Special Issue

Design for Tribology: Theoretical and Practical Assessment in Modern Mechanical Components

Message from the Guest Editors

Design for tribology (tribodesign) can be considered a branch of machine design dealing with mechanical elements where friction, lubrication, wear, and power losses play a significant role in the correct design. In fact, environmental awareness today plays an increasing and important task in material and lubricant selection. The growing challenge is obtaining novel solutions based on more efficient concepts and layouts for different kinds of machinery (from automotive to aerospace as well as from automatic machines to machine tool industries) in order to reduce power consumption and to satisfy the new green deal principles and paradigms as well. The aim of this Special Issue is to encourage scientists and researchers to publish their most recent experimental, theoretical, and computational results concerning tribological themes encountered in designing, realizing, and manufacturing machine elements, such as: - Plain sliding bearings or rolling contact bearings; - Pistons, piston rings, and cylinders; - Cams and cam followers; - Involute gears, hypoid gears and worm gears; - Timing belts, pulleys and chain drives; - Bolted joints and shaft-hub joints.

Guest Editors

Dr. Nicolò Vincenzi

GIULIANI, A Bucci Automations S.p.A. Division, Via Granarolo 167, 48018 Faenza, Italy

Prof. Dr. Dario Croccolo

Department of Industrial Engineering (DIN), University of Bologna, Viale del Risorgimento, 2, 40136 Bologna, Italy

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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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