# **Special Issue**

# Magnesium Alloys: Microstructure, Mechanical Properties and Biomedical Application

### Message from the Guest Editor

In recent years, magnesium and magnesium alloys have been the subject of much research for their potential use in biomedical applications. Mg alloys can be used for making bio-degradable implants, which would gradually degrade in the body and thus, would eliminate the need for secondary surgeries for implant removal. However, there are many challenges in this way that need further focus and research. In this Special Issue, original research articles and reviews are welcome. Research areas and topics are related to Mg and Mg alloys for biomedical applications, and may include (but are not limited to) the following:

- Production, processing and recycling techniques.
- Alloy development.
- In vivo and in vitro cell studies.
- Correlation between microstructure and properties (Mechanical, degradation, cellular).
- Mechanical properties, more interestingly evaluated in psychological environments.
- Biodegradable Mg devices, including temporary implants and batteries.
- Application and properties of coatings on these alloys

### **Guest Editor**

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### Deadline for manuscript submissions

closed (31 October 2023)



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## **About the Journal**

### Message from the Editor-in-Chief

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 the metallurgical field 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.

#### Editor-in-Chief

### Prof. Dr. Yong Zhang

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#### **Author Benefits**

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### **Journal Rank:**

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### **Rapid Publication:**

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the first half of 2025).

