Special Issue

Corrosion and Tribocorrosion Behavior of Metals and Alloys

Message from the Guest Editors

Tribocorrosion, a form of mechanically assisted corrosion, has been defined as the science of conjoint action of mechanical wear (abrasive or erosive) and (electro)chemical corrosion. The process involves a tribological contact occurring in a corrosive environment. The tribocontact disturbs (electro-)chemical reactions on the surface of the material (passive or actively corroding), resulting in complex degradation phenomena. Research in tribocorrosion has gained attention due to its practical importance across many industries and applications, as well as its potential economic benefits, especially in the resource industry, or its automotive and biomedical applications. Despite the growing interest and significant progress in tribocorrosion studies, the testing methodologies are still largely non-standardized. Currently, the only available standard method is the ASTM G119, which has several limitations. This Special Issue aims to share the latest investigations focused on tribocorrosion and the associated localized corrosion of engineering alloys in challenging environments.

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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.*

Editor-in-Chief

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