

Program

Recent Advances in Graphene and Related Materials

1 - 6 August 2010
Singapore

Conference Chair

Kian Ping Loh
National University of Singapore, Singapore

Conference Co-chairs

Antonio Castro-Neto
Boston University, USA

Toshiaki Enoki
Tokyo Institute of Technology, Japan

Özyilmaz Barbaros
National University of Singapore, Singapore

Andrew T. S. Wee
National University of Singapore, Singapore

Young-Woo Son
School of Computational Sciences, Korea Institute for Advanced Study

Kyeongjae Cho
University of Texas – Dallas and Korea Institute for Advanced Study

Byung Hee Hong
Sungkyunkwan University, Korea



Engineering Conferences International
32 Broadway, Suite 314, New York, NY 10004
T: 1-212-514-6760 • F: 1-212-514-6030 • E: info@engconfintl.org

Engineering Conference International (ECI) is a not-for-profit global engineering conferences program, originally established in 1962, that provides opportunities for the exploration of problems and issues of concern to engineers and scientists from many disciplines.

ECI Board Members

Barry C. Buckland, President

Peter Gray

Allen I. Laskin

Raymond J. McCabe

David Robinson

Jules Routbort

William Sachs

Eugene Schaefer

P. Somasundaran

Chair of ECI Conferences Committee: William Sachs

ECI Technical Liaison for this conference: Nghi Q. Lam

ECI Director: Barbara K. Hickernell

ECI Associate Director: Kevin M. Korpics

All conference information © Engineering Conferences International

International Advisory Committee

Kuei Hsien Chen, Academia Sinica, Taiwan
B. V. Chowdari, Materials Research Society-Singapore
Toshiaki Enoki, Tokyo Institute of Technology, Japan
Andre Geim, Manchester University, UK
Dai Hongjie, Stanford University, USA
Phillip Kim, Columbia University, USA
Nghi Q. Lam, Applied Physics Letters, USA
Shuit-Tong Lee, City University of Hong Kong, China
Yun-Qi Liu, Beijing National Laboratory for Molecular Sciences, China
Seeram Ramakrishnan, National University of Singapore, Singapore
Rod Ruoff, University of Texas at Austin, USA
Lim Kiang Wee, Institute of Materials Research and Engineering, Singapore

Local Organizing Committee

Kian Ping Loh, National University of Singapore
Ö. Barbaros, National University of Singapore
Wei Chen, National University of Singapore
Rusdi Andrivo, National University of Singapore
John Thong, National University of Singapore
Ze-Xiang Shen, Nanyang Technological University
Yu Ting, Nanyang Technological University
Lain-Jong Li, Nanyang Technological University
Haibin Su, Nanyang Technological University
Pramoda Kumari Pallathadka, Institute of Materials Research and Engineering

Sunday, August 1, 2010

18:00 – 20:30

Conference check-in (Cinnamon Foyer)

NOTES

- Morning General Technical Sessions will be held in the Cinnamon Room
- Parallel Sessions A will be held in the followings rooms:

Tuesday:	Phoenix Ballroom 1
Wednesday:	Cinnamon Room
Thursday:	Phoenix Ballroom 1
- Parallel Sessions B will be held in the followings rooms:

Tuesday:	Phoenix Ballroom 2
Wednesday:	Phoenix Ballroom 1
Thursday:	Cinnamon Room
- Poster Session will be held in the Cinnamon Room.
- Audiotaping, videotaping and photography of presentations are prohibited.
- Speakers – Please leave at least 5 minutes for questions and discussion.
- Please do not smoke at any conference functions.
- Turn your cellular telephones to vibrate or off during technical sessions.
- Be sure to make any corrections to your name/contact information on the Master Participant List or confirm that the listing is correct. A corrected copy will be sent to all participants after the conference.

