



# Tohoku University-National Yang Ming Chiao Tung University The 9th Joint Technical Workshop 2023

### 13:00-16:40 (TST), Sep. 26 /2023 Room: ED816

### Moderator: Professor Seiji Samukawa and Professor Yiming Li, NYCU, Taiwan

By commemorating the establishment of the Joint Research Center between Tohoku University, Sendai, Japan and National Yang Ming Chiao Tung University (NYCU), Hsinchu, Taiwan, a joint technical workshop will be held in Hsinchu, Taiwan, on Sep. 26, 2023. **Prof. Kazuhiko Endo and Dr. Chao Ho Lan** are invited as special talk and keynote speakers, respectively. **3 Group Leaders** such as Nano-Devices, Hydrogen Energy System, and Bio-Medical Sensor Network from both universities will also have talks in this joint technical workshop.

## Agenda

### **Opening Addresses (13:00-13:10 TST)**

Professor Tarng (Senior Vice President, NYCU, Taiwan)

### **Technical Workshop**

| 1) 13:10 (TST) | (Special Talk)  |
|----------------|---|
|                | Introduction of international Core-to-Core Program of   |
|                | Tohoku Univ and Proposal of Student Exchange Program  |
|                | with NYCU from Tohoku University  |
|                | Prof. Kazuhiko Endo (Tohoku University, Japan)  |
| 2) 13:30       | (Keynote Talk)  |
|                | Hydrogen Energy Safety in Taiwan (Tentative)  |
|                | Dr. Chao Ho Lan (United System Engineering Inc., Taiwan)  |
| 3) 13:50       | Supercomputing multiphase flow energy phenomena by<br>utilizing DX and its application to vehicle elements<br>production technology |
|                | Prof. Jun Ishimoto (Tohoku University, Japan)   |
| 4) 14:20       | Stable Metal-Substituted Oxide-Based Catalysts for<br>Oxidative Steam Reforming of Ethanol (OSRE)                                   |
|                | Prof. Chi-Shen Lee (NYCU, Taiwan)   |
|                | 15 min break  |

| 5) 14:55  | Nanoelectromechanical systems for sensing and processing<br>Prof. Takahito Ono (Tohoku University, Japan)  |
|-----------|--|
| 6) 15:15  | Molecular Imprint Polymer (MIP)-based Sensor for in-situ<br>cTnT Detection in Urine<br>Prof. Yu-Ting Cheng (NYCU, Taiwan)  |
| 7) 15:35  | Atomic Layer Process technology for Heterogeneous<br>Materials Integrated Nano-devices (Etching, deposition and<br>Bonding)<br>Prof. Seiji Samukawa (NYCU, Taiwan) |
| 8) 15:55  | <b>Development of 3DIC/TSV Technology at Tohoku University</b><br>Prof. Tetsu Tanaka (Tohoku University, Japan)  |
| 9) 16:15  | <b>Development of 3D IC Platforms and Bonding Technologies</b><br>Prof. Kuan-Neng Chen (NYCU, Taiwan)  |
| 10) 16:35 | <b>Closing Remarks</b><br>Prof. Li-Chun Wang (Dean of ECE, NYCU, Taiwan)   |