Special Issue

Advanced Chemical Engineering in Nanoparticles

Message from the Guest Editors

Nanoparticles, with dimensions ranging from 1 to 100 nanometers, exhibit unique properties due to their high surface-to-volume ratio. Advanced chemical engineering in nanoparticles holds great promise in revolutionizing various scientific and industrial sectors. This emerging field encompasses the synthesis process, materials characterization, physical/chemical properties, and various applications of nanoparticles. Understanding the fundamental principles behind nanoparticle chemistry and engineering is crucial for developing novel materials and devices with tailored functionalities. The physical/chemical properties of nanoparticles make them suitable for a wide range of applications. For example, Metallic nanorods find applications in catalysis, sensing and biomedical fields, while carbon nanotubes and graphene are utilized in electronics, energy storage, and composite materials. Recent cutting-edge topics in this field include the development of different kinds of nanoparticles, such as Au nanoparticles, up-conversion nanoparticles, and metal-organic frameworks, for tumour-targeting drug delivery and environmental remediation.

Guest Editors

Dr. Bei Liu

College of Science, Minzu University of China, Beijing 100081, China

Dr. Xiaoming Zhang

School of Science, Minzu University of China, Beijing, China

Deadline for manuscript submissions

closed (31 May 2024)



ChemEngineering

an Open Access Journal by MDPI

Impact Factor 3.4 CiteScore 4.9



mdpi.com/si/183012

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

mdpi.com/journal/ ChemEngineering





ChemEngineeri

an Open Access Journal by MDPI

Impact Factor 3.4 CiteScore 4.9



About the Journal

Message from the Editor-in-Chief

Editor-in-Chief

Prof. Dr. Mario J. Muñoz Batista

Department of Chemical Engineering, Faculty of Sciences, University of Granada, Avda. Fuentenueva, s/n, 18071 Granada, Spain

Author Benefits

High Visibility:

indexed within Scopus, ESCI (Web of Science), Inspec, CAPlus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Chemical) / CiteScore - Q1 (General Engineering)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 29.6 days after submission; acceptance to publication is undertaken in 5.7 days (median values for papers published in this journal in the first half of 2025).

