National Taiwan University

The 4th International Symposium on Agricultural Net-Zero Carbon Technology and Management Innovation: Circular Bioeconomy System

1. **Date: Friday, July 24**, 2026
2. **Time:** AM 09:00 - 12:00
3. **Location: GIS Convention Center - NTU**, Taipei **(集思台大會議中心 米開朗基羅廳)**
4. **Backgrounds:**

   To support Taiwan's "2050 Net-Zero Transition" and "5+2 Industrial Innovation Plans," the International Symposium on Agricultural Net-Zero Carbon Technology and Management Innovation (hereafter referred to as the Symposium) aims to facilitate the exchange of the latest information on policies, action plans, and demonstration projects related to agricultural net-zero transformation. The objectives of the Symposium are (1) exchange innovative policy tools, research frameworks, methodologies, and technologies, (2) identify future directions for international collaboration in agricultural systems, and (3) promote the dissemination and exchange of state-of-the-art research among researchers, educators, policymakers, and practitioners.

5. **Themes:**

   As climate change and resource pressures continue to intensify, achieving resource circularity while reducing environmental burdens has become a critical priority for global sustainable development. In this year, we will focus on biomass resource policies and valorization technologies, particularly anaerobic digestion, as key strategies for advancing a circular bioeconomy. We will highlight the expanding role of anaerobic digestion in sustainable resource management by bringing together interdisciplinary perspectives from engineering, environmental science, biotechnology, and policy. It aims to explore innovative approaches for resource recovery, renewable energy conversion, carbon reduction, and low-carbon development. By bridging theory and practice, the Symposium seeks to facilitate knowledge exchange, showcase emerging technologies and demonstration projects, and promote collaborative pathways toward high-efficiency, low-emission, and resilient circular bioresource systems.

   The Themes of this Symposium include

   (1) Policies and Strategies for Circular Bioeconomy.
   (2) Advanced Anaerobic Digestion Systems for Enhancing Efficiency and Stability.
   (3) Integration of Biogas Upgrading and Nutrient Recovery.

(4) Digital and Smart Technologies, and Data-Driven System Modeling.
(5) Bioenergy with Carbon Dioxide Removal.

6. Host Organization:

Agricultural Net-Zero Carbon Technology and Management Innovation Research Center, National Taiwan University, Taiwan ROC

7. Co-host Organizations:

(1) College of Bioresources and Agriculture, National Taiwan University, Taiwan ROC
(2) Department of Bioenvironmental Systems Engineering, College of Bioresources and Agriculture, National Taiwan University, Taiwan ROC

8. Committees:

(1) Professor Shan-Li Wang (National Taiwan University, Taiwan ROC)
(2) Professor Shu-Yuan Pan (National Taiwan University, Taiwan ROC)
(3) Professor Hyunook Kim (University of Seoul, Korea)
(4) Professor Ryozo Noguchi (Kyoto University, Japan)
(5) Professor Yen Wah Tong (National University of Singapore, Singapore)
(6) Professor Jonas Baltrusaitis (Lehigh University, USA)
(7) Professor Justin N-W Chiu (KTH Royal Institute of Technology, Sweden)
(8) Dr. Ching-Ping Chu (Elixir Consultants Co., Ltd., Taiwan ROC)

9. Contact Person: Miss Seon You (游小姐); Tel: (02)-3366-3482.

10. Registration link: https://forms.gle/6Fpw3W6BDVyyHceY6

Registration

11. Agenda (集思台大會議中心 B1 米開朗基羅廳):

Time	Agenda
09:00~09:05	**Opening Remarks** **Distinguished Professor Yu-Pin Lin** (Dean, College of Bioresources and Agriculture, National Taiwan University)
09:05~09:10	Group Photo
Session A: Advances in Circular Bioeconomy Systems Moderator: **Prof. Ramy Salemdeeb (National Tsing Hua University, Taiwan ROC)**	
09:10~09:35	System Analysis and Environmental Impact Assessment for Food Production and Biological Resource Utilization **Prof. Ryozo Noguchi** (Kyoto University, Japan)
09:35~10:00	From Digestate to Dinner: Microalgae Driven Single-Cell Protein for the Urban Bioeconomy **Prof. Yen Wah Tong** (National University of Singapore, Singapore)
10:00~10:25	Nitrogen is the New Carbon? Enhancing the Sustainability of the Nutrient Production and Delivery **Prof. Jonas Baltrusaitis** (Lehigh University, USA)
10:25~10:40	Coffee break
Session B: Integration with Bioenergy Systems for Net-Zero Moderator: **Dr. Pradeshwaran Vijayak (National Taiwan University, Taiwan ROC)**	
10:40~11:05	Advances on Circular Bioeconomy Systems and Anaerobic Digestions in Korea **Prof. Hyunook Kim** (University of Seoul, Korea)
11:05~11:30	Farm-Scale Sediment Microbial Fuel Cells for Low-Carbon Livestock Wastewater Treatment **Prof. Jung-Jeng Su** (National Taiwan University, Taiwan ROC)
11:30~11:50	Integrated Bioenergy and Thermal Energy Storage for Negative-Carbon Systems: Contributions and Early Insights from TAP Collaboration **Prof. Justin N-W Chiu** (KTH Royal Institute of Technology, Sweden)
11:50~12:05	Overall Discussion (Q&A)
12:05~12:10	Closing Remarks **Professor Shu-Yuan Pan** (National Taiwan University, Taiwan ROC)
12:10~	Luncheon

12. Venue: GIS Convention Center – NTU (Google Map: https://www.meeting.com.tw/ntu/location.php)

捷運

捷運新店線　公館站2號出口：
2號出口左轉 (步行2分鐘)

公車

捷運公館站一 (羅斯福路)： 254

捷運公館站(公車專用道-往西區方向)： 0南、1、109、208、208(高架線)、208(區間車)、208(基河二期國宅線)、236、251、252、253、278、284、284(直行)、290、52、642、643、644、648、660、671、672、673、676、74、907、景美女中-榮總快速公車、棕12、綠11、綠13、藍28

捷運公館站(公車專用道-往新店方向)： 207、278、280、280(直達車)、284、311、505、530、606、606區間車、668、 675、676、松江幹線、松江-新生幹線、敦化幹線、藍28

公館 (羅斯福路基隆路口)： 671

公館 (基隆路)： 1、207、254、275、275(副)、650、672、673、907、南港軟體園區通勤專車(雙和線)

仁愛路二段： 214、248、606

信義杭州路口 (往101)： 0東、20、22、204、670、671、信義幹線、信義新幹線、1503

開車

公館水源市場對面羅斯福路上，近羅斯福路與基隆路交叉口

國道一號： 由23B-圓山號出口，轉建國高架道路南行，續行辛亥路至基隆路右轉，直行至羅斯福路再右轉，隨即於右側「台灣大學公館二活停車場」停車即可。

國道三號： 由台北聯絡道下辛亥路端，接基隆路右轉羅斯福路，隨即於右側「台灣大學公館二活停車場」停車即可。

This symposium is also supported by National Science and Technology Council, Taiwan ROC, as well as Ministry of Agriculture, Taiwan ROC.

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