



OSAKA UNIVERSITY



## 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

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

#### Parallel Session

12:00 – 14:00	<b>Parallel Session</b> <ul style="list-style-type: none"> <li>• <b>Biotechnology: Microbial System Design and Application</b></li> <li>• <b>Joining and Welding Technology</b></li> <li>• <b>Information Science and Technology: Digital City</b></li> </ul>
14:00 – 14.20	Discussion for Collaboration
14:20	End

\*\*\*\*\*



**Parallel Session Program:**

**Session 1: Biotechnology on Microbial System Design and Application**

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

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

12:00 – 12:20	<b>Real-time Forecasting of Big Time-series Data: Foundations and Challenges</b> By Prof. Yasushi Sakurai, Osaka University
12:20 – 12:40	<b>Big Data Research</b> By Dr. Marut Buranarach, Director of Data Science and Analytics Research Group (DSARG), NECTEC, NSTDA
12:40 – 13:00	<b>Human-Robot Interaction in Cyber-Physical System</b> By Assist. Prof. Photchara Ratsamee, Osaka University
13:00 – 13:20	<b>Introduction to Intelligent SCADA Research Team</b> By Dr. Nathavuth Kitbutrawat, Researcher of Intelligent SCADA Research Team (IST), NECTEC, NSTDA
13:20 – 13:40	<b>When Learning Techniques Meet Our Real-World Problems: Challenges and Solutions</b> 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>