

Methane production from clay by using swapping method

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In this study, we tried to produce methane from methane hydrate (MH) in clay circumstance by using swapping method. Lots of MH production studies have proceeded in sand scale. Clay is also one of the main components in real deep sea sediment. Thus, we attempt to produce methane from MH in clay. For this experiment, we depict the deep sea surrounding by using clay and distilled water, then, hydrate is formed by CH₄ injection at low temperature and high temperature. To gain CH₄, flue gas (CO₂+N₂) is injected to the cell that contains CH₄ hydrate. From this study, we could contribute for CH₄ production and CO₂ storage simultaneously in the real production.