

Academia Sinica Nano Program-2011 review meeting

October 13-14, 2011

The Auditorium on 1st Floor, Institute of Physics, Academia Sinica

(Address: 128 Academia Road, Section 2, Nankang, Taipei 115, Taiwan)

Agenda

Thursday October 13	
09:30-09:40	Registration
Chairperson: Prof. Yia-Chung Chang 張亞中主任, RCAS, AS	
09:40-09:45	Introductory Remarks Prof. Ting-Kuo Lee 李定國特聘研究員, IoP, AS
09:45-10:00	Growth of Graphene/h-BN bilayers Lain-Jong Li 李連忠*、Chun-Wei Pao 包淳偉、Shih-Hsin Chang 張仕欣
10:00-10:15	Self-Organized Porous Nanomaterials for Potential Energy Applications Kuang-Lieh Lu 呂光烈*、Shu-Hua Chien 簡淑華、Ito Chao 趙奕妤
10:15-10:30	Molecular Mechanisms of Polymer Brush Mediated Lubrications Wen-Tau Juan 阮文滔*、Wei-Li Lee 李偉立、Keng-Hui Lin 林耿慧、Jih-Chiang Tsai 蔡日強、Arvind Gopinath
10:30-10:45	Energy-Saving Applications of Energy Up-Conversion Through Triplet-Triplet Annihilation Tahsin J Chow 周大新*、Chao-Ping Hsu 許昭萍、Shih-Sheng Sun 孫世勝
10:45~11:05	Coffee Break
11:05-11:35	Nanomaterials for Hydrogen Energy Applications Kuei-Hsien Chen 陳貴賢*、Chen-Hao Wang 王丞浩、Chih-Jen Chen、Jih-Shang Hwang 黃智賢、Li-Chyong L. Chen 林麗瓊、Chi-Sheng Wu 吳紀聖
11:35-12:00	Development of Efficient Solar Cells with Nanostructure- and Interface-Controlled Photovoltaic Processes Juen-Kai Wang 王俊凱*、Kuei-Hsien Chen 陳貴賢、Chih-Wei Chu 朱治偉、Jing-Jong Shyue 薛景中、Chun-Wei Pao 包淳偉、Chao-Cheng Kaun 關肇正、Chin-Ti Chen 陳錦地、Li-Chyong L. Chen 林麗瓊、Leeyih Wang 王立義、Yian Tai 戴龔、Chih-Chien Lee 李志堅、Jiun-Haw Lee 李君浩、Shih-Shang Hwang、Ping-Tsung Huang 黃炳綜
12:00-12:15	Investigation of Large Array Nano-Ring and Nano-Dot Systems Fabricated by Unconventional Technique Wei-Li Lee 李偉立*、Keng-Hui Lin 林耿慧、Wen-Tau Juan 阮文滔、Yu-Tai Tao 陶雨臺
12:20~13:30	Lunch
Chairperson: Prof. Ting-Kuo Lee 李定國特聘研究員, IoP, AS	
13:30-13:45	Administration Affairs and Core Facility Report Ting-Kuo Lee 李定國
13:45-14:00	TIGP Report Chia-Seng Chang 張嘉升
14:00-14:15	Liposomal Cargo Unloading Using Light-triggered Fusion Peptides Hsien-Ming Lee 李賢明
14:15-14:30	Spectroscopic Studies on the Pairing Mechanism of Iron-based Superconductors Tien-Ming Chuang 莊天明、Kung-Hsuan Lin 林宮玄

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14:30-14:45	<i>In situ</i> fabricated & Self-aligned Phase Plates for Enhancing TEM Imaging Contrast Yuh-Lin Wang 王玉麟、Jessie Shiue 薛韻馨
14:45~15:00	Coffee Break
15:00-15:15	Friction at the Atomic Scale Chia-Seng Chang 張嘉升*、Ing-Shouh Hwang 黃英碩、Wei-Bin Su 蘇維彬、Ching-Ming Wei 魏金明
15:15-15:30	Material Characterization and Device Applications of GaSb Quantum Dots Prepared by Molecular Beam epitaxy Shih-Yen Lin 林時彥*、Min-Hsiung Shih 施閔雄、Chun-Wei Pao 包淳偉、Shih-Hsin Chang 張仕欣
15:30-15:45	Investigation of Photoinduced Ultrafast Structural Dynamics and Photoluminescence of Nanomaterials for Applications in Nano-Sized Heaters, Lasers, Single-Photon Emitters and Fluorescence Labels Jau Tang 湯朝暉*、Min-Hsiung Shih 施閔雄、Yuh-Jen Cheng 程育人、Yia-Chung Chang 張亞中、Tao-Shih Hsieh 謝道時、Peter M. Prentzepis
15:45-16:00	UV and Near-IR Organic Emitter and Absorber Materials for Optoelectronic Devices Jiann T'suen Lin 林建村*、Chi-Wei Chu 朱治偉、Yuning Li、Hany Aziz
16:00~16:15	Coffee Break
Chairperson: Prof. Kuan Wang 王寬所長, IoC, AS	
16:15-16:45	Lecture: Molecular electronic route to assemble biosensors Prof. Shlomo Yitzchaik, Institute of Chemistry, The Hebrew University of Jerusalem
16:45-17:15	Lecture: Mimicking the Nature Approach to Quantum Mechanics Prof. Yossi Paltiel, Applied Physics Department, The Hebrew University of Jerusalem
17:15-17:45	Lecture: Towards live cell biosensor arrays Prof. Shimshon Belkin, Institute of Life Sciences, The Hebrew University of Jerusalem
18:00~19:30	Dinner

