



Carbon Capture, Storage and Utilization Technologies: Advances and Challenges

Guest Editor:

Dr. Yunxia Yang

CSIRO Energy (Commonwealth Scientific and Industrial Research Organisation), 71 Normanby Rd., Clayton North, VIC 3169, Australia

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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.





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Prof. Dr. Enrico Sciubba

Department of Mechanical and
Aerospace Engineering,
University of Roma Sapienza, Via
Eudossiana 18, 00184 Roma, Italy

Message from the Editor-in-Chief

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MDPI, Grosspeteranlage 5
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