# **Special Issue**

# Friction and Wear of Cutting Tools and Cutting Tool Materials

### Message from the Guest Editors

The friction between cutting tool and workpiece/chip can significantly affect the tool wear, cutting temperature, machined surface integrity, and many other related tool attributes. The friction and wear of cutting tools have long been a focus of researchers. In recent years, the development of new cutting methods and cutting tools, such as ultrasonic vibration cutting, cryogenic cutting, MQL cutting and micro-textured tools, has changed the friction and wear rules of cutting tools. This topic provides an excellent opportunity for researchers and engineers who are studying and working in the fields of the friction and wear of cutting tools and cutting tool materials to present research papers, review articles, and communications relating to the theory, simulation, and experimentation of friction, wear, and lubrication in machining. We are particularly eager to publish new work relating to the fabrication of anti-wear micro-textures, coatings and lubricants.

### **Guest Editors**

Dr. Guoliang Liu

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Dr. Bin Zhao

Dr. Min Ji

## Deadline for manuscript submissions

closed (31 December 2023)



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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**

#### Prof. Dr. Homer Rahnejat

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