



## Co-optimisation of CO<sub>2</sub> Storage and Hydrocarbon Recovery

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### Message from the Guest Editor

Dear Colleagues,

Geological storage of CO<sub>2</sub> is a technically proven method and currently the best solution to mitigate greenhouse gas emissions and therefore develop a sustainable environment. Several factors need to be considered to co-optimize CO<sub>2</sub> storage and hydrocarbon recovery to achieve technical and economic success and environmental sustainability. These factors include reservoir characterisation and understanding the reservoir geology, access to an affordable supply of CO<sub>2</sub>, the size of the target reservoir, metering and monitoring pressures and flow rates at injection and production wells, operational risk assessment and safety performance, economics, and considering alternatives injection scenarios to increase the amount of CO<sub>2</sub> trapped during enhanced hydrocarbon recovery.

This Special Issue focuses on but is not limited to CO<sub>2</sub> storage in oil and gas reservoirs, storage capacity assessments, reservoir characterisation, fluid flow behaviour, geochemical reactions and reservoir response during and after CO<sub>2</sub> injection, enhanced hydrocarbon recovery methods, co-optimising CO<sub>2</sub> EOR/EGR/ECBM, and storage and technoeconomic analysis.





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