

## SpectroNanoscopy Workshop 2018

December 5 (Wed.) Afternoon      Language: English	
12:00 ~ 13:00	Registration
13:00 ~ 13:10	Welcoming remark
13:10 ~ 13:20	Opening remark
Battery Analysis using SR      Chair: Dr. Jouhahn Lee	
13:20 ~ 14:00	Atomistic understanding of the new electrode reactions for rechargeable batteries (Kisuk Kang, SNU, Rep. of Korea)
14:00 ~ 14:30	Synchrotron-Based Analytical Techniques for the Understanding of Battery Operation (Chunjoong Kim, CNU, Rep. of Korea)
14:30 ~ 15:00	In-situ Scanning Transmission X-ray Microscopy for lithium ion batteries and beyond (Jongwoo Lim, SNU, Rep. of Korea)
15:00 ~ 15:15	Coffee Break
Advanced Raman Microscopy      Chair: Dr. Cheolho Jeon	
15:15 ~ 15:45	Coherent Nuclear Wave Packets Toward Polaronic State in Methylammonium Lead Iodide Perovskite (Myeongkee Park, Dong-A Univ., Rep. of Korea)
15:45 ~ 16:15	In-situ and Operando Raman Microscopy Analysis of Phase Transformation (Joonhee Moon, KBSI, Rep. of Korea)
16:15 ~ 16:45	Nanogap-Enhanced Raman Scattering (NERS) (Yung Doug Suh, KRICT, Rep. of Korea)
16:45 ~ 17:00	Coffee Break
SPEM      Chair: Dr. Jaeyoon Baik	
17:00 ~ 17:30	Chemical Modification and Structural Engineering of Graphene for Modulating its Electronic Structure (Hyunseob Lim, JNU, Rep. of Korea)
17:30 ~ 18:00	Electronic Structure of Buried Interface of TiO <sub>2</sub> /CH <sub>3</sub> NH <sub>3</sub> PbI <sub>3</sub> (Yeonjin Yi, Yonsei Univ., Rep. of Korea)
18:00 ~ 19:30	Poster session + reception
19:30 ~ 20:30	Panel discussion

December 6 (Thur.) Morning      Language: English	
Advanced Photon Science      Chair: Dr. Ki-jeong Kim	
08:00 ~ 09:00	Panel discussion
09:00 ~ 09:30	Resonant x-ray scattering: Scattering meets spectroscopy (Hoyoung Jang, PAL, Rep. of Korea)
09:30 ~ 10:10	Bulk-sensitive Elastic and Inelastic X-ray Fluorescence Spectroscopy and its applications (Gapsoo Chang, Univ. of Saskatuwan, Canada)
10:10 ~ 10:30	Coffee Break
Advanced Photon Science      Chair: Dr. Kyuwook Ihm	
10:30 ~ 11:00	THz spectroscopy of graphene (Seong Chu Lim, SKKU, Rep. of Korea)
11:00 ~ 11:30	'Blackswan' Metal (Jeehoon Kim, POSTECH, Rep. of Korea)
11:30 ~ 12:10	Development of Soft X-ray absorption spectroscopy at the Photon Factory for the operando observation of surface and interface (Kenta Amemiya, KEK, Japan)
12:10 ~ 13:30	Lunch
December 6 (Thur.) Afternoon      Language: English	
Hard X-ray Nano-imaging      Chair: Dr. Jun Ihm	
13:30 ~ 14:10	X-rays can propel and visualize colloids (Ji Tae Kim, The University of Hong Kong, Hong Kong)
14:10 ~ 14:40	Nano-scale materials research via spectroscopic X-ray imaging and scientific interior data mining (Sangsul Lee, PAL, Rep. of Korea)
14:40 ~ 15:00	Coffee Break
Coherent X-ray imaging      Chair: Dr. Hyun-Joon Shin	
15:00 ~ 15:30	Exploring the irreversible phase changes with real images from XFEL single-pulse imaging (Changyong Song, POSTECH, Rep. of Korea)
15:30 ~ 16:00	Direct holography from a single speckle snapshot (KyeoReh Lee, KAIST, Rep. of Korea)
16:00 ~ 16:20	Break
STXM      Chair: Dr. Namdong Kim	
16:20 ~ 17:00	Applications and Development of Soft X-ray Spectromicroscopy at Shanghai Synchrotron Radiation Facility (Lijuan Zhang, SSRF, China)
17:00 ~ 17:30	Applications of Synchrotron Soft X-ray Spectro-Nanosopies in Energy Related Materials (Jian Wang, CLS, Canada)
17:30 ~ 18:00	Panel discussion
18:00 ~ 21:00	Banquet

December 7 (Fri.) Language: English	
Advanced Imaging techniques Chair: Dr. Jeong Won Kim	
09:20 ~ 10:00	AFM + Nanoscale Vis-IR Spectroscopy via Photo-induced Force Microscopy <b>(Sung Park, Molecular Vista Inc., USA)</b>
10:00 ~ 10:30	Nanoscale Spectroscopic Studies of Two Different Physical Origins of The Photo-induced Force: Dipole and Thermal <b>(Junghoon Jahng, KRISS, Rep. of Korea)</b>
10:30 ~ 10:50	Coffee Break
10:50 ~ 11:20	Near-Field Optical Spectroscopy for Imaging Exciton Emissions of 2D Semiconductors <b>(Jeongyong Kim, SKKU, Rep. of Korea)</b>
11:20 ~ 11:50	Nanoscale Optical Absorption Spectroscopy using PTIR <b>(Jungseok Chae, Ewha Womans Univ., Rep. of Korea)</b>
11:50 ~ 12:20	Ambient Pressure Scanning Tunneling Microscopy and Atomic Force Microscopy Studies on Catalytic and Energy Materials <b>(Jeong Young Park, KAIST, Rep. of Korea)</b>
12:20 ~ 12:30	Closing remark
12:30 ~ 13:30	Lunch
13:30 ~ 15:00	Panel discussion