Special Issue

In Situ/Operando Characterization of Complex Materials Employing Advanced Synchrotron-Based Techniques

Message from the Guest Editor

The interest in the development of bimetallic catalysts is growing fast due to the important role played by these catalysts in the field of energy, environment, and industry. Bimetallic nanoparticle catalysts are promising because the synergy between two metals can lead to enhanced activity in catalysis or allow for bifunctional properties such as magnetic and plasmonic properties. Assessing the structure-activity relationship of these complex catalyst systems is a major challenge as there are several parameters affecting the measurements. Submissions to this Special Issue are welcome in the form of original research papers which will cover in situ/operando characterization of bimetallic catalysts by employing advanced synchrotron-based techniques and rigorous data analysis methods to unravel the minute structural/phase changes occurring during catalytic reactions.

Guest Editor

Dr. Abhijeet Gaur

Institute of Technical and Polymer Chemistry, Karlsruhe Institute of Technology, Karlsruhe, Germany

Deadline for manuscript submissions

closed (30 July 2023)



Catalysts

an Open Access Journal by MDPI

Impact Factor 4.0 CiteScore 7.6



mdpi.com/si/97299

Catalysts
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
catalysts@mdpi.com

mdpi.com/journal/catalysts





Catalysts

an Open Access Journal by MDPI

Impact Factor 4.0 CiteScore 7.6



About the Journal

Message from the Editor-in-Chief

Editor-in-Chief

Prof. Dr. Keith Hohn

Carl R. Ice College of Engineering, Kansas State University, Manhattan, KS, USA

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), Inspec, Ei Compendex, CAPlus / SciFinder, CAB Abstracts, and other databases.

Journal Rank:

JCR - Q2 (Chemistry, Physical) / CiteScore - Q1 (General Environmental Science)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.6 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).

