

## Measurements of expansion in coals induced by carbon dioxide adsorption

# ziqiu xue[1], Takashi Ohsumi[1], Hitoshi Koide[2]

[1] RITE, [2] Waseda

<http://www.rite.or.jp>

Measurements of expansion in coal samples induced by carbon dioxide adsorption, were conducted under hydrostatic pressure. Coals show a measurable extent of expansion in carbon dioxide at ambient temperature.

Equilibrium is much more uniformly at the first adsorption and desorption cycle. Gas injection pressure and volumetric strain relationships were established using strain gages attached on coal samples.