Special Issue

Tribology in Forging

Message from the Guest Editors

Forging is a valuable process in manufacturing parts with precise dimensions, net shape, high strength in fatigue, a high quality of surfaces, etc. Tribology effectively contributes to forging by helping to reduce friction and wear under extremely severe conditions, including those of high pressures, high temperatures, and a high surface expansion ratio. Using a lower forming load can result in more precise dimensions, longer tool life, and higher energy efficiency even if only the friction is reduced. Additionally, environmental issues have appeared in forging, especially in lubricants and lubrication systems. A typical problem is in the phosphating lubricant process, for example, With the aim of achieving better forging techniques and reducing environmental loads in the manufacturing process, we seek to engage in a comprehensive discussion on tribology in forging. It includes studies on lubricants, lubrication systems, coatings, materials, press motion, pre-treatment before lubrication, pre-forming in multiple stages of forging, etc.

Guest Editors

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Deadline for manuscript submissions

1 November 2025



Lubricants

an Open Access Journal by MDPI

Impact Factor 2.9 CiteScore 4.5



mdpi.com/si/229064

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About the Journal

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.

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