



Synthesis and Characterization of Various Nanomaterials Based on Graphene Derivatives

Guest Editors:

**Dr. Masoud
Khaleghiabbasabadi**

Institute for Nanomaterials,
Advanced Technology and
Innovation, Technical University
of Liberec, 46001, Liberec, Czech
Republic

Dr. Daniele Silvestri

Centre for Nanomaterials,
Advanced Technologies and
Innovation, Technical University
of Liberec, Studentská 1402/2,
461 17 Liberec, Czech Republic

Deadline for manuscript
submissions:

20 May 2026

Message from the Guest Editors

Dear Colleagues,

Graphene derivatives, modified versions of graphene with tailored properties, offer enhanced functionality and versatility. Their synthesis involves the functionalization, doping, or hybridization of graphene with other materials to impart the desired properties. Their applications span a wide range of sectors, including electronics, energy storage, catalysts, and environmental remediation. Topics include, but are not limited to, the following:

- Novel synthesis approaches for graphene derivatives;
- Functionalization and doping strategies to tailor graphene properties;
- Characterization techniques for assessing graphene derivative properties;
- Advanced applications of graphene derivatives in organic chemistry, catalysts, electronics, energy, biomedicine, and environmental computational modelling and theoretical studies of graphene derivative behaviour;
- Challenges and opportunities for scaling up the production of graphene derivatives for commercialization;
- Environmental, health, and safety considerations of graphene derivative use.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Giancarlo Cravotto

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

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.

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))

Contact Us

Processes Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/processes
processes@mdpi.com
[X@Processes_MDPI](https://twitter.com/Processes_MDPI)