

Special Issue

Gas Hydrate Energy Technologies for Net-Zero Carbon Emissions

Message from the Guest Editors

Gas hydrate, a solid clathrate structure containing gas, offers a variety of potential applications that may aid in reaching net-zero carbon emissions by offering a carbon-neutral energy source and by supporting the hydrogen economy.

We are requesting contributions to a Special Issue on such applications of gas hydrate. Topics include subsurface CO₂ sequestration in the form of CO₂ hydrate, the potential for CO₂ to replace CH₄ in gas hydrates as a pathway toward carbon-neutral production of natural gas, hydrate technologies that provide a means for CO₂ and H₂ gas capture/storage, novel low-dosage hydrate inhibition (AAs, KHIs, cold flow) that could displace traditional energy-intensive THI (thermodynamic inhibitor) regeneration, and emerging flow assurance issues related to greener energy production such as in the case of H₂ storage in depleted gas reservoirs and subsurface CO₂ disposal.

This Special Issue aims at covering a broad, interdisciplinary range of topics including chemical engineering, flow-assurance studies, H₂ hydrate properties, laboratory and field experiments on natural gas hydrates, gas hydrate production modeling, and others.

Guest Editors

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Deadline for manuscript submissions

closed (31 January 2023)



Energies

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Impact Factor 3.2
CiteScore 7.3



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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.

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