

ASME session 2

"Frontier in Microbial Ecology & Young Scientist Session"

Date and time : July 12th (Thu) 9 : 00 ~ 11 : 45

Room : B1

Conveners:

Woojun Park, Korea University

Hsion-Wen David Kuo, Tunghai University

Ryosuke Nakai, National Institute of Advanced Industrial Science and Technology

Invited speakers for "Frontier in Microbial Ecology"

A2-1 **Current Progress and Challenges in Microbial Source Tracking Based on Next-Generation-Sequencing**
9:00-

○Tatsuya Unno¹⁾、Dukki Han¹⁾、Hor-Gil Hur²⁾、Christopher Staley³⁾、
Michael J. Sadowsky³⁾

1) Faculty of Biotechnology, College of Applied Life Sciences, SARI, Jeju National University, Jeju 63243, Republic of Korea 2) School of Earth Sciences and Environmental Engineering, Gwangju Institute of Science and Technology, Gwangju, Republic of Korea 3) BioTechnology Institute, University of Minnesota, St. Paul, Minnesota 55108, USA

A2-2 **Skin Microbiome: Fragile skin microbiomes in megacities are assembled by a predominantly niche-based process**
9:18-

Hye-Jin Kim¹⁾、Jin Ju Kim¹⁾、Hanbyul Kim²⁾、Susun An²⁾、○Woo-Jun Sul¹⁾

1) Chung-Ang University, Anseong, Korea. 2) Amorepacific R&D Center, Yongin, Korea

A2-3 **Ecology of airborne fungi associated with respiratory allergy**
9:36-

○Pi-Han Wang

Department of Life Science, Tunghai University, Taiwan

A2-4 **Role of bacterial type VI secretion system in rhizobium-legume mutualistic symbiosis**
9:54-

Hsiao-Han Lin¹⁾、²⁾、Hsin-Mei Huang¹⁾、Manda Yu²⁾、Erh-Min Lai²⁾、Hsiao-Lin Chien¹⁾、
○Chi-Te Liu¹⁾、³⁾

1) Institute of Biotechnology, National Taiwan University, No. 81, Chang-Xing St., Taipei 10617, Taiwan 2) Institute of Plant and Microbial Biology, Academia Sinica, No. 128 Section 2, Academia Rd., Nankang, Taipei 11529, Taiwan 3) Agricultural Biotechnology Research Center, Academia Sinica, No. 128 Section 2, Academia Rd., Nankang, Taipei 11529, Taiwan

A2-5 **Challenging the dogma of bacterial membrane vesicle formation**
10:12-

○Masanori Toyofuku

Univ. of Tsukuba

Speakers for "Young Scientist Session"
A2-6 Genomic insight into the predominance of candidate phylum Atribacteria JS1 lineage in marine sediments

10:30-

○Yung Mi Lee¹⁾、Kuin Hwang¹⁾、Jae Il Lee¹⁾、Jongsik Chun²⁾、Soon Gyu Hong¹⁾、Seung Chul Shin¹⁾

1) Korea Polar Research Institute 2) Seoul National University

A2-7 Uncovering the bacterial community assembly pattern and novel populations in Baltic Sea surface waters

10:42-

○Poorna Weeraratna Vidanage¹⁾、○Seungdae Oh²⁾

1) Nanyang Technological University 2) Kyung Hee University

A2-8 Plant microbial fuel cell for remediation of hexavalent chromium contaminated soil and treating mechanisms

10:54-

○Chung-Yu Guan¹⁾、Chang-Ping Yu²⁾

Graduate Institute of Environmental Engineering, National Taiwan University, Taipei 106, Taiwan

A2-9 Microbial community composition and functional capacity in a terrestrial ferruginous, sulfate-depleted mud volcano

11:06-

○Tzu-Hsuan Tu^{1)、2)}、Li-Wei Wu^{2)、4)}、Yu-Shih Lin⁵⁾、Hiroyuki Imachi^{3)、6)}、Li-Hung Lin²⁾、Pei-Ling Wang¹⁾

1) Institute of Oceanography, National Taiwan University, Taipei, Taiwan 2) Department of Geosciences, National Taiwan University, Taipei, Taiwan 3) Department of Subsurface Geobiological Analysis and Research, Japan Agency for Marine-Earth Science and Technology, Yokosuka, Japan 4) The Experimental Forest, College of Bio-Resources and Agriculture, National Taiwan University, Nantou, Taiwan 5) Department of Oceanography, National Sun Yat-sen University, Kaohsiung, Taiwan, 6) Research and Development Center for Marine Resources, Japan Agency for Marine-Earth Science and Technology, Yokosuka, Japan

A2-10 Nitrogen and oxygen isotope effect of anaerobic ammonium oxidation

11:18-

○Kanae Kobayashi¹⁾、Akiko Makabe²⁾、Midori Yano³⁾、Mamoru Oshiki⁴⁾、Tomonori Kindaichi⁵⁾、Satoshi Okabe⁶⁾

1) Grad. Sch. of Eng., Hokkaido Univ. 2) JAMSTEC 3) CER, Kyoto Univ. 4) NIT, Nagaoka Coll. 5) Grad. Sch. of Eng., Hiroshima Univ. 6) Faculty of Eng., Hokkaido Univ.

A2-11 Nitrogen-fixing bacteria and nitrogenase activity in thermophilic chemosynthetic microbial communities at Nakabusa hot springs

11:30-

○Arisa Nishihara¹⁾、Katsumi Matsuura¹⁾、Shawn E McGlynn^{1)、2)、3)、4)}、Vera Thiel¹⁾、Marcus Tank¹⁾、Shin Haruta¹⁾

1) Dept. of Biol. Sci., TMU 2) ELSI, Titech 3) BCRT, RIKEN 4) BMSIS
