

# THE 17<sup>TH</sup> INTERNATIONAL WORKSHOP ON NONDESTRUCTIVE QUALITY EVALUATION OF AGRICULTURAL, LIVESTOCK AND FISHERY PRODUCTS

**Date:** October 29, 2024 (Tuesday) 08:30 - 17:00

**Venue:** Shin-Yi Lecture Hall, 1F, Tseng Jiang Hall, National Taiwan University, Taipei, Taiwan

**Organizers:** Department of Biomechatronics Engineering, National Taiwan University  
Taiwan Agricultural Mechanization Research & Development Center (TAMRDC)

**Co-organizers:** Chinese Institute of Agricultural Machinery, Taiwan  
Taiwan Institute of Biological Mechatronics  
Center for Intelligent Agriculture Education and Research, National Taiwan University  
Bioenergy Research Center, National Taiwan University

**Sponsoring Organization:** College of Bioresources and Agriculture (CBA), National Taiwan University

| PROGRAM       |  |  |
|---------------|--|--|
| Time          | Agenda   | Chair / Speaker  |
| 08:30 - 09:00 | Registration   | TBD  |
| 09:00 - 09:10 | Opening Ceremony   | Prof. Dar-Yuan Lee (Vice Dean of CBA)<br>Prof. Emeritus Fu-Ming Lu<br>Prof. Yan-Fu Kuo<br>Prof. Yi-Chieh Chiu (Director of TAMRDC) |
|               | Session I  | TBD  |
| 09:10 - 09:50 | The Role of Digital Technologies in Transitioning Food and Agricultural Systems to A Circular Bioeconomy   | Prof. John F. Reid<br>University of Illinois at Urbana-Champaign   |
| 09:50 - 10:20 | Application of Image Texture Feature Distribution on Agriculture Field Type Classification   | Prof. Li-yu Daisy Liu<br>National Taiwan University  |
| 10:20 - 10:50 | Coffee Break   |  |
|               | Session II   | TBD  |
| 10:50 - 11:30 | Advancing Sustainable Food Production Through AI-driven High-throughput Field Phenotyping  | Prof. Wei Guo<br>The University of Tokyo   |
| 11:30 - 12:00 | Phenotyping Strategies for Agricultural Robots: Massive Sampling and Real-time Fruit Assessment  | Prof. Francisco Rovira-Más<br>Polytechnic University of Valencia   |
| 12:00 - 13:30 | Lunch Break  |  |
|               | Session III  | TBD  |
| 13:30 - 14:10 | Phenomics researches for digital agriculture and smart farm applications   | Prof. Ghiseok Kim<br>Seoul National University   |
| 14:10 - 14:40 | Application of Imaging and Spectral Technologies in Crop Growth Monitoring and Quality Evaluation  | Prof. Shih-Fang Chen<br>National Taiwan University   |
| 14:40 - 15:10 | Coffee Break   |  |
|               | Session IV   | TBD  |
| 15:10 - 15:50 | Crop Monitoring Using AI Technology on UAV Images  | Prof. Ming-Der Yang<br>National Chung Hsing University   |
| 15:50 - 16:20 | Smart Agriculture, The Needs, Challenges and Approaches  | Prof. Qin Zhang<br>Washington State University   |
| 16:20 - 17:00 | General Discussion<br><u>Panelists</u><br>Prof. John F. Reid      University of Illinois at Urbana-Champaign<br>Prof. Li-yu Daisy Liu   National Taiwan University<br>Prof. Wei Guo          The University of Tokyo<br>Prof. Francisco Rovira-Más   Polytechnic University of Valencia<br>Prof. Pomin Li          National Pingtung University of Science and Technology<br>Prof. Ghiseok Kim       Seoul National University<br>Prof. Shih-Fang Chen    National Taiwan University<br>Prof. Ming-Der Yang    National Chung Hsing University<br>Prof. Qin Zhang         Washington State University<br>Prof. Yan-Fu Kuo        National Taiwan University<br>Prof. Suming Chen       National Taiwan University<br>Prof. Hao-Ting Lin      National Chung-Hsing University | Prof. Emeritus Fu-Ming Lu<br>National Taiwan University  |