



an Open Access Journal by MDPI

# **Unconventional Hydrogen Applications and Systems**

Guest Editor:

# Dr. Arash Badakhsh

Power Networks Demonstration Centre, University of Strathclyde, Glasgow G1 1XQ, UK

Deadline for manuscript submissions:

31 March 2025

### Message from the Guest Editor

Dear Colleagues,

The energy sector is transitioning to use hydrogen as the main vector to replace fossil fuels. Hydrogen is a promising molecule that can store energy with a high density (33.33 kWh/kg by lower heating value). However, what happens to all the fossil fuel resources we are left with? And where can we actually apply hydrogen to replace fossil fuels?

To attempt to answer these significant questions, this platform mainly aims to collect and report data from unconventional and novel applications of hydrogens, including disruptive systems for hydrogen production from unconventional sources of energy like nuclear. hydropower, tidal and wave energy. Moreover, the application of hydrogen for decarbonising underrated but highly emitting sectors like domestic, aviation, etc. requires further investigation before large-scale deployment. This special issue is a great opportunity for novel industrial projects on the feasibility of unconventional hydrogen applications and systems.

Dr. Arash Badakhsh *Guest Editor* 









an Open Access Journal by MDPI

## **Editor-in-Chief**

#### Prof. Dr. Enrico Sciubba

Department of Mechanical and Aerospace Engineering, University of Roma Sapienza, Via Eudossiana 18, 00184 Roma, Italy

### 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.

# **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)

### **Contact Us**

*Energies* Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/energies energies@mdpi.com X@energies\_mdpi