

Special Issue

Nuclear Innovations in Integrated Energy Systems: Industrial Integration and Siting Strategies

Message from the Guest Editors

In this Special Issue, we will publish papers that focus on innovations in advanced nuclear energy for integrated energy systems. The topics of interest for publication include, but are not limited to, the following:

- Design and analysis of systems coupling advanced nuclear reactors with other form of energy sources and industrial processes (e.g., hydrogen production, desalination, chemical, steel, cement, pulp and paper, and synfuels plants);
- Modeling, simulation, and optimization of hybrid energy systems incorporating nuclear power;
- Innovations in thermal and electrical power dispatch strategies to enhance system flexibility and reliability, covering electric energy storage, thermal energy storage, and hydrogen production and storage;
- Economic assessments and market analyses of integrated energy systems utilizing nuclear technologies;
- Advancements in energy storage solutions (thermal, electrical, hydrogen) to support nuclear-integrated systems;
- Strategies and frameworks for siting nuclear reactors within industrial settings, considering factors such as infrastructure compatibility, regulatory environments, and community engagement.

Guest Editors

Dr. Rami M. Saeed

Dr. Tyler Westover

Dr. Richard B. Vilim

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

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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

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