



2024 ASEAN Joint Workshop (online)

(Hanoi-Penang-Osaka, on Wednesday, March 27th, 2024)

VAST-OU Joint Campus Programme: The 7th IMS-Vast and INSD-OU Joint Workshop on Frontier Nanomaterials,

and

USM-OU Joint Programme: The 4th USM and OU Joint Colloquium on Nanoscience and Nanotechnology,

Topics: Zero Carbon, Renewable Energy, and Semiconductor Devices

INSD-OU: R³ Institute for Newly-Emerging Science Design, Osaka University

IMS-VAST: Institute of Materials Science, Vietnam Academy of Science and Technology

USM: University of Science Malaysia

Program:

15:00-18:35 in Osaka (14:00-17:35 in Penang, 13:00-16:35 in Hanoi))

Opening

15:00-15:15 ***Opening***

Chair: Prof. Tadashi Itoh

Opening Address

Prof. Yasufumi Fujiwara, Director of INSD, OU

Prof. Abdul Rahman Bin Mohamed, Vice-Chancellor, USM

Prof. Hoang Anh Son, Director of IMS-VAST

Oral Talks

First Session: Zero Carbon

15:15-16:15 in Osaka (14:15-15:15 in Penang, 13:15-14:15 in Hanoi)

15:15-15:45 Development of High Performance Catalysts toward Sustainable Society

Prof. Tomoo Mizugaki, Division of Chemical Engineering, Graduate School of Engineering Science, OU

15:45-16:15 Research and Development of Transition Metal-Based Electrocatalysts for Efficient Water Splitting in Green Hydrogen Production

Dr. Bui Thi Hoa, Lab. of Technologies for Hydrogen and Corrosion, IMS, VAST



16:15-16:25 *Intermission*

Second Session: Renewable Energy

16:25-16:55 in Osaka (15:25-15:55 in Penang, 14:25-14:55 in Hanoi)

***16:25-16:55 Solar-to-Chemical Energy Conversion on Powder
Photocatalysts***

Associate Prof. Yasuhiro Shiraishi, Research Center for Solar Energy
Chemistry & Division of Chemical Engineering, Graduate School of
Engineering Science, OU

Third Session: Semiconductor Devices

16:55-18:25 in Osaka (15:55-17:25 in Penang, 14:55-16:25 in Hanoi)

***16:55-17:25 Double-Shelling AgInS₂ Quantum Dots with GaS_x and ZnS for
Bright and Stable Excitonic Luminescence***

Dr. Nguyen Thu Loan, Lab. of Optoelectronic Materials, IMS, VAST

17:25-17:55 Photon Management in Next-Generation Photovoltaic Devices

Associate Prof. TS. DR. Mohd Zamir Bin Pakhuruddin, Institute of
Nano Optoelectronics Research and Technology (INOR) and School
of Physics, USM

***17:55-18:25 Synthesis of Multinary Quantum Dots and Enhancement of
Photoluminescence Properties by Core/Shell Engineering***

Associate Prof. Taro Uematsu, Department of Applied Chemistry,
Graduate School of Engineering, OU

Closing

18:25-18:35 Closing Remarks

Prof. Tran Quoc Tien, Vice-Director of IMS, VAST

Prof. Zainovia Lockman, Director, Research Creativity &
Management Office, USM

Prof. Hiroshi Miyasaka, Vice-Director of INSD, OU