Special Issue

Wear and Friction in Hybrid and Additive Manufacturing Processes

Message from the Guest Editors

Tribology is the science of friction, wear, and lubrication, making it inherently inseparable from surface engineering. Additive manufacturing (AM) offers unique capabilities that can be leveraged to enhance the reliability of various tribological contacts. Hybrid manufacturing can provide enhanced capability by combining subtractive and/or transformative (e.g., peening or rolling) processes with additive ones. The operating life of components engaged in wide varieties of contacts is critical for their application in sectors such as biomedicine, energy, automotive, and aerospace. Accordingly, this Special Issue seeks to showcase research papers, short communications, and review articles that focus on understanding the friction and wear behavior of components fabricated via hybrid/additive manufacturing of metals, polymers, ceramics, and composite materials.

Guest Editors

Dr. Sougata Rov

Department of Mechanical Engineering, Iowa State University, Ames, IA 50011. USA

Dr. Avik Samanta

Department of Mechanical Engineering, University of South Florida, Tampa, FL 33620, USA

Deadline for manuscript submissions

closed (30 June 2025)



Lubricants

an Open Access Journal by MDPI

Impact Factor 2.9 CiteScore 4.5



mdpi.com/si/210496

Lubricants
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
lubricants@mdpi.com

mdpi.com/journal/ lubricants





Lubricants

an Open Access Journal by MDPI

Impact Factor 2.9 CiteScore 4.5





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.

Editor-in-Chief

Prof. Dr. Homer Rahnejat

School of Engineering, University of Central Lancashire, Preston PR1 2HE, UK

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Mechanical) / CiteScore - Q2 (Mechanical Engineering)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 14.8 days after submission; acceptance to publication is undertaken in 1.9 days (median values for papers published in this journal in the first half of 2025).