Special Issue

Application and Optimization of CCUS Technology in Shale Gas Production and Storage

Message from the Guest Editors

Worldwide climate change enables a major challenge to the current situation of energy consumption and, accordingly, much attention has been drawn to the development of comprehensive technology as a way of enhancing the energy supply and simultaneously reducing carbon emissions. In this context, in recent years, a technique known as CCUS in shale gas production and storage raised increasing concerns because it usually promotes synthetic rewards, namely, acquiring energy from geological formation and trapping CO2 in underground strata. Basically, the shale gas reservoir has been widely accepted and recognized to be a suitable geological target to deploy CCUG technology; however, it is not mature enough to experience large-scale field promotion and implementation. As a result, shale-based CCUS is the focus of considerable scientific investigations, and these drive the organization of this Special Issue. Herein, this Special Issue welcomes all achievements regarding CCUS technology related to shale gas, including all outlines from laboratory experiments, numerical simulations, engineering evaluations, economic judgements, etc.

Guest Editors

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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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