



## Sustainable Lubrication in Machining

Guest Editors:

**Dr. Fuat Kara**

**Dr. Hargovind Soni**

**Prof. Dr. Uğur Köklü**

**Dr. Onur Özbek**

Deadline for manuscript  
submissions:

**closed (31 October 2023)**

### Message from the Guest Editors

Global industry trends are advocating for processing to be environmentally friendly and acceptable for sustainable production. In this regard, strategies for reducing cutting fluid consumption are widely discussed in the literature as a very interesting and challenging research topic. Cutting fluids involve high costs in machining processes while harming the environment and human health. There have been some efforts to use sustainable cutting fluids based on vegetable oils, such as sesame, coconut, sunflower, and palm oils. For these reasons, different lubrication and cooling techniques have been developed in recent years in order to reduce the use of cutting fluids and improve the workability of materials in environmentally friendly conditions. Some of these modern techniques are: minimum amount of lubrication (MQL), minimum amount of cryogenic lubrication (MQCL), and high-pressure cooling (HPC).

In this Special Issue, we are especially interested in publishing articles on sustainable lubrication in machining. Additionally, we welcome the submission of review articles describing the current state of related technology.





an Open Access Journal by MDPI

## **Editor-in-Chief**

**Prof. Dr. Antonio J. Marques  
Cardoso**

CISE—Electromechatronic  
Systems Research Centre,  
University of Beira Interior,  
Calçada Fonte do Lameiro, P -  
6201-001 Covilhã, Portugal

## **Message from the Editor-in-Chief**

*Machines* is an international, peer reviewed journal on machinery and engineering. It publishes research articles, reviews and communications.

Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. Full experimental and/or methodical details must be provided.

There are, in addition, unique features of this journal: Manuscripts regarding research proposals and research ideas will be particularly welcomed; Electronic files or software regarding the full details of the calculation and experimental procedure - if unable to be published in a normal way can be deposited as supplementary material.

## **Author Benefits**

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within *Scopus*, *SCIE (Web of Science)*, *Inspec*, and other databases.

**Journal Rank:** JCR - Q2 (*Engineering, Mechanical*)

## **Contact Us**

---

*Machines* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/machines](http://mdpi.com/journal/machines)  
[machines@mdpi.com](mailto:machines@mdpi.com)  
[X@Machines\\_MDPI](https://twitter.com/Machines_MDPI)