metals

an Open Access Journal by MDPI

IMPACT FACTOR 3.1

CITESCORE 5.7

Modelling and Simulation of Sheet Metal Forming Processes

Guest Editors:

Prof. Dr. Marta Oliveira
Centre for Mechanical Engineering, Materials and Processes (CEMMPRE), University of Coimbra, 3030-788 Coimbra, Portugal

Prof. Dr. José Valdemar Fernandes
Centre for Mechanical Engineering, Materials and Processes (CEMMPRE), University of Coimbra, 3030-788 Coimbra, Portugal

Deadline for manuscript submissions:
closed (31 August 2019)

Message from the Guest Editors

Modelling and simulation of sheet metal forming processes involve continuous developments in different areas, such as: (i) constitutive modelling, including hardening, anisotropy and damage; (ii) friction modelling; (iii) failure criteria; (iv) strategies for parameters identification of constitutive, friction and failure models; (v) numerical models for description of the contact with friction conditions, including deformable tools; (vi) numerical strategies for the analysis of multistep sheet metal forming processes; (vii) optimization procedures combined with numerical simulation, to define forming process parameters; (viii) numerical simulation combined with statistical analysis tools; and (ix) application to novel sheet metal forming processes and materials, such as warm forming and multi-layer sheets.

The aim of this Special Issue is to collect full papers, communications and reviews, about modeling and numerical simulation of sheet metal forming processes, which may contribute to bridge the gap between dream and virtual reality.

metals

IMPACT FACTOR 3.1

CITESCORE 5.7

an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Yong Zhang
Beijing Advanced Innovation Center of Materials Genome Engineering, State Key Laboratory for Advanced Metals and Materials, University of Science and Technology Beijing, 30 Xueyuan Road, Beijing 100083, China

Message from the Editor-in-Chief

Metallic materials play a vital role in the economic life of modern societies; contributions are sought on fresh developments that enhance our understanding of the fundamental aspects related to the relationships between processing, properties and microstructure – disciplines in the metallurgical field ranging from processing, mechanical behavior, phase transitions and microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

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, Ei Compendex, CAPlus / SciFinder, and other databases.
Journal Rank: JCR - Q2 (Metallurgy and Metallurgical Engineering) / CiteScore - Q1 (Metals and Alloys)

Contact Us

Metals Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/metals
metals@mdpi.com
𝕏@Metals_MDPI