Special Issue

CO₂ Geological Storage and Utilization

Message from the Guest Editors

Urbanization and industrialization boost the consumption of fossil fuels, which causes enormous CO2 emissions. Excessive CO2 in the air can intensify the greenhouse effect, deteriorating the global climate and ecological environment. Carbon capture, utilization, and storage (CCUS) is a kind of technology that can massively reduce CO2 emissions from industrial processes. Among various CCUS technologies, CO2 geological storage and utilization has become one major development orientation due to its huge storage scales and potential economic benefits with enhanced oil/gas recovery. We invite you to submit your original research and review manuscripts to this Special Issue entitled CO2 Geological Storage and Utilization. The subjects of the papers may include (but are not limited to): CO2 injection technology; CO2 physical/chemical interaction with rocks and other fluids; adsorption/desorption, diffusion, flow behavior, phase behavior of CO2 and fluids; mechanisms of enhanced oil/gas recovery by CO2; and CO2 leakage monitoring and evaluation.

Guest Editors

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Prof. Dr. Yu Yang

Deadline for manuscript submissions

closed (3 July 2023)



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About the Journal

Message from the Editor-in-Chief

Continued developments in instrumentation and modeling have driven atmospheric science to become increasingly more complex with a deeper understanding of concepts, mechanisms, and interactions. This is the field that innovation built and it has led to a better appreciation for the complexity with atmosphere. Human life is intertwined in this complexity as we strive to better understand our atmosphere. Climate change is constantly stretching the limits of our thinking and forcing new ideas and concepts to be played out. Welcome to the Anthropocene!

Editor-in-Chief

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