Monday, August 2, 2010

- 08:45 - 09:15 Opening Address: K.P. Loh, Conference Chair
Welcome Address: Antonio Castro-Neto
Welcome from ECI: Nghi Lam, ECI Technical Liaison
- 09:15 **Session 1: Nanoscale Graphene Devices 1**
Session Chair: Antonio Castro-Neto
- 09:15 - 10:00 Plenary Speaker
Philip Kim, *Columbia University*
ELECTRON TRANSPORT IN GRAPHENE
- 10:00 - 10:20 Invited Talk
Tomas Palacios, *Massachusetts Institute of Technology*
GRAPHENE AMBIPOLAR ELECTRONICS
- 10:20 - 11:00 Coffee break
- Session Chair: Toshiaki Enoki
- 11:00 - 11:20 Invited Talk
Eric M. Vogel, *University of Texas at Dallas*
PROPERTIES OF METAL CONTACTS ON GRAPHENE
- 11:20 - 11:40
- 11:40 - 12:00 Invited Talk
Jose A. Garrido, *Walter Schottky Institut, Technische
Universität München*
**DIAMOND AND GRAPHENE SOLUTION-GATED FIELD
EFFECT TRANSISTORS**
- 12:00 - 14:00 Lunch break
- 14:00 **Session 2: Epitaxial Graphene Growth,
Characterization and
Devices 1**
Session Chairs: Andrew T.S. Wee; Kostya Novoselov
- 14:00 - 14:20 Invited Talk
Kazuhito Tsukagoshi, *MANA, NIMS*
BAND GAP TUNING FOR GRAPHENE TRANSISTOR
- 14:20 - 14:40 Kazuyuki Takai, *Tokyo Institute of Technology*
**STRUCTURE AND THE ELECTRONIC STRUCTURE OF
EPITAXIAL GRAPHENE EDGES**
- 14:40 - 15:00 Invited Talk
Thomas Seyller, *University of Erlangen-Nuremberg*
EPITAXIAL GRAPHENE ON SIC (0001)

Monday, August 2, 2010 (continued)

- 15:00 - 15:20 V. Sorokin, *Institute of High Performance Computing*
PARTIAL EPITAXIAL MORPHOLOGY OF GRAPHENE NANORIBBON AND NANOFLLAKE ON THE SI-TERMINATED SIC (0001) SURFACES
- 15:20 - 16:00 Tea Break
- 16:00 **Session 3: Nanoscale Graphene Devices 2**
Session Chair: Özyilmaz Barbaros
- 16:00 - 16:30 KEYNOTE Talk
Konstantin S. Novoselov, *University of Manchester*
GRAPHENE AND ITS CHEMICAL DERIVATIVES
- 16:30 - 16:50 Invited Talk
Toshiaki Enoki, *Tokyo Institute of Technology*
FERRIMAGNETIC STRUCTURE AND SPIN GLASS STATE OF A NETWORK OF NANOGRAFENE SHEETS
- 16:50 - 17:10 Katsunori Wakabayashi, *International Centre for Materials Nanoarchitectonics (MANA), National Institute for Materials Science (NIMS)*
MAGNETOTRANSPORT PROPERTIES OF GRAPHENE NANORIBBONS AND JUNCTIONS
- 17:10 - 17:30 Invited Talk
Young Jae Song, *Centre for Nanoscale Science and Technology (CNST), National Institute of Standards and Technology (NIST), MD 20878*
FRACTIONAL HALL PHYSICS OF EPITAXIAL GRAPHENE: SCANNING TUNNELING SPECTROSCOPY STUDY BELOW 20 MK WITH HIGH MAGNETIC FIELD

Tuesday, August 3, 2010

- 09:00 **Session 4: Graphene Characterization (Spectroscopy, Raman, etc.) 1**
Session Chair: Young-Woo Son
- 09:00 - 09:45 Plenary Talk
Sumio Iijima, *Meijo University, (National Institute of Advanced Industrial Science and Technology / Nanotube Research Centre, SAINT and NEC)*
CHARACTERIZATION OF ATOMIC STRUCTURES OF GRAPHENE AND ITS RELATED NANO-CARBON MATERIALS WITH THE LATEST ELECTRON MICROSCOPY
- 09:45 - 10:05 K. Sasaki, *International Centre for Materials Nanoarchitectonics, National Institute of Materials Science*
IDENTIFYING THE ORIENTATION OF EDGE OF GRAPHENE USING G BAND RAMAN SPECTRA
- 10:05 - 10:35 Coffee break
- 10:35 **Session 5: Latest Development on Preparation Techniques for Large Area Graphene**
Session Chair: Kian Ping Loh
- 10:35 - 11:05 Keynote Speaker
Byung Hee Hong, *SKKU*
TOWARD INDUSTRIAL APPLICATIONS OF GRAPHENE ELECTRODES
- 11:05 - 11:35 Keynote Speaker
Rod S. Ruoff, *University of Texas at Austin*
GRAPHENE-BASED MATERIALS
- 11:35 - 11:55 Shintaro Sato, *Fujitsu Laboratories Ltd.*
WAFER-SCALE SYNTHESIS OF GRAPHENE BY CHEMICAL VAPOR DEPOSITION AND FABRICATION OF TOP-GATED FIELD EFFECT TRANSISTORS USING TRANSFER-FREE PROCESSES
- 11:55 - 12:15 Sung Hun Kim, *Korea Electrotechnology Research Institute*
LARGE AREA PRODUCTION OF SINGLE-LAYER REDUCED GRAPHENE OXIDE BY SHEAR STRESS
- 12:15 - 13:30 Lunch break

