

Special Issue

Foundry Aluminum Alloys: Casting Metallurgy and Processes

Message from the Guest Editors

This Special Issue is devoted to experimental and numerical research concerning the foundry processes and sub-processes of foundry aluminum alloys, along with the evaluation of the microstructural and mechanical properties of castings. Contributions from industry and/or academia dealing with cutting-edge development in foundry processes and technologies, both as original research papers and review articles, will be highly appreciated. Topics of interest include:

- Casting process improvements devoted to both technological innovation and sustainable manufacturing;
- Case studies on or failure analysis of cast aluminum alloys;
- Investigations on the melt treatments, solidification processes and heat treatments of foundry aluminum alloys and their effect on microstructure and mechanical behavior;
- Development of new alloys: microstructural, chemical and physical properties evaluation and/or numerical simulation.

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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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