

**R224-019**

**Room: 301B**

**Time: May 29 15:30-15:45**

## Tri-axial compression tests on drill cores containing natural gas hydrates in Eastern Nankai Trough

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MH21 research consortium of Japan conducted off-shore drillings to survey gas hydrates in Tokai-oki and Kumano-nada area of Eastern Nankai Trough region in early 2004 and recovered drill cores of gas hydrate bearing sediment successfully. Marine gas hydrate was confirmed mainly in sandy drill cores extracted from mud and sand alternation strata. Tri-axial compression tests on natural core samples have been conducted to ascertain mechanical properties of natural hydrate bearing sediments for the first time. The results from the tri-axial compression tests were discussed focusing on strength, elasticity and Poisson's ratio in comparison with those from Toyoura sand containing laboratory-formed synthetic methane hydrate.