

Special Issue

Carbon Materials for Physical and Chemical Hydrogen Storage

Message from the Guest Editor

Carbon materials are going to play a key role in hydrogen storage technologies. In the case of physical storage, materials from slightly modified activated carbon to metal organic frameworks, also considering graphene derivatives, carbon nanofibers, nanotubes, etc., have been proposed as hydrogen adsorbents both for separation and storage purposes. Most chemical storage strategies are mainly based on catalytic hydrogenation–dehydrogenation cycles. Carbon materials are promising supports for the catalysts used in these steps because of their inert character and their ability to tune the catalytic properties of the involved active phases. Considering these facts, the aim of this Special Issue is to gather submissions (either experimental, computational, or from the point of view of process simulation) about the potential of carbon-based materials for hydrogen storage.

Guest Editor

Prof. Dr. Salvador Ordóñez García

Department of Chemical and Environmental Engineering, University of Oviedo, 33006 Oviedo, Spain

Deadline for manuscript submissions

closed (31 March 2022)



C

an Open Access Journal
by MDPI

Impact Factor 2.9
CiteScore 3.4



mdpi.com/si/88370

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

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





C

an Open Access Journal
by MDPI

Impact Factor 2.9
CiteScore 3.4



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



About the Journal

Message from the Editor-in-Chief

Editor-in-Chief

Prof. Dr. Craig E. Banks
Faculty of Science and Engineering, Manchester Metropolitan
University, Chester Street, Manchester M1 5GD, UK

Author Benefits

High Visibility:

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

Journal Rank:

CiteScore - Q2 (Environmental Science (miscellaneous))

Rapid Publication:

manuscripts are peer-reviewed and a first decision is
provided to authors approximately 24.3 days after
submission; acceptance to publication is undertaken in 3.9
days (median values for papers published in this journal in
the first half of 2025).