

## Self-potential variation associated with carbon dioxide storage

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Accelerating of global warming is caused by increasing emissions of greenhouse gases such as carbon dioxide. Reduction approaches of the greenhouse gases is one of the urgent problems on a global scale and attempted in many countries. Carbon dioxide capture and storage is an economical and efficient technology to the reduce greenhouse gas emissions. We suggest a monitoring method of injected and storage carbon dioxide by using self-potential variation. It is well known that self-potential is caused by the electrokinetic phenomenon of streaming potential associated with subsurface fluid flow. In this study, we calculated the self-potential variations associated with carbon dioxide storage by using 3D simulation code (STAR + EKP post-processor, e.g. Ishido and Pritchett, 1999) and will present the results.

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