Special Issue

Nanomaterial-Mediated Green Catalysis

Message from the Guest Editors

The 18th century marked a pivotal shift towards large-scale production during the Industrial Revolution, bringing both progress and significant environmental challenges. The scientific community encounters innovative challenges in developing materials and processes that are more sustainable. This involves minimizing waste, enhancing catalyst performance through materials engineering, and, critically, substituting toxic solvents with more sustainable alternatives. Meanwhile, renewable sources play an essential role, with green hydrogen and water-splitting processes highlighted as promising alternatives aligned with the pursuit of a more sustainable and clean energy future. This Special Issue, titled "Green Catalysis Facilitated by Nanomaterials", aims to cover recent advances in the synthesis of new materials and processes aligned with the concept of green catalysis. Topics of interest for this Special Issue include, but are not limited to, the following:

- Catalysis in Sustainable Hydrogen Production;
- Degradation of Emerging Contaminants through Catalysis;
- Catalytic Synthesis for Obtaining Value-Added Molecules;
- Carbon Dioxide Capture;
- Use of Biochar in Catalysis.

Guest Editors

Dr. Renata Lopes Moreira

Department of Chemistry, Federal University of Viçosa, Viçosa 36.570-900, MG, Brazil

Dr. Guilherme Max Dias Ferreira

Department of Chemistry, Institute of Natural Sciences, Federal University of Lavras, University Campus, Lavras 3037, MG, Brazil

Deadline for manuscript submissions

closed (20 May 2025)

Processes

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.5

mdpi.com/si/197512

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

mdpi.com/journal/processes

Processes

an Open Access Journal by MDPI

Impact Factor 2.8
CiteScore 5.5

mdpi.com/journal/processes

About the Journal

Message from the Editor-in-Chief

You are invited to contribute either a research article or a comprehensive review for consideration and publication in *Processes* (ISSN 2227-9717). *Processes* is published in open access format – research articles, reviews, and other content are released on the internet immediately after acceptance. The scientific community and the general public have unlimited, free access to the content. As an open access journal, *Processes* is supported by the authors and their institutes through the payment of article processing charges (APCs) for accepted papers. We would be pleased to welcome you as one of our authors.

Editor-in-Chief

Prof. Dr. Giancarlo Cravotto
Department of Drug Science and Technology, University of Turin, Via P. Giuria 9, 10125 Turin, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, Inspec, AGRIS, and other databases.

Journal Rank:

CiteScore - Q2 (Chemical Engineering (miscellaneous))

MDPI