Special Issue

Mechanisms and Engineering Applications of Drag Reduction and Wear Resistance in Bionic Non-Smooth Surfaces

Message from the Guest Editors

This Special Issue focuses on the mechanisms and engineering applications of drag reduction and wear resistance in bionic non-smooth surfaces. Drawing inspiration from nature's optimized structures, it aims to gather cutting-edge research on surface design. material modification, and performance testing. Topics include biomimetic structure fabrication, frictionreduction mechanisms, wear-resistance optimization, and industrial applications in machinery, aerospace, and marine engineering. We welcome original research, reviews, and technical notes that bridge theoretical innovations with practical implementations. This Special Issue will provide a platform for scholars and engineers to exchange insights and promote the development and industrialization of high-performance bionic surface technologies.

Guest Editors

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Deadline for manuscript submissions

31 July 2026



Lubricants

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Impact Factor 2.9 CiteScore 4.5



mdpi.com/si/262925

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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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