Special Issue

Sustainable Lubrication in Machining

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.

Guest Editors

Dr. Fuat Kara

Dr. Hargovind Soni

Prof. Dr. Uğur Köklü

Dr. Onur Özbek

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

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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.

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

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