

Special Issue

Nanocatalysts: Organic/Inorganic Nanosystems as Biomimetic Catalysts

Message from the Guest Editors

Nature has always represented the main inspiration source for chemists. During a long design and optimization period (over 4 billion years), nature has realized hybrid organic/inorganic nanosystems, able to act as optimal catalysts towards many different organic reactions. These catalytic nanosystems are called enzymes. In recent decades, taking into account the enzymatic mechanism, researchers developed a wide range of synthetic catalysts, with nanoscopic dimensions, which mimic the enzymatic reaction: the biomimetic catalysts. This Special Issue will collect recent developments in this field, highlighting the employing of new nanostructured organic and inorganic catalysts. Particular attention will be devoted to new eco-friendly nanosystems, able to work in “green-conditions”. There will be a focus on contributions regarding chiral catalysts, due to the importance of asymmetric reactions in the organic synthesis, in particular for the wide applications in pharmaceuticals, agricultural chemicals, and functional materials.

Guest Editors

Dr. Giuseppe Trusso Sfrazzetto

Department of Chemical Science, University of Catania, Catania, Italy

Dr. Andrea Pappalardo

Department of Chemical Sciences, University of Catania, Viale A. Doria 6, 95100 Catania, Italy

Deadline for manuscript submissions

closed (31 July 2019)



Catalysts

an Open Access Journal
by MDPI

Impact Factor 4.0
CiteScore 7.6



mdpi.com/si/21949

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

[mdpi.com/journal/
catalysts](https://mdpi.com/journal/catalysts)





Catalysts

an Open Access Journal
by MDPI

Impact Factor 4.0
CiteScore 7.6



[mdpi.com/journal/
catalysts](https://mdpi.com/journal/catalysts)



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).