

Integrated Simulation and Optimization for Carbon Capture and Storage System

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Abstract : CO₂ capture and storage/sequestration (CCS) is a key technology for addressing the global warming issue. This paper proposes an integrated model for the whole chain of CCS, from a power plant to a reservoir. The integrated model is further utilized to determine optimal operating conditions and study responses to various changes in input variables.

Keywords : CCS, carbon dioxide, carbon capture and storage, simulation, optimization

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