Special Issue

Implementation of the Industry 4.0 Manufacturing—New Systems, Technologies and Outcomes

Message from the Guest Editors

This Special Issue will present the latest achievements in several industrial application scenarios, leading to the so-called Industry 4.0 and the latest research related to the computational methods for a wide range of industrial applications. Both research and review articles focusing on new developments in the new digital industrial technology (Industry 4.0) are welcome for consideration of publication. We truly believe that this Special Issue will help the research community to enhance understanding of the present status and trends of the advanced digital technologies. Topics of interest include (but are not limited to) the following:

- Additive and hybrid manufacturing (3D printing, direct energy deposition, digital manufacturing, incremental forming, fused filament fabrication);
- Automation of manufacturing process;
- Cloud computing and manufacturing;
- New approaches to computational methods in materials science;
- Implementation of Industry 4.0 in the aerospace and automotive industries;
- Machine learning for manufacturing;
- Numerical modeling of the industrial processes (i.e., FEM, BEM, CFD, multi-grid and mesh-free methods, CPFEM, DEM, XFEM, ALE);

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Message from the Editor-in-Chief

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.

Editor-in-Chief

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