[TS07T5]

Nanotechnology for Eco-Friendly Energy Generation/Storage 5

Date & Time	July 9(Thu.), 2026 / 15:50-17:10
Place	Room 205
Session Chair(s)	Dr. Su-Ho Cho (NNFC)

TS07T5_I_1 ***Invited** 15:50-16:10

Tailoring Transport of Charge Carriers in Electrochemical Energy Storage Chemistries

Yuping Wu
(Southeast University)

TS07T5_O_2 16:10-16:20

Mechano-Electrochemical Energy Harvesting for Wearable Applications

Duri Han, Jae Myeong Lee, and Changsoon Choi
(Hanyang University)

TS07T5_O_3 ***YSA Applied** 16:20-16:30

Interfacial Synergy in CuS/rGO Nanocomposites for Enhanced Pseudocapacitive Energy Storage

Nikhil Malik[1], Shalendra Kumar[2], Anup Thakur[3], and Ankush Vij[1]
([1]Central University of Haryana, [2]University of Petroleum and Energy Studies, [3]Punjabi University)

TS07T5_O_4 ***YSA Applied** 16:30-16:40

Regenerated Spent Graphite with Inorganic-Rich Solid Electrolyte Interphase for Lithium-Ion Batteries

Alphonse Raj Ruby, Raaju Sundhar Arul Saravanan, Keyru Serbara Bejigo, and Sang-Jae Kim
(Jeju National University)

TS07T5_O_5 ***YSA Applied** 16:40-16:50

A Catalyst-Free Aluminum-Based Electrochemical Energy System with Catholyte Regeneration and Integrated Hydrogen Production

Joshua Alex and Sang-Jae Kim
(Jeju National University)

TS07T5_O_6 ***YSA Applied** 16:50-17:00

AI-Enabled Real-Time Force and Frequency Sensing Using TENG with Sputtered Thin-Film Electrodes

Hong Mu Park, Anand Kurakula, Ramadevi Vadlakonda, Venkata Siva Kavarthapu, Goutham Gatla, and Jae Su Yu
(Kyung Hee University)

TS07T5_O_7 ***YSA Applied** 17:00-17:10

Molten Salt Synthesized Bismuth Titanate/Ecoflex-Based Composites for Energy Harvesting Applications

Ramadevi Vadlakonda, Anand Kurakula, Hong Mu Park, Venkata Siva Kavarthapu, Goutham Gatla, and Jae Su Yu
(Kyung Hee University)