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Corrosion and Mechanical Performance of Magnesium Alloys

Guest Editors:

Message from the Guest Editors

Dr. Björn Wiese

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Deadline for manuscript submissions: 10 February 2025 Dear Colleagues,

Magnesium and its alloys can be used in a wide range of applications, from lightweight structures to medical implants, but there are always concerns about resistance to corrosion. This is particularly significant in the use of magnesium-based materials for medical applications where dissolution is considered desirable. There is also a significant difference here, usually speaking of the desired targeted degradation rates for the degradable implants rather than undesirable corrosion rates for structural applications. In the case of structural applications for lightweight construction, a greater number of components are coated in order to increase the service life for performance and sustainability reasons. Cleaning and coating are also important for applications in medical technology. Therefore, the aim of this Special Issue is to understand the complex relationships to enable the development of a more targeted and sustainable alloy processing, cleaning and coating. In addition to the classical empirical research and development methods, modelling and simulation approaches are also very welcome.

We look forward to receiving your submissions.



Specialsue





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Editor-in-Chief

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Message from the Editor-in-Chief

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