



an Open Access Journal by MDPI

# **Analysis and Modeling of Sheet Metal Forming Processes**

Guest Editor:

### Message from the Guest Editor

#### Prof. Dr. Markus Bambach

Advanced Manufacturing Lab, Department of Mechanical and Process Engineering, Institute of Virtual Production, ETH Zurich, Leonhardstrasse 27, Building LEO C1, 8092 Zürich, Switzerland

Deadline for manuscript submissions: closed (31 March 2019) Dear Colleagues,

This Special Issue on the "Analysis and Modelling of Sheet Metal Forming Processes" focuses on contributions that detail new developments and enhance the understanding of sheet metal forming analysis and modeling. The topics of interest include (but are not limited to):

- Methods for the optimization, robust design and control of sheet metal forming processes
- Through process Modeling from sheet production to crash simulation
- Advanced Damage Modeling for sheet and tool material
- Prediction of residual stresses and springback
- Novel methods for characterization of sheet metal forming properties and parameter identification
- Models for new sheet materials (monolithic and hybrid)
- Models for flexible and sheet-bulk forming processes
- Constitutive Modeling of sheet metal, especially multi-scale analysis
- Models for warm forming of sheet metal
- Friction models, especially for new tribological conditions such as dry forming or forming with structured tool surfaces
- New element formulations and solution techniques

I am very much looking forward to your contributions.









an Open Access Journal by MDPI

# **Editor-in-Chief**

#### Prof. Dr. Steven Y. Liang

George W. Woodruff School of Mechanical Engineering, Georgia Institute of Technology, Atlanta, GA 30332-0405, USA

### Message from the Editor-in-Chief

Journal of Manufacturing and Materials Processing (JMMP) (ISSN 2504-4494) is a new MDPI peer-reviewed, open access venue with a focus on the scientific fundamentals and engineering methodologies of manufacturing and materials processing. We offer an online platform facilitating effective exchange of innovative scientific and engineering ideas and the dissemination of recent, original, and significant research and developmental findings. On behalf of the Editorial Board, I extend an invitation to our scientific and engineering colleagues to contribute highquality, innovative, and ground-breaking research articles to *JMMP*.

## **Author Benefits**

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions. **High Visibility:** indexed within Scopus, ESCI (Web of Science), Inspec, CAPlus / SciFinder, and other databases. **Journal Rank:** CiteScore - Q1 (*Mechanical Engineering*)

# **Contact Us**

*Journal of Manufacturing and Materials Processing* Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/jmmp jmmp@mdpi.com X@JMMP\_MDPI