Special Issue

Carbon Capture, Storage and Utilization Technologies: Advances and Challenges

Message from the Guest Editor

Decarbonisation, especially in CO2-intensive industries, is not possible without CCUS. However, its widespread deployment will require continued improvements in cost and performance. Stronger and clearer policies are needed to further activate the market and encourage government and industry to further invest in developing supply chains, infrastructures around them, and continued R&D activities.

This Special Issue aims to present and disseminate the most recent advances related to CO2 capture and sequestration technology, CO2 utilisation technology, techno-economic and life cycle assessment, and regulatory and policy issues.

- All aspects of technologies related to CO2 capture;
- All aspects of technologies related to CO2 utilisation:
  - Thermal chemical CO2 conversion: CO2 to CH4, methanol, and other high hydrocarbons
  - CO2 mineralisation
  - Photocatalytic CO2 conversion
  - Plasma enhanced CO2 conversion
  - Biological CO2 conversion#
- CO2 sequestration;
- Regulatory and policy issues;
- Economic and environmental benefits and impacts such as techno-economic and life cycle assessment.

Guest Editor

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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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