Special Issue

Erosive Wear of Polymer Composites

Message from the Guest Editors

Erosive wear is a mechanism that causes damage to materials under conditions where flows carry solid particles that impact surfaces at high speeds. This phenomenon represents a considerable technical challenge because it can compromise the efficiency and lifespan of materials. Currently, polymer composites. due to their properties such as low density, good mechanical performance, high chemical resistance, and ease of processing, have generated significant interest and growth in their applications. Therefore, studying their performance against erosive wear is of significant impact. In this Special Issue, "Erosive Wear of Polymer Composites", we are looking to explore how the incorporation of reinforcements, such as fibers or nanoparticles, as well as new architectures, can enhance the performance of these materials against erosion. Through experimental and numerical studies. microstructural analysis, and predictive modeling, it is expected to report advances in the design of polymer composites with high erosive performance. Critical factors such as impact angle, particle velocity and material surface properties must also be addressed.

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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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