



machines

an Open Access Journal by MDPI



Advancements and Challenges in Wire Electrical Discharge Machining (WEDM) Processes

Guest Editor:

Prof. Dr. Chaojiang Li

School of Mechanical
Engineering, Beijing Institute of
Technology, Beijing 100081,
China

Deadline for manuscript
submissions:

30 June 2024

Message from the Guest Editor

Wire electrical discharge machining (WEDM) is a highly advanced and widely used machining process that has revolutionized the manufacturing industry. It involves the use of an electrically charged wire to cut through various materials, including metals, ceramics, and composites, to create precise and intricate shapes. Over the years, WEDM has become increasingly popular due to its high accuracy, flexibility, and cost-effectiveness. As a result, it has been widely adopted in industries such as aerospace, automobiles, medicine, and electronics, where precision and high-quality parts are essential.

This Special Issue in *Machines* aims to provide a comprehensive overview of recent advancements and challenges in WEDM processes. The Special Issue seeks original research articles, review articles, and case studies that address key topics related to WEDM, including new materials, novel process developments, optimization, and innovative applications. The Special Issue also welcomes papers about challenges in WEDM, such as tool wear, surface roughness, and machining time, as well as how researchers address these issues using advanced technologies and techniques.



mdpi.com/si/192102

Special Issue



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

mdpi.com/journal/machines
machines@mdpi.com
X@Machines_MDPI