



## Alloys Casting: Materials, Technologies, and Applications

Guest Editors:

**Prof. Dr. Annalisa Pola**

Department of Mechanical and Industrial Engineering, University of Brescia, via Branze 38, 25123 Brescia, Italy

**Prof. Marcello Gelfi**

Department of Mechanical and Industrial Engineering, University of Brescia, via Branze 38, 25123 Brescia, Italy

Deadline for manuscript submissions:  
**closed (31 March 2020)**

### Message from the Guest Editors

Dear Colleagues,

Foundry processes are now widely applied for the manufacturing of near net shape products for different applications, ranging from structural or mechanical fields. In order to guarantee the obtainment of high-quality cast parts that are able to fulfil the industrial requirements, the alloy has to be properly chosen and treated, and the mold, runners, and gating systems have to be accurately designed. This Special Issue aims at disseminating the most recent developments and research in foundry, dealing with both the metal engineering and casting technologies.

Papers on the microstructural and mechanical characterization of castings as well as on the improvement or innovation of alloys and processes are strongly encouraged, especially if compared with conventional ones.

As liquid metal preparation, heat treatments and finishing operations are known to affect the final properties of cast parts, studies exploring these topics are welcome.

Additionally, the Guest Editors of this Special Issue also appreciate papers dealing with the simulation and modelling of foundry processes.





an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada

2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

## 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.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

**Journal Rank:** JCR - Q2 (Metallurgy and Metallurgical Engineering) / CiteScore - Q1 (Condensed Matter Physics)

## Contact Us

*Materials* Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/materials](http://mdpi.com/journal/materials)  
[materials@mdpi.com](mailto:materials@mdpi.com)  
[X@Materials\\_Mdpi](https://twitter.com/Materials_Mdpi)