Tuesday, August 3, 2010 (continued) - Parallel Session A

- 13:30 **Session 6: Graphene Characterization (Spectroscopy, Raman, etc.) 2**
Session Chair: Byung Hee Hong
- 13:30 - 13:50 Katsuaki Sugawara, *WPI-AIMR, Tohoku. University*
ELECTRONIC STRUCTURE OF LI-DOPED GRAPHENE ON SIC (0001) STUDIED BY HIGH RESOLUTION ARPES
- 13:50 - 14:10 Ken-Ichi Sakai, *Tokyo Institute of Technology*
STM OBSERVATION OF THE FINE STRUCTURE IN THE VICINITY OF THE GRAPHENE EDGE
- 14:10 - 14:30 Koheni Kanetani, *Tohoku. University*
ELECTRONIC STRUCTURE OF SINGLE- AND MULTI-LAYER GRAPHENE ON SIC(0001) STUDIED BY HIGH RESOLUTION ANGLE-RESOLVED PHOTOEMISSION SPECTROSCOPY
- 14:30 **Session 7: Nanoscale Graphene Devices 3**
Session Chair: Manu Jaiswal
- 14:30 - 14:50 Invited Talk
Vitor M. Pereira, *Boston University*
ON-DEMAND ENGINEERING OF ELECTRONIC TRANSPORT IN GRAPHENE
- 14:50 - 15:10 Alina Veligura, *University of Groningen*
LARGE YIELD PRODUCTION OF HIGH MOBILITY FREELY SUSPENDED GRAPHENE ELECTRONIC DEVICES ON A PMGI BASED ORGANIC POLYMER
- 15:10 - 15:30 Invited Talk
Christoph Stampfer, *RWTH Aachen University*
SPIN STATES IN GRAPHENE QUANTUM DOTS
- 15:30 - 15:50 Zheng Yi, Department of Physics, *National University of Singapore*
LARGE SCALE GRAPHENE-BASED FIELD EFFECT TRANSISTORS ON FERROELECTRIC SUBSTRATES
- 16:30 - 19:30 Poster Session and Singapore Food Happy Hour

Tuesday, August 3, 2010 (continued) - Parallel Session B

- 13:30 **Session 8: Nano-structuring of Graphene (Ion Beam, Cutting, Making of Graphene Nanoribbons)**
Session Chairs: Kyeong-Jae Cho; John Thong
- 13:30 - 13:50 Gun-Do-Lee, *Seoul National University*
RECONSTRUCTION AND EVAPORATION AT GRAPHENE NANORIBBON EDGES
- 13:50 - 14:10 Junji Haruyama, *Aoyama Gakuin University*
ELECTRON TRANSPORT OF NOVEL NON-LITHOGRAPHICALLY FORMED DAMAGE-FREE GRAPHENE NANO-RIBBONS; UNZIPPING OF CARBON /NANOTUBES AND NANO-POROUS ALUMINA TEMPLATE
- 14:10 - 14:30 S. Mathew, *National University of Singapore*
THE EFFECTS OF MEV PROTON IRRADIATION ON GRAPHENE
- 14:30 - 14:50 Wang Haomin, *Division of Physics and Applied Physics, Nanyang Technological University*
GRAPHENE NANOGAP WITH ATOMICALLY PARALLEL EDGES AND ITS ELECTRON EMISSION PROPERTIES
- 14:50 - 15:10 Ye Tao, *Department of Physics, National University of Singapore*
LOCALIZED INSULATOR-CONDUCTOR TRANSFORMATION OF GRAPHENE OXIDE FILM VIA FOCUSED LASER BEAM IRRADIATION
- 15:10 **Session 9: Thermal and Optical Properties of Graphene**
Session Chair: Zheng Yi
- 15:10 - 15:30 Invited Talk
Alexey Kuzmenko, *Department of Physics and Condensed Matter, University of Geneva*
INFRARED SPECTROSCOPY OF BILAYER GRAPHENE
- 15:30 - 15:50 G. P. Das, *Department of Material Science, Indian Association for Cultivation of Science*
A MODIFIED GRAPHENE NANOSTRUCTURE FOR HYDROGEN STORAGE
- 15:50 – 16:10 Jayasena R. A. P. B., *Nanyang Technological University*
A NOVEL MECHANICAL CLEAVAGE METHOD FOR PRODUCING FEW-LAYER GRAPHENES
- 16:30 - 19:30 Poster Session and Singapore Food Happy Hour

