

## Special Issue

# Computational and Technological Advancements for Low-Carbon Structures

### Message from the Guest Editors

The architectural engineering and construction (AEC) industry is currently responsible for a huge part of the critical environmental damage which includes global carbon emission, ecosystem pollution, and harmful resource depletion. On the other hand, globalisation is diminishing the sustainable domestic technologies that have historically been developed based on the local materials and labour forces. Therefore, to meet sustainable development goals, we urgently need to change our engineering approach in either designing new constructions or maintaining existing buildings, including preserving our built heritage. Towards this goal, in the last few years, low-carbon materials have become of increasing interest to construction practitioners, and maximisation of their mechanical and physical performances at micro-(e.g., composite materials) and macrolevels (e.g., form-active structures) have been taken into consideration. On the other hand, recent advancements in construction technologies including transformations in digital manufacturing and construction techniques have enabled us to build with minimum construction waste and environmental impact.

---

### Guest Editors

Dr. Antonino Iannuzzo

Dr. Elham Mousavian

Dr. Pirouz Nourian

---

### Deadline for manuscript submissions

closed (31 December 2024)



## Sustainability

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.3  
CiteScore 6.8



[mdpi.com/si/129588](https://mdpi.com/si/129588)

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

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





## Sustainability

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.3  
CiteScore 6.8



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



## About the Journal

### Message from the Editor-in-Chief

I encourage you to contribute a research or comprehensive review article for consideration for publication in *Sustainability*, an international Open Access journal which provides an advanced forum for research findings in areas related to sustainability and sustainable development. *Sustainability* publishes original research articles, review articles and communications. I am confident you will find the journal contributes to enhancing understanding of sustainability and fostering initiatives and applications of sustainability-based measures and activities.

---

### Editor-in-Chief

Prof. Dr. Marc A. Rosen

Faculty of Engineering and Applied Science, University of Ontario  
Institute of Technology, Oshawa, ON L1G 0C5, Canada

---

### Author Benefits

#### Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

#### High Visibility:

indexed within Scopus, SCIE and SSCI (Web of Science), GEOBASE, GeoRef, Inspec, AGRIS, RePEc, CAPIus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q2 (Environmental Studies) / CiteScore - Q1  
(Geography, Planning and Development)