

## Special Issue

# Magnetic Nanoparticles in Green Manufacturing for Sustainability

### Message from the Guest Editors

In recent years, magnetic nanoparticles (MNPs) have emerged as a promising technology in the field of green manufacturing. This innovation has the potential to revolutionize the way products are manufactured, making the process more sustainable and environmentally friendly. One of the major benefits of MNPs is that they can be used as catalysts in chemical reactions, allowing for the production of products with fewer waste products and lower energy consumption. The aim of this Special Issue of *Processes* is to present the state-of-the-art applications of nanoparticles for green manufacturing, including both experimental and numerical studies. Advanced research for the recovery and reusability of MNPs in order to save resources and reduce the amount of waste produced in the manufacturing process is also welcome. In addition, innovative methods for the production of biofuels as well as cleaning and purifying contaminated water and soil procedures by using MNPs are also welcome. Contributions that study the production of biofuels, waste reduction, resource conservation, and pollution control using MNPs are also very much appreciated.

---

### Guest Editors

Dr. Evangelos Karvelas

Department of Mechanical Engineering, University of West Attica,  
12243 Athens, Greece

Prof. Dr. Theodoros Karakasidis

Department of Physics, University of Thessaly, Lamia, Greece

---

### Deadline for manuscript submissions

closed (31 March 2024)



## Processes

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.8  
CiteScore 5.5



[mdpi.com/si/162251](https://mdpi.com/si/162251)

*Processes*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[processes@mdpi.com](mailto:processes@mdpi.com)

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





# Processes

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.8  
CiteScore 5.5



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