

Workshop II : Synchrotron X-ray Techniques Facilitate Upgrade of Energy Industry

Chair: Shi-Wei Chen (陳世偉)

November 12 (Thursday)

Place: L100

08:30		Registration
09:00		Workshop Opening Remarks <i>Bor-Yuan Shew (許博淵) & Gwo-Huei Luo (羅國輝), NSRRC (國家同步輻射研究中心)</i> <i>Session Chair: Chi-Chang Hu (胡啟章)</i>
09:20	II1	Manufacture and Discussion on Safety of High Energy Density Li-ion Batteries <i>Torng-Jinn Lee (李桐進), Taiwan Battery Association (台灣電池協會)</i>
09:50	II2	Advanced Synchrotron Techniques Used for New Material Development and Failure Analyses in Li-ions Battery <i>Shi-Wei Chen (陳世偉), NSRRC (國家同步輻射研究中心)</i>
10:20		Coffee Break <i>Session Chair: Fu-Ming Wang (王復民)</i>
10:50	II3	Electrolyte Additives Improved High Rate Performance at High Voltage System for LiCoO₂/Graphite Pouch Cells <i>Chih-Hung Shen (沈志鴻), Synergy ScienTech Corp. (興能高科技(股)公司)</i>
11:20	II4	The Latest Challenges of High-capacity Power LIB Batteries <i>Hung-Ming Kang (康宏銘), E-ONE MOLI Energy Corp. (能元科技(股)公司)</i>
11:50	II5	In Situ/Operando Synchrotron-based X-ray Studies on Batteries and Supercapacitors <i>Han-Yi Chen (陳翰儀), National Tsing Hua Univ. (國立清華大學)</i>
12:20		Lunch

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- 13:30 II6 **Controlling Ni²⁺ from the Surface to the Bulk by a New Cathode Electrolyte Interphase Formation on Ni-rich Layered Cathode in High-Safe and High-Energy-Density Lithium-Ion Batteries**
Fu-Ming Wang (王復民), National Taiwan Univ. of Sci. and Tech. (國立臺灣科技大學)
- 14:00 II7 **Requirements of Cell Characteristic and Performance for Swapping E-Scooter Battery**
Kun-Sheng Shen (沈坤昇), Gogoro Taiwan Limited (Gogoro 睿能創意(股)公司)
- 14:30 II8 **Development of Prospective Energy Materials and Batteries**
Chung-Chieh Chang (張忠傑), GUS Technology (格斯科技)

15:00 Coffee Break

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- 15:20 II9 **The Recent Development of CSCC's Anode Materials of LIB**
Po-Chin Chen (陳柏欽), China Steel Chemical Corp. (中鋼碳素化學(股)公司)
- 15:50 II10 **LiNi_{0.5}Mn_{1.5}O₄||Li₄Ti₅O₁₂ Full Battery—An in-operando Neutron Powder Diffraction Study**
Cheng-Zhang Lu (呂承璋), ITRI MCL--Division of Energy Storage Materials & Tech. (工研院材化所儲能研究組)
- 16:20 II11 **Development of Innovative Recycling of Lithium Battery**
Tien-Chin Chang (張添晉), National Taipei Univ. of Tech. (國立臺北科技大學)
- 16:50 **Discussion & Closing Remarks**
- 17:20