



Mechanical and Microstructural Characterisations of Nickel Based Superalloys

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Message from the Guest Editor

In this Special Issue of *Metals*, an open access forum is provided for publishing original papers that investigate the correlations between thermomechanical processing parameters and generated microstructure to understand the physical and mechanical properties of nickel-based superalloys. The following aspects of the science and engineering of nickel-based superalloys are of particular interest:

- Original research studies that relate to the understanding of mechanical properties of nickel based superalloys obtained following specific processing/heat treatment route (experimental, theoretical, and simulation modeling).
- Understanding the mechanisms involved in microstructure evolution and phase transformation during processing of nickel based superalloys, specifically as they relate to the understanding of final mechanical properties.
- Nano/micro/macro structure characterization and chemistry of nickel based superalloys used in power generation, nuclear, aerospace, and other critical applications.
- Micro/macro texture devolvement during thermo-mechanical processing of nickel based superalloys.





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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 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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