# Special Issue

# Advances in Catalytic Oxidation of Methane and Carbon Monoxide

## Message from the Guest Editors

This Special Issue aims to provide an account of recent advances in the catalytic oxidation of methane and carbon monoxide. Concepts:

- Development of catalysts, catalytic reactions, and processes; chemical engineering reactor design, reaction kinetics and mechanism; optimum conditions, catalytic efficiency, stability and sustainability, resistance to steam deactivation.
- Determination of the structure and morphology of the catalyst and support, interactions of the support with the catalyst, changes in crystallite sizes, shape and chemical state of the catalyst in the presence of the support, catalyst–support interfaces, structural variations in the catalyst, effects of catalyst–support interactions on particle size distribution.
- Techniques: Improvements/innovations in catalytic process development and reactor design; analytical; chemisorption and temperature programmed reduction; theoretical/computational studies.

Applications: Catalytic activity, reaction rate, activation energy, reaction mechanism; development of more sustainable catalysts.

## Guest Editors

Prof. Dr. Anil Banerjee

Prof. Dr. Hongxing Dai

Prof. Dr. Junhu Wang

Prof. Dr. Patrick Da Costa

## Deadline for manuscript submissions

closed (31 December 2021)

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**Impact Factor 4.0**
**CiteScore 7.6**

mdpi.com/si/70488

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# About the Journal

## Message from the Editor-in-Chief

## Editor-in-Chief

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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).

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