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Casting of Aluminum Alloy and Porous Metal

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Message from the Guest Editors

Expanding the use of porous metals or metal foams with both artificially made closed or interconnected internal cavities—the pores—in their structure with different layouts, shapes, and sizes is providing new opportunities for foundry aluminum alloys to be a leading material for various applications. Their valued attributes result from the advantageous combination of aluminum alloy properties with the porous metal material qualities.

This Special Issue will be devoted to theoretical and experimental observations in the field of simulations, research, and development of aluminum alloys for foundry purposes, with the aim of gathering and presenting advances in the numerous production technologies for aluminum castings and to address various aspects of their use in the field of porous metals. Articles from the academic or industrial sector that deal with the development of foundry production technologies for porous metals and metal foams, along with the examination of their structure and properties, will also be highly appreciated.









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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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