Special Issue

Computational Methods in Metal Manufacturing Processes

Message from the Guest Editors

Virtual manufacturing is attracting increased interest for its capability to improve or invent product designs while respecting a responsible life cycle. The industrial application of virtual manufacturing requires the development of new efficient numerical strategies for simple calibration, easy use, and fast results, despite the complexity of the nonlinear coupled problems that must be solved. This Special Issue, entitled "Computational Methods in Metal Manufacturing Processes", will focus on this purpose. Our goal is to publish a notable issue on this topic, covering areas including (but not limited to) assembling processes; bulk and sheet metal forming; machining, drilling, and grinding processes; additive manufacturing; tribology and surface engineering processes; control and optimization of manufacturing processes; modeling and numerical methods for forming and manufacturing processes, including constitutive modeling for forming and manufacturing of metals, reduced order modeling (ROM), and proper generalized decomposition (PGD).

Guest Editors

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Deadline for manuscript submissions

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About the Journal

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 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.

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