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# **Metallic Glasses and Composites**

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### Message from the Guest Editors

Metallic glass is still a relatively young class of materials, which then present high perspectives but yet full of challenges. It is often mentioned that its bulk form has exceptional mechanical properties (high strength, elastic deformation). However, it suffers from the absence of plastic deformation, low thermal stability, and forming ability. Association of a metallic glass with a crystalline phase has soon been considered with a high potential to produce plasticity, for example. It has also guickly been observed that metallic glass composite opens extended perspectives in terms of functional properties with relevant phase coupling and flexibility in microstructural conception and formation. This special issue focuses on up to date results on metallic glasses and their composites. Articles are welcomed, reporting on the various possible structures, mixing glass and 2<sup>nd</sup> phase (glass-crystal, glassglass, metallic, ceramic ..., micro/nanostructure), in situ (partial devitrification) and ex-situ (mixing of phases) formation and processing as well as properties (mechanical, magnetic, shape-memory ...).

Dr. Champion Yannick Prof. Moreira Jorge Alberto Junior *Guest Editors* 









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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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