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Semisolid Processing and Squeeze Casting of Alloys and Composites

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Deadline for manuscript submissions: closed (20 May 2023)

Message from the Guest Editors

Semisolid processing (SSP) and squeeze casting (SC) are two typical near-net-shape technologies for forming of alloys and composites. They have been widely used in the automotive, motorcycle, aerospace, weapons, and 3C fields due to their low resistance to deformation, short processing time, and low cost.

Semisolid processing and squeeze casting depend on the optimization of microstructure and properties, numerical simulation of processes, and the development of new materials. This Special Issue aims to cover recent progress and new developments in the relationships between the microstructures and mechanical properties of products formed by SSP or SC. All aspects related to SSP or SC, semisolid slurry fabrication, rheoforming and thixoforming, physical and numerical simulation of SSP and SC, process optimization of squeeze casting, and heat treatment of products formed by SSP and SC are of interest. Submissions of full papers, communications, and reviews are all welcome.









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Message from the Editor-in-Chief

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