Special Issue

Fretting Wear and Fretting Fatigue

Message from the Guest Editors

Fretting wear occurs when two surfaces are subjected to vibration with a small oscillatory relative motion. This phenomenon is considered a plague in many modern industrial applications, such as the transportation, energy and biomedical sectors, and can cause loss of functionality or initiate fatigue leading to catastrophic failures. Specific cases include but are not limited to riveted and bolted joints, dovetail joints, shrink-fitted couplings, wire ropes, bearing rings, flexible pipes, turbine blades, electrical connections and prosthetic implants. This Special Issue intends to share advances in the understanding of the damage mechanisms, specific phenomena, improved mitigation and other novel aspects in the field of fretting wear and fretting fatigue. Both experimental and theoretical investigations are 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.

Editor-in-Chief

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