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Analysis and Design of Metal Forming Processes II

Guest Editor:

Prof. Dr. Sergei Alexandrov

 Laboratory of Technological Processes, Ishlinsky Institute for Problems in Mechanics of the Russian Academy of Sciences, 119526 Moscow, Russia
School of Mechanical Engineering and Automation, Beihang University, Beijing 100191, China

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Message from the Guest Editor

Large-scale bulk forming processes are widely used for the processing of materials. The analysis and design of such processes require accurate constitutive equations and boundary conditions. New experimental techniques are needed for developing accurate constitutive equations at large strains. Of special importance are the constitutive equations for the prediction of the evolution of ductile damage and plastic anisotropy. Friction has a great effect on material flow in forming processes. The development of new friction tests is a vital aspect of the successful analysis and design of material forming processes. On the other hand, fast computational methods are needed for solving boundary value problems, especially when calculations are to be performed in real time. The development of analytic methods is useful for understanding some general tendencies in solution behavior and for verifying numerical solutions

In this Special Issue, we seek to provide a wide set of articles on various aspects of bulk forming processes. We are also seeking articles devoted to both experimental and theoretical (analytical and numerical) approaches, as well as a combination of these approaches.









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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. and mechanical behavior. phase transitions microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

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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