

# Special Issue

## Carbon-Based Materials for Electrical Power Transmission and Smart Grid Technologies

### Message from the Guest Editor

Carbon based materials for power transmission, storage, and energy conversion offer unique opportunity for application in the smart grid of the future. Example materials of interest include, but are not limited to carbon nanotubes (single wall and multi wall), graphene, graphene nanoribbons, conducting polymers, and organic semiconductors. These materials have been shown to effectively work in many pertinent applications such as transistors, conductors, semi-conductors, displays, capacitors, batteries and much more. The aim of this Special Issue is to present solutions to global energy demands using carbon-based materials within the smart grid system, whereby key technical components are improved or replaced by carbon based materials.

---

### Guest Editor

Dr. Alvin Orbaek White

Energy Safety Research Institute, Swansea University, Bay Campus,  
Swansea SA1 8EN, UK

---

### Deadline for manuscript submissions

closed (30 June 2017)



C

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.9  
CiteScore 3.4



[mdpi.com/si/7238](http://mdpi.com/si/7238)

C

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

[mdpi.com/journal/  
carbon](http://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 22.5 days after  
submission; acceptance to publication is undertaken in 2.8  
days (median values for papers published in this journal in  
the second half of 2025).