Contribution ID: **198** Type: **Oral Presentation**

Potential geological sequestration of CO2 in Kazakhstan

Monday, 30 May 2022 17:35 (15 minutes)

CO2 storage in subsurface is one of ways to mitigate the CO2 emissions in many places including Kazakhstan . To achieve the goals to achieve the 25% emission reduction strategy by 2030 according to Paris agreement in 2016, Kazakhstan may require additional actions to be performed. CO2 sequestration is one of the possible solutions in the reduction of CO2 emission.
In this work, we explore the possibility of CO2 storage in the region of the Precaspian basin using the compositional reservoir simulation flow model. We propose the potential place of the CO2 storage and provide the amount of stored CO2 based on the reservoir simulation model of Precaspian basin. We also present CO2 plume migration in the post-injection period.
Moreover, we study the effect of parameters that can be essential in the modeling of CO2 storage evaluation in a potential subsurface of Kazakhstan.
We conducted uncertainty and sensitivity analysis by incorporating machine learning algorithms and reservoir simulation tool by varying model parameters and finally received 3 probability cases P10, P50, and P90 for the amount of trapped CO2.

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Time Block Preference

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Participation

In person

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