface modification of metals.

The intention of this Special Issue is to share advances in new lubricating protective materials, new tribological phenomena, and new tribological mechanisms. Both experimental and theoretical investigations are highly welcome.

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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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