

**The 6<sup>th</sup> International Workshop  
on the Application of Geophysics to Rock Engineering**

**Kyoto International Conference Hall, Japan  
November 29, 2004**

9:00-9:10	Commission Report : Koichi Sassa (ISRM Commission President, Fukui University of Technology, Japan)
9:10-9:35	Heterogeneity and Instability in Geological Deformation; Insights From Sandbox Experiments and Particle Simulations Yasuhiro Yamada (Kyoto University)
9:35-10:00	Tomographic imaging of injected CO <sub>2</sub> migration in a porous sandstone Toshifumi Matsuoka (Kyoto University)
10:00-10:25	Seismic Refraction Method with Extrapolated First-arrival Data Yoshinori Sanada (Kyoto University)
10:25-10:50	The application in strong noise background by using Mini-Sosie Method Chang Xu (Chinese Academy of Sciences)
10:50-11:10	Break
11:10-11:50	Progress report of the Suggested Methods for Borehole Geophysics in Rock Engineering Toru Takahashi (OYO Corporation)
11:50-13:10	Lunch
13:10-13:40	Love and Rayleigh wavefield dispersion for nondestructive testing of shallow rock anisotropy (Field demonstration) Adam O'Neill (Kyoto University)
13:50-14:15	Joint analysis of multi-shot, multi-channel surface-wave data and micro-gravity data Koichi Hayashi (OYO Corporation)

14:15-14:40	Permeability distribution estimation for rock mass from P-wave velocity tomography using frequency-velocity dispersion relationship Shin-ichi Uehara (Kyoto University)
14:40-15:05	A case study of permeability analysis using frequency dependent acoustic wave velocity and applying in-situ data Kimitaka Yoshimura (Radioactive Waste Management Funding and Research Center)
15:05-15:25	Break
15:25-15:50	Physical properties of hemipelagic sediments at the Nankai Trough -Special Interest to fluid circulation and sedimentation- Hitoshi Mikada (Kyoto University)
15:50-16:15	Anisotropic crosshole resistivity tomography for the ground safety analysis of a high storied building over an abandoned mine Jung-Ho Kim (Korea Institute of Geoscience and Mineral Resources)
16:15-16:40	Simulation of earth tunnel excavation based on tropdoor test by DEM Harushige Kusumi (Kansai University)
16:40-16:50	Closing Remarks Yuzuru Ashida (Kyoto University)