

Special Issue

Tribocorrosion of Surface Engineered Materials

Message from the Guest Editors

A surface engineered material is a composite system comprising the surface layer, the subsurface zone and the substrate. One of the major concerns in the use of surface engineered materials is the sustainability of the surface layer and the modified surface region with finite thicknesses. Such a concern become more important when tribocorrosion is involved in application. The combined mechanical and chemical actions involved in tribocorrosion can lead to the synergistic effect between wear and corrosion. Minor damages to the surface layer may lead to the penetration of the chemical solution to the substrate, creating a galvanic effect between the surface layer and the substrate. This, when coupled with the mechanical wearing actions, can lead to the premature failure of the surface engineering system during tribocorrosion. Since the 1990s, significant progress has been made in the study of tribocorrosion of bulk materials. Although the tribological and corrosion properties of many surface engineering systems have been studied separately, the study on tribocorrosion of surface engineered materials has been limited so far. Thus, this Special Issue is aimed at stimulating tribocorrosion studies of surface engineered materials. Contributions from both academic research and application-oriented research are welcome. s

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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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