Special Issue

Advances in Tribochemistry

Message from the Guest Editors

We would like to invite you to contribute to the Special Issue of Lubricants entitled "Advances in Tribochemistry". Tribology is the multidisciplinary science of rubbing surfaces. This discipline includes the study of friction, produced wear and surface analysis of surfaces that interact in relative motion; these surfaces can be lubricated by different types of lubricants. Surface interactions that occur between two sliding surfaces are the primary cause of friction and wear. When these surfaces interact, the material exposed on the surfaces reacts with the surrounding environment. The interfaces can be of different types: solid/solid. solid/gas/solid or solid/liquid/solid. Moreover, under certain conditions, chemical reactions could occur within these interfaces and generate a new compound called a Tribofilm, as a result of a tribochemical process. This fact can create different reaction products, which can influence the tribology of the system. Tribochemistry is the study focus on the chemical reactions in different lubricant formulations affecting the tribofilm formation on metal surfaces.

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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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