





an Open Access Journal by MDPI

Numerical Modelling and Simulation of Metal Processing

Guest Editor:

Prof. Dr. Christof Sommitsch

Institute of Materials Science, Joining and Forming, Graz University of Technology, Kopernikusgasse 24, A-8010 Graz, Austria

Deadline for manuscript submissions:

closed (30 December 2020)

Message from the Guest Editor

Dear Colleagues,

The service properties of materials strongly depend on the chemical composition, as well as their processing conditions. The specific applications and the optimization of thermal and thermo-mechanical processes, respectively, enable both, to save processes and to treat new alloy variants, as well as to realize materials with special properties. The numerical simulation of metal processing, coupled with the modelling of the structural evolution allows to reduce time and cost expensive tests at lab and industrial scale. Here, multi-scale modelling is an appropriate means to describe the development of the nano, micro and macro structure and, hence, to determine the local materials properties.

Prof. Christof Sommitsch Guest Editor











an Open Access Journal by MDPI

Editors-in-Chief

Prof. Dr. Hugo F. Lopez

Department of Materials Science and Engineering, College of Engineering & Applied Science, University of Wisconsin-Milwaukee, 3200 N. Cramer Street, Milwaukee, WI 53211, USA

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 Editorial Board

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 metallurgical field the 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 <u>article processing charges</u> (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 - Q2 (Metallurgy & Metallurgical Engineering) / CiteScore - Q1 (Metals

and Alloys)

Contact Us

Metals Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/metals metals@mdpi.com X@Metals_MDPI