# **Special Issue**

# Advances on Utilization of Recycled and Sustainable Materials in Energy-Efficient Buildings and Infrastructural Systems

# Message from the Guest Editors

The sustainability and energy efficiency of different construction systems, made up of one or more recycled materials, can be assessed with life cycle assessment (LCA) studies and through calculating the embodied energy of each system to confirm its sustainability. Topics of interest for publication include, but are not limited to, the following:

- All aspects of the use of recycled materials in buildings and infrastructural systems;
- Life cycle assessment studies on recycled and new built systems;
- Manufacturing techniques for recycled building materials:
- Utilization of construction and demolition (C&D) materials in the production of sustainable building and infrastructural systems;
- Analytical and experimental evaluation of recycled building materials;
- Advanced modelling approaches of recycled building systems;
- Utilization of recycled tires, plastics, and wood in construction applications;
- Use of recycled materials in water- and thermalproofing materials;
- Use of recycled materials in manufacturing lightweight construction materials;
- Health and safety aspects in the use of recycled materials (e.g., PFAS effects).

#### **Guest Editors**

Prof. Dr. Ayman S. Mosallam

Prof. Dr. Brahim ELBHIRI

Dr. Shaohua He

Prof. Dr. Shadi M. Saadeh

Prof. Dr. Haohui Xin



# **Energies**

an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 7.3



mdpi.com/si/138033

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

mdpi.com/journal/ energies





# **Energies**

an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 7.3



# **About the Journal**

## Message from the Editor-in-Chief

Energies is an international, open access journal in energy engineering and research. The journal publishes original papers, review articles, technical notes, and letters. Authors are encouraged to submit manuscripts which bridge the gaps between research, development and implementation. The journal provides a forum for information on research, innovation, and demonstration in the areas of energy conversion and conservation, the optimal use of energy resources, optimization of energy processes, mitigation of environmental pollutants, and sustainable energy systems.

### Editor-in-Chief

Prof. Dr. Enrico Sciubba

Department of Mechanical and Industrial Engineering, University Niccolò Cusano, 00166 Roma, 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, RePEc, Inspec, CAPlus / SciFinder, and other databases.

### Journal Rank:

CiteScore - Q1 (Control and Optimization)

