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Computational Methods in Manufacturing Processes

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Deadline for manuscript submissions:

closed (31 December 2019)

Message from the Guest Editors

Dear Colleagues,

"Computational Modeling in Manufacturing Processes" has been a very active field of research in the last few decades. Significant advances in this field have been the result of interdisciplinary multi-physics and multiscale research in related fields of computational mechanics, constitutive material models, and mathematical analysis. Additionally, during this period, industry has shown a growing interest in incorporating numerical techniques as a valuable tool for design and process optimization.

Topics addressed in this Special Issue may include, but are not limited to:

- Computational modelling
- Numerical simulation
- Finite Elements
- Stabilization methods
- Thermomechanical formulations
- Material properties
- Metallurgical characterization
- Numerical methods
- Industrial applications
- Additive Manufacturing (AM) processes
- Friction Stir Welding (FSW) processes
- Casting processes
- Rolling processes
- Sheet Metal Forming (SMF) processes











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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.

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