Special Issue

State-of-the-Art of Tribology in North America

Message from the Guest Editors

In 1493, Leonardo da Vinci noted the laws of friction, marking the beginning of the modern age of tribology. Tribology has seen great advances in the 20th century and had a significant impact on our lives, from transportation to industrial machinery with improved mobility and durability. The recent development of numerous new lubricants and materials as well as modeling capabilities provides new opportunities for energy savings and environmental impact reductions. Tribology R&D is estimated to save 1 quad of energy annually. The field of tribology is continually evolving, and because of its interdisciplinary nature, current research takes advantage of advanced technologies in materials and surface characterization, nanostructured materials, molecular dynamics simulation, and AI/ML approaches. With the fast-growing field of electric vehicles and additive manufacturing, tribology is facing unprecedented challenges and opportunities.

Guest Editors

Dr. Jun Qu

Materials Science and Technology Division, Oak Ridge National Laboratory, 1 Bethel Valley Road, Oak Ridge, TN 37831-6063, USA

Dr. Xin He

Solvay USA Inc., 350 George Patterson Blvd, Bristol, PA 19007, USA

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

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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

Prof. Dr. Homer Rahnejat
School of Engineering, University of Central Lancashire, Preston PR1 2HE, UK

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