



INTERNATIONAL INSTITUTE FOR CARBON-NEUTRAL ENERGY RESEARCH

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**-MOLECULAR- TO FIELD-SCALE CO<sub>2</sub> BEHAVIOR  
FOR OPTIMIZED STORAGE-  
I<sup>2</sup>CNER INTERNATIONAL WORKSHOP  
CO<sub>2</sub> STORAGE DIVISION**

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**DATE: FRIDAY, FEBRUARY 2, 2018**

**TIME: 1:00 PM-5:12 PM**

**VENUE: I<sup>2</sup>CNER HALL C**

| Time      | Speaker          | Affiliation         | Title   |
|-----------|------------------|---------------------|---|
| 1:00-1:15 | Takeshi Tsuji    | Kyushu Univ.        | Activity in CO <sub>2</sub> storage division  |
| 1:15-1:35 | Kazuya Ishitsuka | Hokkaido Univ.      | Field-scale temperature estimation based on resistivity using neural network: Application to the Kakkonda geothermal field  |
| 1:35-1:50 | Tatsunori Ikeda  | Kyushu Univ.        | Monitoring of CO <sub>2</sub> storage sites using a controlled and continuous seismic source system   |
| 1:50-2:20 | Osamu Takano     | JAPEX               | Tectonic and depositional system transition of the Cretaceous to Neogene Sanriku-Shimokita-Hidaka-oki forearc to foreland basin: transformation scenario from coal-bearing fluvio-deltaic forearc to deeper-marine foreland |
| 2:20-2:32 | Chandoeun Eng    | Kyushu Univ.        | Hydrocarbon characterization using seismic attributes for Sanriku-Oki Forearc basin, northeast Japan  |
| 2:32-2:44 | Chanmaly Chhun   | Kyushu Univ.        | Characterization of hydrate and gas reservoirs using automatic seismic velocity analysis and rock physics: Example from Kumano forearc basin of the Nankai Trough, Japan  |
| 2:44-3:00 | Coffee break     |                     |   |
| 3:00-3:30 | Diogo Bolster    | Univ. of Notre Dame | Comparison of micromodel experiments and numerical simulations of multiphase displacement flows under CO <sub>2</sub> sequestration relevant conditions   |

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|-----------|-----------------|---------------------------------------|--|
| 3:30-3:50 | Fei Jiang       | Yamaguchi Univ. & I <sup>2</sup> CNER | Effect of wettability alternation on multiphase flow behavior in porous media  |
| 3:50-4:10 | Kazuki Sawayama | Kyushu Univ.                          | Numerical investigation about the effect of aperture closure on fluid behavior in digitalized fracture                               |
| 4:10-4:40 | Yunfeng Liang   | Univ. of Tokyo                        | Recent Progresses in Molecular Scale Investigation of CO <sub>2</sub> -Brine-Clay Interactions for CO <sub>2</sub> Geo-Sequestration |
| 4:40-5:00 | Jihui Jia       | China Univ. of Petroleum              | Ab Initio Molecular Dynamics Study of Carbonation and Hydrolysis of Quartz and Basalt Andesine Reactive Surface                      |
| 5:00-5:12 | Hiroki Matsui   | Kyushu Univ.                          | Influence of the addition of H <sub>2</sub> S on replacement reaction of CH <sub>4</sub> and CO <sub>2</sub>                         |

IN THE MORNING (10:00-12:00), WE HAVE 4 GROUP DISCUSSION.

1. MONITORING: IKEDA, ISHITSUKA, NIMIYA, FERNANDO, NAGTA,
2. GEOLOGIC MODEL CONSTRUCTION: TAKANO, ENG, MALY, KAKDA
3. FLUID FLOW: BOLSTER, JIANG, IKUO, SAWAYAMA, KITAMURA
4. NANO-SACALE: LIANG, JIA, MATSUI