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# News Trends in Powder Metallurgy: Microstructures, Properties, Durability

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Deadline for manuscript submissions:

closed (1 May 2021)

# **Message from the Guest Editors**

Dear Colleagues,

Elaboration of sintered metallic alloys is currently one of the main ways of developing structural parts, compared to traditional methods of casting or plastic deformation processes. In this Special Issue, we propose a review of the scientific advances in this field, covering all the areas concerned, especially (though non-exhaustively):

- Powder properties, nanostructuration, mechanical alloying, and aging;
- Additive manufacturing by powder bed melting processes;
- Mechanical properties: fatigue, creep, plasticity mechanisms;
- Physical properties: magnetism, electrical conduction;
- Damage, fracture, effect of the environment: oxidation, electrochemical corrosion.

This Special Issue seeks to provide a selection of original research on the impact of the microstructure on the mechanical and functional properties of metallic alloys obtained by sintering and additive manufacturing routes. Submissions dealing with new microstructures and specific properties of metal powders are also welcome. As Guest Editors of this Special Issue, we invite you to submit your work, which will be peer-reviewed, to be accepted for publication in *Metals*.

**Special**sue









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# **Editors-in-Chief**

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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. and mechanical behavior. phase transitions microstructural evolution, nanostructures, as well as unique metallic properties – inspire general and scholarly interest among the scientific community.

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