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Friday October 14	
Chairperson: Prof. Maw-Kuen Wu 吳茂昆所長, IoP, AS	
09:30-09:45	Investigation of the Roles of Micro-environments to the Cellular Behavior by Advanced Nanotechnology Peilin Chen 陳培菱*、Jing-Jong Shyue 薛景中、Yi-Chung Tung 董奕鍾、Chung-Chih Lin 林崇智
09:45-10:00	Development of Ultra Sensitive Biochips for Early Detection of Environmental Viruses Ji-Yen Cheng 鄭鄧言*、Pei-Kuen Wei 魏培坤、Sen-Yeu Yang 楊申語、Xuanhong Cheng
10:00-10:15	Evaluation of Influenza Inhibitors Using Virus-Like Particle (VLP) Derived from H1N1 and H3N2 Subtypes Ding-Kwo Chang 張定國*、Pei-Wen Hsiao 蕭培文
10:15-10:30	New Proposal: Lung on a Chip - Study the Cellular-Level Functions of Pneumocytes Differentiated from Stem Cells <i>in vitro</i> Yi-Chung Tung 董奕鍾*、Thai-Yen Ling 林泰元
10:30-10:45	Advanced Studies of Nanostructure Junctions and Biomolecule-Protein Interaction via a Near-Field Enhanced High-Resolution Optical Imaging Ellipsometer Yia-Chung Chang 張亞中*、Chau-Hwang Lee 李超煌、Pei-Kuen Wei 魏培坤、Wei-Li Lee 李偉立
10:45~11:05	Coffee Break
11:05-11:20	Dynamic Imaging of Cell - Cell, Cell - Vesicle, and Cell - Particle Interactions in the Sub-100 nm Scale Chau-Hwang Lee 李超煌*、Peilin Chen 陳培菱、Wei-Yu Liao、Fan-Gang Tseng 曾繁根、Chi-Ming Ho 何志明、Chia-Fu Chou 周家復
11:20-11:35	Using Functional Nano-Au to Facilitate Generation of Structural Genomic Database of Yeast Protein Complexes Wei-hau Chang 章為皓*、Yeukuang Hwu 胡宇光
11:35-11:50	Culturing Cells in Cellular Solids Keng-hui Lin 林耿慧*、En-de Hu 胡恩德、Chaw-hwang Lee 李超煌、Ji-Yen Cheng 鄭鄧言、Oscar Lee 李光申
11:50-12:15	Tracking Membrane Protein Localization and Polarity During Stem Cell Differentiation Yu-Ju Chen 陳玉如*、Hung-Chih Kuo 郭紘志、Pei-Lin Chen 陳培菱、Chau-Hwang Lee 李超煌、Yi-Chung Tung 董奕鍾、Chia-Fu Chou 周家復、Chun-Cheng Lin 林俊成、Dar-Bin Shieh 謝達斌
12:20~13:30	Lunch

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Chairperson: Prof. Mei-Ying Chou周美吟所長, IAMS, AS

13:30-13:55	Probing Biological Samples and Interfacial Water with High-Sensitivity Atomic Force Microscopy Ing-Shouh Hwang黃英碩*、Chia-Seng Chang張嘉升、En-Te Hwu胡恩德、Yeng-Long Chen陳彥龍、Chi Keung Chan陳志強、Chia-Fu Chou周家復、Keng-hui Lin林耿慧、Wen-Tau Juan阮文滔、Chun-Wei Pao包淳偉
13:55-14:20	Exploring the Structures and Dynamics of Water at Interfaces Jer-Lai Kuo 郭哲來*、Michitoshi Hayashi林倫年、Yuan Ron Shen沈元壤、Sheng-H Lin林聖賢、Chung-Yuan Mou牟中原、Sow-Hsin Chen陳守信、Yun-Wei Chiang江昀緯、Chun-Wei Pao包淳偉、Ing-Shouh Hwang黃英碩、Chieng-Cheng Kuo郭建成、Chi-Kuang Sun孫啓光、Kaito Takahashi高橋開人、Asuka Fujii藤井朱鳥、Ming-Kang Tsai蔡明剛、Veronica Vaida
14:20-14:35	Real-Time Sensing with Single-Pixel Resolved Kinetics Using Biofunctional Nanoslits and Nanotraps Chia-Fu Chou周家復*、Thierry Leïchlé、Chun-Cheng Lin林春成、Yu-Ju Chen 陳玉如、Po-Huang Liang梁博煌、Chris Jao饒淑娟
14:35-15:00	Discussion Time & Concluding Remarks