

Special Issue

Minimum Quantity Lubrication: Environmental Alternatives in Processing, 2nd Edition

Message from the Guest Editors

Manufacturers can create an environmentally friendly and more efficient manufacturing process that aligns with various sustainability goals, such as climate action and life on land, by using use Minimum Quantity Lubrication (MQL). The MQL process involves applying minimal amounts of lubricant directly to the cutting zone rather than flooding the workpiece with a large amount of lubricant. By using this technique, there is a significant reduction in the overall consumption of lubricants, which reduces the impact on the environment and minimizes waste production. This Special Issue examines the innovative potential of MQL, an advanced technique that has the potential to significantly reduce lubricant consumption while maintaining optimal efficiency. When MQL is used, industries will be able to reduce their environmental impact, generate less waste, and release less volatile organic compounds into the atmosphere in comparison to traditional machining fluids. This Special Issue will present a collection of articles that will emphasize MQL's role in promoting sustainability within the metalworking industry, aligning it with global efforts to adopt greener manufacturing practices.

Guest Editors

Dr. Abdelkrem Eltaggaz

School of Engineering, University of Guelph, Guelph, ON N1G 2W1, Canada

Dr. Ibrahim Deiab

Advanced Manufacturing Lab (AML), College of Engineering, University of Guelph, Guelph, ON N1G 2W1, Canada

Deadline for manuscript submissions

closed (31 March 2025)



Lubricants

an Open Access Journal
by MDPI

Impact Factor 2.9
CiteScore 4.5



mdpi.com/si/192676

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

[mdpi.com/journal/
lubricants](https://mdpi.com/journal/lubricants)





Lubricants

an Open Access Journal
by MDPI

Impact Factor 2.9
CiteScore 4.5



[mdpi.com/journal/
lubricants](https://mdpi.com/journal/lubricants)



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 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 15.6 days after submission; acceptance to publication is undertaken in 2.5 days (median values for papers published in this journal in the second half of 2025).