

Special Issue

Carbon Capture and Utilization

Message from the Guest Editors

Carbon dioxide (CO₂) emissions to the atmosphere have drastically increased in the past decades, with the energy and transport sectors representing the major fractions of the greenhouse gas (GHG) emissions. This increase, which can be translated to a 50% increase in atmospheric CO₂ concentration since pre-industrial levels, has been associated with several negative environmental impacts, such as the increase of greenhouse effect, global warming, and ocean acidification. Therefore, it becomes urgent for world economies to reduce their CO₂ emissions, reduce carbon intensity associated with the energetic and transport sectors, and adopt effective CO₂ capture techniques. This Special Issue on Carbon Capture and Utilization aims to present an overview of currently applied techniques for CO₂ capture and applications, focusing on their advantages and disadvantages and on the main challenges towards their large-scale application.

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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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