



an Open Access Journal by MDPI

Novel Analysis of Tribological Characterization in Machining Processes

Guest Editors:

Prof. Dr. Pedro Rosa

IDMEC, Instituto Superior
Técnico, Universidade de Lisboa,
Av. Rovisco Pais, 1049-001
Lisboa, Portugal

Dr. Abílio M. P. De Jesus

Department of Mechanical
Engineering, Faculty of
Engineering, University of Porto,
4200-465 Porto, Portugal

Deadline for manuscript
submissions:

closed (20 December 2022)

Message from the Guest Editors

In machining technologies, friction between the cutting tool and the chip is a key parameter that influences the productivity and quality of the machined part. Despite this, obtaining realistic friction input data for simulation-based analysis and optimization methodologies remains an issue.

This Special Issue will focus on the latest advances in machining tribology related to the development of new experimental techniques and comprehensive theoretical models to support the effective simulation of the chip formation mechanics. Review articles and novel research papers are invited.

Keywords

- machining
- metal cutting
- tribology
- friction
- lubrication
- wear
- dry sliding
- surface roughness
- tribo-oxidation
- stick-slip



mdpi.com/si/65423

Special Issue



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica,
Politecnico di Milano, Piazza L.
da Vinci 32, 20133 Milano, Italy

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q1 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)

Contact Us

Applied Sciences Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/applsci
applsci@mdpi.com
[X@Applsci](#)