

Connecting Expertise: Collaborative Innovations in Materials and Energy Science

Venue: Faculty of Science, Mahidol University, Phayathai Campus

Date: March 17, 2025

8:30–9:00 – Registration and Coffee

9:00-9:10 - Welcome Address by Dean of the Faculty of Science

SESSION 1: Advances in Materials Research

9:15-9:35 - Reiko Oda (Tohoku University)

"Origin of Chirality for Mesoscopic and Hierarchical « Chiral » Objects and their Transmission Mechanisms"

9:35-9:55 - Haw Yang (Princeton University)

"Niche Approaches to Understanding Dynamics at Material Interfaces"

9:55–10:15 – Jhih-Wei Chu (National Yang Ming Chiao Tung University)

"Molecular Simulation for the Engineering of Energy Materials"

10:15–10:30 – Coffee Break & Networking

SESSION 2: Innovations in Energy Materials

10:30–10:50 – Hirotomo Nishihara (Tohoku University)

"Three-dimensional Graphene for Energy Storage"

10:50–11:10 – Jyh-Tsung Lee (National Sun Yat-sen University)

"Electrolyte Additives for Enhanced Performance in Lithium-ion Batteries"

11:10-11:30 - Teera Chantarojsiri (Mahidol University)

"Homogeneous Electrocatalysts for Small Molecule Activation"

11:30–11:50 – Ho-Hsiu Chou (National Tsing Hua University)

"Design and Synthesis of Semiconducting Polymers for Solar-driven Hydrogen Evolution from Water"

11:50-13:00 - Lunch Break

SESSION 3: Innovations in Materials & Characterizations

13:00–13:20 – Vlad Badilita (Karlsruhe Institute of Technology)

"CORREL - the Magnetic Resonance and X-ray Imaging Correlative Characterisation Laboratory at KIT"

13:20–13:40 – Siraprapha Deebansok (Tohoku University)

"Real Time Electrochemical Observation and Data Analysis"

13:40-14:00 - Wijak Yospanya (Tohoku University)

"Exploring the Potential of Proteins Beyond their Native Environments: Toward Versatile and Sustainable Advanced Materials"

14:00–14:20 – Tanant Waritanant (Mahidol University)

"Submicron Fabrication Investigation of Dental Polymer"

14:20–14:45 – Coffee Break & Networking

14:45–15:00 – Introduction to MUSC by Deputy Dean for Research and Innovation

15:00-16:00 - Tour of research facilities