Special Issue

Recent Advances in High Temperature Tribology

Message from the Guest Editors

High temperature tribology is gradually developing along with the needs of high-tech fields such as aviation, aerospace and nuclear energy. It concerns friction, wear and lubrication and their relationships at high temperature. High temperature lubrication/anti-wear materials and technologies are greatly required in the fields of aerospace, national defense technical equipmentand hot metal processing and are the key technologies of mechanical systems. We would like to invite researchers to submit original research papers and review articles to the Special Issue. The Special Issue is dedicated to disseminating the latest research and understandings based on advanced experimental studies and computational modeling related to friction, wear and lubrication at high temperature. The potential scope of interest includes but not limited to:

- Wear at high temperature
- Tribology in metal forming
- High temperature metals and alloys
- Novel high temperature lubricants
- High temperature tribology testing
- Characterization of friction and wear
- Oxidation in tribology
- Contact mechanics, computational simulation and multiscale modeling

Guest Editors

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Deadline for manuscript submissions

closed (10 April 2025)



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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.

Editor-in-Chief

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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).