# Special Issue

# High-Entropy Alloy and Compositionally Complex Alloys: Challenges and Prospects for Applications in Corrosive Environments

## Message from the Guest Editors

In the last decade, high-entropy alloys (HEAs) have gained increased attention as a new class of metallic materials with improved mechanical properties and corrosion resistance for environments where high-temperature strength and corrosive challenges prevail. HEAs are multi-component alloys which consist of equiatomic mixtures or near-equal proportions of five or more elements. They tend to form simple solid-solution structures due to their high mixing entropy, with single-phase crystal structures being more studied. The sluggish diffusion and severe lattice distortions of HEAs have a large effect on their microstructures and properties. These characteristics are considered to be of critical importance for providing the good properties of HEAs, such as high hardness and strength, corrosion, and wear resistance.

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## Deadline for manuscript submissions

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