

Special Issue

Advanced Technologies for Carbon Capture, Utilization, and Storage (CCUS)

Message from the Guest Editors

Carbon capture and storage (CCS) has become well-known as a technology for reducing the emission of greenhouse gases from fossil fuels during power generation and industrial processes. The main drawback of CO₂ storage in an aquifer is lack of commercial value, so it is necessary to consider utilization of cost-effective options for the reduction of CO₂ emissions. Because of economic and environmental issues, blue hydrogen technology is getting the most attention. To complete a successful blue hydrogen system, CCUS technology is essential because we can store CO₂, which is a secondary product of hydrogen. The issue covers all experiments or simulation studies related to CCUS technology, such as carbon capture, transportation, fluid modeling, reservoir simulation, mineralization, artificial intelligence, blue hydrogen, etc.

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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