

Special Issue

Thermally and Electrically Conductive Nanomaterials Lubricants

Message from the Guest Editor

Commercially available lubricants are usually nonconductive, e.g., lithium and calcium lubricants. However, the rapid industrial development in various industrial fields has increased the demand for lubricants with exceptional properties, such as high thermal and electrical conductivity, corrosion resistance, high temperature, and high pressure stability. Heat dissipation is a serious problem for many machines, as it impairs their performance, efficiency, and accuracy, and limits the lifetime of the machines. Therefore, thermal lubricants have been invented to remove the heat generated by machines as fast as possible to keep the machine temperature within the acceptable range and avoid any effect on the performance of the machines. The current Special Issue aims to have contributions from world-leading scientists working in electrically and thermally conductive lubricants to deepen our understanding of lubricants. Contributions are welcome from all scientists working in nanomaterials lubricants and related areas. **Keywords** CNTs; graphene; nanomaterials; electrical conductivity; thermal conductivity; nanoparticles; thermal paste tribology; lubricants

Guest Editor

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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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