## **Special Issue**

# A Hands-On Guide to the Synthesis of Bimetallic Catalysts

#### Message from the Guest Editors

Bimetallic metal catalysts, i.e., catalysts based on alloys, represent an increasingly important class of technical materials due to their reportedly improved performance in various relevant applications. Indeed, it has long been known that the catalytic behavior of metals, from bulk to nanoscale, can strongly be modified by alloying. In addition, the catalytic performance (activity, selectivity, or stability) of the alloys often exceeds the overall performance of the monometallic constituents, which is highly appealing. Typically, this phenomenon requires a certain kind of cooperation between different components or active sites in one catalyst (synergism).

This Special Issue intends to collect dedicated review articles and case studies, preferably tutorial articles and technical reports, concerned with the synthesis of bimetallic metal catalysts, ranging from bulk alloys to supported nanoparticles and single-atom alloys. In addition, attention shall be given to the characterization methods used to corroborate their nature, particularly their stability under practical conditions, and to evaluate them in target catalytic reactions.

### **Guest Editors**

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## Deadline for manuscript submissions

closed (29 March 2024)



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Impact Factor 2.4 CiteScore 5.0



mdpi.com/si/170882

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Impact Factor 2.4 CiteScore 5.0



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## Message from the Editor-in-Chief

Welcome to *Crystals*, the journal dedicated to the fascinating world of crystallographic research! Crystals are more than mere decorative elements; they hold the key to understanding the fundamental structure of matter. Our mission is to explore the crucial significance of this research across various fields. From medicine to technology, chemistry to geology, crystals play a vital role. Their structure provides insights into new advanced materials, innovative drugs, and groundbreaking technologies. Through *Crystals*, we delve into the microscopic world to discover solutions that will shape the future. Join us on a journey through the *Crystals*, where science merges with beauty and innovation.

#### Editor-in-Chief

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