



Mahidol University  
Wisdom of the Land



大阪大学  
THE UNIVERSITY OF OSAKA

# MU-UOsaka Joint Symposium 2025

Advanced Innovations in Sustainable Biomanufacturing  
– From Food to Future Bioindustries

DEC 8, 2025

9 AM - 5 PM

STANG MONGKOLSUK  
CONFERENCE ROOM

FACULTY OF SCIENCE,  
MAHIDOL UNIVERSITY

Registration



## Future Food Innovations



**Assoc. Prof.  
Viriya  
Taecharungroj**  
iNT, MU

Food Tech Startups  
in Thailand and  
Mahidol University's  
Supporting  
Framework



**Assoc. Prof.  
Sittiwat Lertsiri**

Faculty of  
Science, MU

Biotechnology in  
Flavor Industry



**Dr. Pornpimol  
Mahamad**

The Halal  
Science Center,  
CU

The Science-  
based Ecosystem  
for Halal  
Innovation in  
Thailand



**Assoc. Prof.  
Sastia Prama  
PUTRI**

Graduate School of  
Engineering, UOsaka

Latest Advancements  
in Mass Spectrometry-  
Based Metabolomics  
for Quality  
Improvement of Food  
and Agricultural  
Products



**Assoc. Prof.  
TORISU Tetsuo**

Graduate School of  
Engineering, UOsaka

Edible Foams  
Stabilized by  
Proteins

## Next Generation Innovative Biomanufacturing



**Prof.  
HONDA Kohsuke**

ICBiotech,  
UOsaka

*In vitro* Metabolic  
Engineering With  
Thermophilic  
Enzymes



**Dr.  
Aiyada Aroonsri**

BIOTEC, NSTDA

Engineering  
Programmable and  
Safe Microbes:  
Bridging Discovery  
to Industrial  
Biomanufacturing



**Assoc. Prof.  
TOMITA Hiroya**

ICBiotech,  
UOsaka

Elucidation and  
Application of the  
Biosynthetic  
Mechanisms of  
Microbial Secondary  
Metabolites



**Assoc. Prof.  
Choowong  
Auesukaree**

Faculty of  
Science, MU

High-Efficiency  
Platform for Ethanol  
Fermentation at  
High Temperature



**Assoc. Prof.  
Thunyarat  
Pongtharangkul**

Faculty of  
Science, MU

Process  
Optimization for  
Recombinant HPV L1  
Protein Production in  
*Hansenula  
polymorpha*



**Asst. Prof.  
KAJIURA  
Hiroyuki**

ICBiotech,  
UOsaka

Harnessing Plant  
Cell Factories for  
Next-Generation  
Biopharmaceuticals

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MU-OU:CRS and OU:CRS

Faculty of Science, Mahidol University



# MU-UOsaka Joint Symposium 2025

"Advanced Innovations in Sustainable Biomanufacturing — From Food to Future Bioindustries."

8 December 2025, 9:00 – 17:00  
Conference Room, Stang Mongkolsuk Building  
Faculty of Science, Mahidol University, Phayathai

8:00 - 9:00 Registration

9:00 – 9:15 Opening remarks

## AM Session: Future Food Innovations

9:15 – 9:45 **(tentative)** Food Tech Startups in Thailand and Mahidol University's Supporting Framework

*Assoc. Prof. Viriya Taecharungroj*  
(Institute for Technology and Innovation Management, Mahidol University)

9:45 – 10:15 Biotechnology in Flavor Industry

*Assoc. Prof. Sittiwat Lertsiri* (Faculty of Science, Mahidol University)

10:15 – 10:30 Break (15 min.)

10:30 – 11:00 The Science-Based Ecosystem for Halal Innovation in Thailand

*Dr. Pornpimol Mahamad* (Halal Science Center, Chulalongkorn University)

11:00 – 11:30 Latest Advancements in Mass Spectrometry-Based Metabolomics for Quality Improvement of Food and Agricultural Products

*Assoc. Prof. Sastia Prama Putri*  
(Graduate School of Engineering, The University of Osaka)

11:30 – 12:00 Edible Foams Stabilized by Proteins

*Assoc. Prof. Tetsuo Torisu*  
(Graduate School of Engineering, The University of Osaka)

12:00 – 13:30 Lunch

## PM Session: Next-generation Innovative Biomanufacturing

13:30 – 14:00 *In vitro* Metabolic Engineering with Thermophilic Enzymes

*Prof. Kohsuke Honda*  
(International Center for Biotechnology, The University of Osaka)

14:00 – 14:30 Engineering Programmable and Safe Microbes: Bridging Discovery to Industrial Biomanufacturing

*Dr. Aiyada Aroonsri* (BIOTEC, NSTDA)

14:30 – 15:00 Elucidation and Application of the Biosynthetic Mechanisms of Microbial Secondary Metabolites

*Assoc. Prof. Hiroya Tomita*  
(International Center for Biotechnology, The University of Osaka)

15.00 – 15:15 *Break (15 min.)*

15:15 – 15:45 High-Efficiency Platform for High-Temperature Ethanol Fermentation  
*Assoc. Prof. Choowong Auesukaree* (Faculty of Science, Mahidol University)

15:45 – 16:15 Process Optimization for Recombinant HPV L1 Protein Production in *Hansenula polymorpha*  
*Assoc. Prof. Thunyarat Pongtharangkul* (Faculty of Science, Mahidol University)

16:15 – 16:45 Harnessing Plant Cell Factories for Next-Generation Biopharmaceuticals  
*Asst. Prof. Hiroyuki Kajiura*  
(International Center for Biotechnology, The University of Osaka)

16:45 – 17:00 Closing remarks