Special Issue

Finite Element Modelling of Metal Cutting Processes

Message from the Guest Editor

The finite element modelling of metal cutting processes has been a very active field of research in the last few decades. Significant advances and benchmark results in this field have been achieved as a result of interdisciplinary research in the related fields of finite element simulation, metal cutting mechanics, material constitutive modelling, surface integrity modelling, and experimental verification developments. In addition, in recent decades industry has shown a growing interest in adopting finite element modelling as a valuable tool for process optimization, cutting tool design, and process innovation. This Special Issue, entitled *Finite Element Modelling of Metal Cutting Processes*, intends to identify state-of-the-art developments in the field made by well-known researchers who have contributed significantly to the field and to provide a broad view of the field to readers in the manufacturing community.

Guest Editor

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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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