

## The 8th Workshop on Next-Generation Utilization of Natural Gas

**Sponsorship** Young Study Group for Next-Generation Utilization of Natural Gas,  
Junior Society of Japan Petroleum Institute

**Co-sponsorship** Catalysis for natural gas conversion (Catalysis society of Japan)

**Support** Forum on Low-dimensional Photo-functional Materials of Chemical Society of Japan

**Day and time** March 27, 2021 (Sat.) 13 : 00-18 : 00 pm (admission 12:30-)

**Method** Online (Zoom)

**Purpose** This workshop is aimed to discuss the next generation utilization technology of C1 compounds such as methane and CO<sub>2</sub>, and to give shape to the ideas and dreams of young researchers. The content of the meeting is planned to be presented by domestic (Japan) and overseas professors who are working at the leading edge. Young researchers and students from universities, research institutes, and companies are eligible to participate, but there is no age limit. If you are able to interact actively with young researchers, we welcome you. We are looking forward to seeing you there.

### Program

13:00-13:05 Opening remarks Shizuoka University Ryo Watanabe

13:05-13:30

Kanagawa University (Japan), Assoc. prof. Yuki Motohashi  
"Crystalline lithium calcium silicate as a highly active catalyst for  
oxidative coupling of methane"

13:30-13:55

Mahidol University (Thailand), Lecturer Sakhon Ratchahat  
"Power-to-Gas (PtG) Technology: An Efficient Route for CO<sub>2</sub> Unitization"

13:55-14:20

Ibaraki University (Japan), Assist. Prof. Shohei Tada  
"Cu-based catalyst precursor for CO<sub>2</sub>-to-methanol hydrogenation"

14:20-15:20

Seoul National University (Korea), Assist. Prof. Jong Hun Kang  
"Experimental investigation of catalytic shape selectivity in methanol-to-olefins (MTO)  
and development of cage-defining ring theory"

15:20-15:40 Break time

15:40-16:05

Yamaguchi University (Japan), Assoc. Prof. Yasutaka Suzuki  
"Optical manipulation of nanosheet toward functional nanomaterial"

16:05-16:30

National Institute for Material Science (NIMS, Japan), Principal Researcher Yusuke Ide  
"Stabilized, molecularly small iron oxides as an alternative to TiO<sub>2</sub>"

16:30-16:55

Yamagata University (Japan), Assist. Prof. Kakeru Fujiwara  
"CeO<sub>2</sub> on Ni nanoparticles by flame spray pyrolysis for CO<sub>2</sub> methanation"

16:55-17:55

National Taiwan University (Taiwan), Assist. Prof. Wen-Yueh Yu  
"CO<sub>2</sub> activation on cerium oxide surface for its non-reductive conversion"

**Participation Fee** : Free

**How to apply** Please send your name, affiliation (including grade if you are a student), contact information (representative), laboratory name, and e-mail to the following address.

### Contact for application and inquiries

Ryo Watanabe, Faculty of Engineering, Shizuoka University, Tel: +81-53-478-1172, E-mail: watanabe.ryo@shizuoka.ac.jp

### Committee member

Hitoshi Ogihara (Saitama Univ.), Akimitsu Miyaji (Tokyo Institute of Technology), Naohiro Shimoda (Tokushima Univ.), Shuhei Ogo (Kochi Univ.), Satoshi Ishikawa (Kanagawa Univ.), Kazumasa Oshima (Kyushu Univ.), Ryo Watanabe (Shizuoka Univ.)