

The 5th International Symposium on Recent Advances in Exploration Geophysics in Kyoto (RAEG2001)

Monday, January 22, 2001
Kyodai Kaikan, Kyoto, Japan

PROGRAM

9:25~ 9:30 **Opening Address**

Toshifumi Matsuoka (Kyoto University, Japan)

Seismic Theory and Experiment (9:30~10:50)

Chair: Toshifumi Matsuoka (Kyoto University, Japan)

9:30~ 9:50 **Laboratory Studies of Surface Waves Using a Laser Doppler Vibrometer**

Koichi Hayashi* and Osamu Nishizawa** (*OYO Corporation, Japan, **Geological Survey of Japan, Japan)

9:50~10:10 **Higher Modes of Surface Waves over Unconsolidated Sediments**

Choon B. Park, Richard D. Miller, and Jianghai Xia (Kansas Geological Survey, University of Kansas, U.S.A.)

10:10~10:30 **Distortions of Arrival Time, Amplitude and Shape of the Seismic Waves and their Relationship with Heterogeneity of the Medium**

Chadaram Sivaji*, Osamu Nishizawa*, Genshiro Kitagawa** and Yo Fukushima*** (*Geological Survey of Japan, Japan, **Institute of Statistical Mathematics, Japan, ***CTBTO, Austria)

10:30~10:50 **Wave Propagation in Fractured Rock Using Discrete and Effective Media Models**

Larry R. Myer, Seiji Nakagawa and Kurt T. Nihei (Lawrence Berkeley National Laboratory, U.S.A.)

Break (10:50~11:00)

Seismic Methods (11:00~12:00)

Chair: Nobuyuki Shimizu (JGI, Inc., Japan)

11:00~11:20 **Advanced Wave-Equation Migration**

Lianjie Huang and Michael Fehler (Los Alamos National Laboratory, U.S.A.)

11:20~11:40 **A Velocity Analysis Method on Deregowski Loop for Depth Imaging**

Shigenobu Uraki*, Nobuyuki Shimizu*, Eiichi Asakawa*, Masami Hato** and Yoshinari Nakajima*** (*JGI, Inc., Japan, **Japan Petroleum Exploration Co. Ltd., Japan, ***Japan National Oil Corporation, Japan)

11:40~12:00 **Crosswell Seismic Imaging of Complex Structures**

Arthur Cheng (Tomoseis, U.S.A.)

Lunch (12:00~13:20)

Imaging and Inversion (13:20~15:00)

Chair: Masami Hato (Japan Petroleum Exploration Co. Ltd., Japan.)

- 13:20~13:40 **Estimation of the Ground Stiffness using Vibrator**
Tosifumi Matsuoka, Koji Yoshikawa and Yuzuru Ashida (Kyoto University, Japan.)
- 13:40~14:00 **Tomographic Inversion of Anisotropy using VSP Data**
Nobuyasu Hirabayashi, Yoshinori Sanada, Kenzo Hara and Di Cao (Schlumberger K.K., Japan.)
- 14:00~14:20 **Joint Imaging in Geotechnical Engineering**
Rui Feng, Qingju Wu And Zhengqin He (China Seismological Bureau, China)
- 14:20~14:40 **Bridging Tomography and Inverse Analysis for Characterizing Heterogeneous Materials**
Yasuaki Ichikawa (Nagoya University, Japan)
- 14:40~15:00 **Two Stage Inversion for Tilt Data**
Toshifumi Matsuoka, Hirohide Fukamori and Yuzuru Ashida (Kyoto University, Japan)

Coffee Break (15:00~15:20)

Electromagnetic, log, etc. (15:20~17:00)

Chair: Toshihiro Uchida (Geological Survey of Japan, Japan.)

- 15:20~15:40 **Effect of Steel Casing to Electromagnetic Fields**
Hee Joon Kim*, Ki Ha Lee* and Toshihiro Uchida*** (*Pukyong National University, Korea, **Lawrence Berkeley National Laboratory, U.S.A., ***Geological Survey of Japan, Japan)
- 15:40~16:00 **Estimation of Underground Permeability using Geophysical Logs Data**
Koichi Suzuki (Central Research Institute of Electric Power Industry, Japan)
- 16:00~16:20 **Sensitivity Study on Inverse Modeling of Fluid Flow in Fractured Rocks Constrained by Tiltmeter Data**
Shinsuke Nakao*, Kenzi Karasaki** and Don W. Vasco** (*Geological Survey of Japan, Japan, **Lawrence Berkeley National Laboratory, U.S.A.)
- 16:20~16:40 **Analog and Digital Modeling in Structural Geology**
Toshifumi Matsuoka*, Takahiro Hasegawa*, Zentarou Wakatuki*, Yuzuru Ashida* and Yasuhiro Yamada** (*Kyoto University, Japan, **Japan Petroleum Exploration Co. Ltd., Japan)
- 16:40~17:00 **Development of Intelligent Horizontal Directional Drilling Technique**
Takaharu Nakauchi*, Mitsutoshi Hayashi**, Ryoichi Hasegawa** and Kazuyuki Ohta** (*Osaka Gas Co., LTD, Japan, **The Japan Gas Association, Japan)
- 17:00~17:10 **Closing Remarks**
Yuzuru Ashida (Kyoto University, Japan)

Banquet (17:30~19:30)

Kyodai Kaikan (Room SR)