





an Open Access Journal by MDPI

# **Volume II: Energy Resource Potential of Gas Hydrates**

Guest Editors:

#### Dr. Federico Rossi

Engineering Department, University of Perugia, Via G.Duranti 67, 06125 Perugia, Italy

### Dr. Beatrice Castellani

Department of Engineering, CIRIAF, University of Perugia, Via G.Duranti 67, 06125 Perugia, Italy

Deadline for manuscript submissions:

closed (31 December 2021)

## **Message from the Guest Editors**

We are glad to share the great success of our Special Issue "Energy Resource Potential of Gas Hydrates". We now seek to launch the second volume of this Special Issue.

Natural gas hydrates, mostly located on the seabed, constitute the largest reservoir of natural gas on the planet, and represent an important solution for the transition from the current energy scenario to a renewable one.

Authors are invited to submit papers in the field of gas hydrates as an energy resource, focusing on the following topics:

- Chemical and physical aspects for a deeper comprehension of the kinetics and thermodynamics of methane delivery and CO<sub>2</sub> hydrate formation and stability
- Geological aspects, in particular the mechanical properties of CO<sub>2</sub> and CH<sub>4</sub> hydrate sediments, as well as the mechanical properties of gas hydrates during the CH<sub>4</sub>-CO<sub>2</sub> exchange process; prospection and detection aspects.
- Engineering aspects related to natural gas extraction, the CO<sub>2</sub> injection and replacement process, and drilling problems.
- Environmental sustainability evaluations.
- Economic and political aspects of gas hydrate exploitation; effects on energy scenarios and markets.











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 (*Engineering (miscellaneous)*)

### **Contact Us**