

# ワークショップ: エネルギー資源開発への ナノジオサイエンスの適用

【日時】2016年6月28日(火)13:30-18:00 【場所】東京大学理学部1号館 小柴ホール 【参加費】無料

## RACE Workshop on “Application of NanoGeosciences into Energy and Resources Development”

Date: 13:30-18:00 on Tuesday 28<sup>th</sup> June 2016 Place: Koshiba Hall, University of Tokyo

### プログラム

13:30-13:40 開会挨拶 – 増田 昌敬, 東京大学人工物工学研究センター教授  
Opening Address - Dr. Yoshihiro MASUDA, Professor, University of Tokyo (JAPAN)

13:40-14:00 *Application of NanoGeosciences into Petroleum Engineering: History in Japan and Perspectives*  
梁 云峰 リャン・ユンフェン, 東京大学人工物工学研究センター 特任准教授  
Yunfeng, LIANG, Project Associate Professor, University of Tokyo (JAPAN)

### ◀ Low salinity EOR and nanoparticle application ▶

14:00-14:35 *Uniquely Identifiable DNA-Embedded Silica Nanotracer for Fractured Reservoir Characterization*  
- Dr. Roland N. HORNE, Professor, Stanford University (USA)

14:35-15:10 *Nanoscience Applied to Oil and Gas Technologies: a Multiscale Computational Approach*  
- Dr. Caetano R. MIRANDA, Professor, University of Sao Paulo (Brazil)

15:10-15:45 *AFM Force Mapping as a Fast Alternative to Core Plug Tests for Optimizing Low Salinity Water EOR in Sandstone and Limestone*  
- Dr. Tue HASSENKAM, Associate Professor, University of Copenhagen (Denmark)

15:45-16:05 COFFEE BREAK

16:05-16:40 *Density Functional Theory Modelling of Adsorption from a Multicomponent Solution onto a Mineral Surface as a Function of pH and Solution Composition*  
- Dr. Martin ANDERSSON, Associate Professor, University of Copenhagen (Denmark)

### ◀ Gas Hydrate and CCS ▶

16:40-17:15 *Exploring Free Energy Landscape and Molecular Pathways of Hydrate Nucleation from Advanced Sampling Methods*  
- Dr. Tianshu LI, Assistant Professor, George Washington University (USA)

17:15-17:50 *Ab Initio Molecular Dynamics Simulations of Water/CO<sub>2</sub>/Mineral Interfaces for CO<sub>2</sub> Geo-Sequestration*  
- Dr. Mal-Soon LEE, Research Scientist, Pacific Northwest National Laboratory (PNNL) (USA)

17:50-18:00 閉会挨拶 – 松岡 俊文, 京都大学 名誉教授  
Closing Remark - Dr. Toshifumi MATSUOKA, Professor Emeritus, Kyoto University (JAPAN)

参加費：無料

参加申し込み：先着100名程度

申込先：<http://www.race.u-tokyo.ac.jp/activities/international.html>

問い合わせ：[office@race.u-tokyo.ac.jp](mailto:office@race.u-tokyo.ac.jp)

