

Thai-Yonsei Workshop on New Generation Flow Battery & Advanced Energy Storage Systems

Date & Time: 2 – 6 pm, August 2, 2022

Place: Rm D404, the 4th Engineering Bldg., Yonsei University, Seoul, Republic of Korea

Sponsored by BK21 Four 연세대학교 사회지향기계기술 글로벌리더 양성교육연구단, 한국연구재단

Time	Agenda
2:00 - 2:10 pm	Introduction
2:10 - 2:30 pm	X-ray absorption spectroscopy: the state of the art synchrotron-based characterization Dr. Pinit Kidkhunthod Synchrotron Light Research Institute
2:30 - 2:50 pm	High Voltage Symmetric Non-Aqueous Redox Flow Battery Based on Modularly Tunable [Ru₂M(μ₃-O)(CH₃CO₂)₆(py)₃] (M = Ru, Mn, Co, Ni, Zn) Cluster Compounds with Multi-Electron Storage Capacity Prof. Hyun S. Ahn Dept. of Chemistry, Yonsei University
2:50 - 3:10 pm	Operando characterization of Zn interface in zinc-based batteries Dr. Jitti Kasemchainan Department of Chemical Technology, Faculty of Science, Chulalongkorn University
3:10 - 3:30 pm	Advanced electrodes for high performance Zn based flow battery Dr. Youngkwon Kim Korea Electronics Technology Institute (KETI)
3:30 - 3:50 pm	Recent progress and strategies toward a high-performance zinc-ion battery Assoc. Prof. Soorathep Kheawhom Department of Chemical Engineering, Faculty of Engineering, Chulalongkorn University
3:50 - 4:00 pm	Break
4:00 - 4:20 pm	Multi-physics modeling of vanadium redox flow batteries with parameter identification Prof. Jung-il Choi School of Mathematics and Computing, Yonsei University
4:20 - 4:40 pm	Structural investigation and mechanistic study of oxygen evolution electrocatalyst using synchrotron X-ray characterization techniques Dr. Suttipong Wannapaiboon Synchrotron Light Research Institute
4:40 - 5:00 pm	Elucidating the thermal runaway reaction mechanism of lithium-ion batteries and development of an integrated model to estimate their performance and durability Prof. Jong Sup Hong School of Mechanical Engineering, Yonsei University
5:00 - 5:20 pm	Polymeric approach in enhancing the stability of halide perovskite solar cells and Zn-based batteries Dr. Rongrong Cheacharoen ³ Metallurgy and Materials Science Research Institute, Chulalongkorn University
5:20 - 5:40 pm	Self-charging 3D-printed Supercapacitor for Harvesting and Storage of Photosynthetic Electrons Prof. WonHyoung Ryu School of Mechanical Engineering, Yonsei University
5:40 – 6:00 pm	Closing & Photo Time
6:30 – 8:00 pm	Dinner