Special Issue

Optimization of the Operation of Industrial Energy and Power Plants

Message from the Guest Editors

This Special Issue focuses on optimizing the operation of industrial energy systems and power plants to support the transition towards a sustainable and low-carbon energy future. Key areas include the integration of renewable energy sources like solar and wind, the adoption of green hydrogen, and the implementation of carbon capture and storage (CCS) technologies. Circular economy principles, such as energy recovery and resource reuse, are also vital in improving efficiency and minimizing waste in industrial operations. We invite original research, review papers, and case studies addressing advanced control systems, real-time energy management, energy storage, and digital technologies like AI and machine learning. Topics of interest also include decarbonization strategies, cybersecurity in optimized systems, and policy frameworks for industrial energy sustainability. The goal is to explore cutting-edge solutions that enhance the efficiency, resilience, and sustainability of energy systems while supporting global climate targets.

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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.

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