

NSTDA – Osaka University Webinar 23 December 2021

ORGANIZED BY

National Science and Technology Development Agency (NSTDA), Thailand
Osaka University, Japan

EVENT PURPOSE

1. To introduce research interest in Biotechnology, Welding Technology, and Information Science and Technology between NSTDA and Osaka University
2. To find mutual interest to establish research collaboration

PROGRAM

Welcome and Introduction Session

(Thai time)

10:30 – 10:35	Welcome Remarks By Prof. Prasit Palittapongarnpim, NSTDA Executive Vice President
10:35 – 10:40	Opening Remark By Prof. Genta Kawahara, Osaka University Executive Vice President
10:40 – 10:55	Introduction to NSTDA By Dr. Lily Eurwilaichitr, Vice President, NSTDA
10:55 – 11:10	Introduction to Osaka University By Prof. Genta Kawahara, Osaka University Executive Vice President
11:10 – 11:25	Introduction on eAsia Joint Research Program (e-Asia JRP) By Ms. Emi Kaneko, Director, Japan Science and Technology Agency (JST)
11:25 – 12:00	Break

Parallel Session

(Thai time)

12:00 – 14:00	Parallel Session <ul style="list-style-type: none">• Biotechnology: Microbial System Design and Application• Joining and Welding Technology• Information Science and Technology: Digital City
14:00 – 14:20	Discussion for Collaboration
14:20	End



Parallel Session Program:

Session 1: Biotechnology on Microbial System Design and Application

(Thai time)

- 12:00 – 12:20 **Development of yeast expression system for heterologous protein production: molecular genetics and secretion mechanisms**
By Dr. Niran Roongsawang, Principal Researcher, BIOTEC, NSTDA
- 12:20 - 12:40 **Molecular breeding of oleaginous yeast *Rhodotorula toruloides* for lipid production**
By Prof. Dr. Kazuhito Fujiyama, International Center for Biotechnology, Osaka University
- 12:40 - 13:00 **Metagenomic Exploration of uncultured microbial bioresources for biotechnological application**
By Dr. Verawat Champreda, Director, Biorefinery Technology and Bioproducts Research Group, BIOTEC, NSTDA
- 13:00 - 13:20 **Development of a microbiota modification technique using antisense peptide nucleic acids**
By Dr. OKANO Kenji, International Center for Biotechnology, Osaka University
- 13.20 – 13.40 **Bioprocess engineering and metabolic flux redistribution toward microbial production of value-added chemicals**
By Dr. Kanokarn Kocharin, Researcher, Biorefinery Technology and Bioproducts Research Group, BIOTEC, NSTDA
- 13:40 - 14:00 **Comparative ¹³C-metabolic flux analysis indicate elevation of ATP regeneration, carbon dioxide, and heat production in industrial *Saccharomyces cerevisiae* strains**
By Prof. Dr. Fumio Matsuda, Graduate School of Information Science and Technology, Osaka University
- 14:20 - 14:40 **AMR in Southeast Asia**
By Dr. Yukihiro Akeda, Department of Bacteriology I, National Institute of Infectious Diseases, Tokyo, Japan/Research Institute for Microbial Diseases, Osaka University
- 14:40 - 15:00 Discussion for collaboration
- 15:00 End

Session 2: Joining and Welding Technology

(Thai time)

- 12:00 – 12:20 **Linear Friction Welding of Various Metals with 100% Joint Efficiency**
By Prof. Dr. Hidetoshi Fujii, JWRI, Osaka University
- 12:20 - 12:40 **Dissimilar Materials Joining for Mobility Applications**
By Dr. Sinthu Chanthapan, Researcher of RMT, NSTDA
- 12:40 - 13:00 **Development of Additively Manufacturing for Copper using High Brightness Blue Diode Laser**
By Prof. Dr. Yuji Sato, JWRI, Osaka University
- 13:00 - 13:20 **Microstructure and hardness of novel 316L/TiN composite fabricated by SLM**
By Dr. Dhritti Tanprayoon, Researcher of MTEC, NSTDA



OSAKA UNIVERSITY



- 13:20 - 13:40 **Aluminum Honeycomb Panel for Electric Vehicle Battery Enclosure**
By Dr. Sutee Olarnrithinun, Researcher of RMT, NSTDA
- 13:40 – 14:00 Discussion for Collaboration
- 14:00 End
- Session 3: Information Science and Technology: Digital City**
(Thai time)
- 12:00 – 12:20 **Real-time Forecasting of Big Time-series Data: Foundations and Challenges**
By Prof. Yasushi Sakurai, Osaka University
- 12:20 - 12:40 **Big Data Research**
By Dr. Marut Buranarach, Director of Data Science and Analytics Research Group (DSARG), NECTEC, NSTDA
- 12:40 - 13:00 **Human-Robot Interaction in Cyber-Physical System**
By Assist. Prof. Photchara Ratsamee, Osaka University
- 13:00 – 13.20 **Introduction to Intelligent SCADA Research Team**
By Dr. Nathavuth Kitbutrawat, Researcher of Intelligent SCADA Research Team (IST), NECTEC, NSTDA
- 13:20 - 13:40 **When Learning Techniques Meet Our Real-World Problems: Challenges and Solutions**
By Dr. Hamada Rizk, Specially appointed Assistant Professor, Graduate School of Information Science and Technology, Osaka University,
- 13:40 - 14:00 Discussion for collaboration
- 14:00 End

Registration:

<https://meeting-nstda.webex.com/meeting-nstda/j.php?RGID=rf9d20c85ca78c9478b099b8a4da681d4>