

# A3 Foresight Summer School and Workshop

Aug. 29, 2009 ~ Sep. 2, 2009  
Hill House, Yangpyeong, KOREA

Aug. 29 (Sat.)

19:30 ~	Welcome reception
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Aug. 30 (Sun) **Summer School on SPM Instrumentation**

9:20 ~ 9:30	Opening and Preview	Young Kuk
9:30 ~ 12:20	Session1. STM Instrumentations Session chair:	
9:30 ~ 11:00	STM Instrumentation I: Electronics, Hardware, Software	Young Kuk <i>Seoul Nat'l University</i>
11:00 ~ 11:20	Break	
11:20 ~ 12:20	STM Instrumentation II: Cryogenic STM	Xi Chen <i>Tsinghua University</i>
12:20 ~ 14:00	Lunch break	
14:00 ~ 17:40	Session 2. AFM Instrumentations Session chair:	
14:00 ~ 15:00	AFM Instrumentation I: Review	Yongho Seo <i>Sejong University</i>
15:00 ~ 15:20	Break	
15:20 ~ 16:20	AFM Instrumentation II: Dynamic AFM	Yukio Hasegawa <i>The University of Tokyo</i>
16:20 ~ 16:40	Break	
16:40 ~ 17:40	AFM Instrumentation III: NSOM	Zee Hwan Kim <i>Korea University</i>
18:30 ~	Banquet	

Aug. 31 (Mon.) **A3 Workshop for students**

9:00 ~ 10:30	Session I. Session chair:	
9:00 ~ 9:15	Oxidation of Ultrathin Bismuth Films	Feng Pan
9:15 ~ 9:30	Superconductivity on Nb/Si(111) System : Scanning tunneling microscopy and spectroscopy study	Sangjun Jeon
9:30 ~ 9:45	STM studies of monovalent adsorbates on 2D metallic Si surfaces	F. Nakamura
9:45 ~ 10:00	Preparation of atomically flat TiO <sub>2</sub> (110) substrate	Ryota Shimizu
10:00 ~ 10:15	Conformation Manipulation of Single Metalloporphyrin Molecules on Cu(111) by Scanning Tunneling Microscope Tip	Jong Keon Yoon
10:15 ~ 10:30	Mott insulating ground state and metallization/localization induced by carrier doping on a surface superstructure	T. Komorida
10:30 ~ 10:55	Break	
10:55 ~ 12:10	Session II. Session chair:	
10:55 ~ 11:10	Study of interaction between Rashba surface state and QWS by high-resolution spin- and k-resolved band mapping	Manami Ogawa
11:10 ~ 11:25	Emergence of nearly massless hole carriers at silicon subsurface covered with a lead monolayer	Keun Su Kim
11:25 ~ 11:40	Atomic arrangement and electronic states of Al nanowires on NaCl(100) surface	Satoshi Yokoya
11:40 ~ 11:55	In situ atomic scale investigation of crack propagation in ultra-fine grained gold thin films	Pan Liu
11:55 ~ 12:10	Mediating role of Magnesium substrate in n-type doping of tetrathianaphthacene (TTN) to tris-(8-hydroxyquinoline) aluminum (Alq3)	Sumera Shimizu
12:10 ~ 13:30	Lunch	

13:30 ~ 14:30	Tutorial on Graphene	Young-Woo Son KIAS
14:30 ~ 15:00	Break	
15:00 ~ 16:30	Session III. Session chair:	
15:00 ~ 15:15	Exciton diffusion in MgZnO nanorods using nanorod quantum structures	Jinkyung Yoo
15:15 ~ 15:30	Enhancement of Photochemical Reaction with Near Field between Gold Particles	Tomoya Taguchi
15:30 ~ 15:45	Fast High-Temperature Response of Carbon Nanotube Film and Its Application as an Incandescent Display	Peng Liu
15:45 ~ 16:00	Carbon Nanotube Films fabricated by a Simple Transfer Method and Their Electrical Properties	Doo Hee Hwang
16:00 ~ 16:15	High-Capacity Lithium Storage in Silicon Nanowire Array Films as Anodes for Lithium-Ion Batteries	Rui Huang
16:15 ~ 16:30	Logic Circuits from One-Dimensional Nanoscale Building Blocks with Adjustment of Operation Voltage	Gunho Jo
16:30 ~ 17:00	Break	
17:00 ~ 18:00	Session IV. Session chair:	
17:00 ~ 17:15	Nanoscale $p$ - $n$ junctions investigated by local probes	Cheol-Joo Kim
17:15 ~ 17:30	The research of nano dewetting process by SPM methods	Qiang Fu
17:30 ~ 17:45	Nanometer-scale four-point probe resistance measurements of nanowires using carbon nanotube tips	T. Tono
17:45 ~ 18:00	Scanning Gate Microscope Study on Graphene Device	Jungseok Chae
18:00 ~	Dinner	