Special Issue

Advances in Carbon Capture, Utilization & Storage (CCUS)

Message from the Guest Editors

This Special Issue welcomes original research articles and authoritative reviews that advance research on any aspect of the CCUS value chain. Topics of interest include (but are not limited to) the following:

- **CO2 capture**: novel solvents, sorbents, membranes, and intensified processes;
- **CO2 transport**: network planning, pipeline integrity, and infrastructure optimization;
- **CO2 utilization**: chemical conversion, mineralization, and other value-adding pathways;
- **CO2**-based enhanced oil recovery: experiments on and simulations of CO2-EOR processes, filed implementation and monitoring, CO2-EOR, and carbon storage synergies;
- **Subsurface storage**: formation characterization, injection strategies, caprock integrity, and risk assessment;
- **Simulation and optimization** of CCUS hubs, clusters, and full-value-chain deployments;
- **Machine learning and data analytics** applications across carbon capture, transport, utilization, and storage;
- **Risk, safety, and lifecycle assessments** for CCUS projects;
- **Techno-economic and policy frameworks** enabling large-scale CCUS project implementation.

Guest Editors

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Deadline for manuscript submissions

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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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