Wednesday, August 4, 2010

- 09:00 **Session 10: Multiscale Modeling, Theory and Computation in Graphene 1**
Session Chair: Su Hai Bin
- 09:00 - 09:30 Keynote Speaker
Antonio Castro-Neto, *Department of Physics, Boston University*
ELECTRONIC AND STRUCTURAL PROPERTIES OF GRAPHENE
- 09:30 - 09:50 Invited Talk
Tsuneya Ando, *Department of Physics, Tokyo Institute of Technology*
ZERO-MODE ANOMALIES IN GRAPHENE: RECENT ADVANCES
- 09:50 - 10:10 Chilla Damodara Reddy, *Institute of High Performance Computing*
SUBSTRATE ROLE ON EDGE RIPPLES OF GRAPHENE SHEETS
- 10:10 - 10:40 Coffee break

Wednesday, August 4, 2010 - Parallel Session A

- 10:40 **Session 11: Multiscale Modeling, Theory and Computation in Graphene 2**
Session Chair: Tsuneya Ando
- 10:40 - 11:00 D. V. Khveshchenko, *University of North Carolina, Department of Physics and Astronomy*
MASSIVE DIRAC FERMIONS IN GRAPHENE
- 11:00 - 11:20 Haibin Su, *Nanyang Technological University*
EXCITON OF FUNCTIONALIZED GRAPHENE NANORIBBONS
- 11:20 - 11:40 Kikuo Harigaya, *Nanosystem Research Institute, AIST*
EDGE STATES AND EVANESCENT STATES IN NANOGRAPHENE WITH THE ZIGZAG EDGE STACKED ON TWO-DIMENSIONAL GRAPHENES
- 11:40 - 12:00
- 12:00 - 14:00 Lunch break
- 14:00 **Session 12: Multiscale Modeling, Theory and Computation in Graphene 3**
Session Chair: Zhang Chun
- 14:00 - 14:20 Lucian Covaci, *University of Antwerp*
PROXIMITY INDUCED SUPERCONDUCTING VORTICES IN GRAPHENE
- 14:20 - 14:40 Sudipta Dutta, *International Centre for Materials Nanoarchitectonics*
ELECTRONIC PROPERTIES OF GRAPHENE NANORIBBONS
- 14:40 - 15:00 Young-Woo Son, *Korea Institute for Advanced Study*
EFFECTS OF STRAIN ON ELECTRONIC PROPERTIES OF GRAPHENE AND BILAYER GRAPHENE
- 15:00 **Session 13: Engineering Applications of Graphene 1**
Session Chair: Manish Chhowalla
- 15:00 - 15:20 Invited Talk
Byung Jin Cho, *Department of Electrical Engineering, KAIST*
PROPERTIES OF GRAPHENE ON DIFFERENT DIELECTRICS AND GRAPHENE OXIDE BASED FLEXIBLE RESISTIVE MEMORY
- 15:20 - 15:40 Linfei Lai, *Nanyang Technological University*
NITROGEN DOPED GRAPHENE OXIDE AS PT-FREE ELECTROCATALYST FOR OXYGEN REDUCTION IN FUEL CELLS
- 15:40 - 16:10 Tea break

Wednesday, August 4, 2010 - Parallel Session A (continued)

- 16:10 **Session 14: Engineering Applications of Graphene 2**
Session Chair: Byung Jin Cho
- 16:10 - 16:30 Invited Talk
Jong-Hyun Ahn, *SKKU Advanced Institute of Nanotechnology (SAINT) and Centre for Human Interface Nano Technology (HINT), School of Advanced Materials Science and Engineering, Sungkyunkwan University*
GRAPHENE FILMS FOR ELECTRONIC APPLICATIONS
- 16:30 - 16:50 Quan-Hong Yang, *Tianjin University*
GRAPHENE: MASS PRODUCTION, SELF-ASSEMBLY AND ELECTROCHEMICAL APPLICATIONS
- 16:50 - 17:10 Invited Talk
Manish Chowalla, *Imperial College London*
OPTO-ELECTRONIC PROPERTIES OF SOLUTION PROCESSABLE CHEMICALLY DERIVED GRAPHENE
- 17:10 - 17:30 Gi-Moon Yoo, *Chungju National University*
GRAPHENE-NANOPARTICLE COMPOSITE FILM AS THE ELECTRODE FOR DYE-SENSITIZED SOLAR CELLS
- 18:00 – 21:30 Conference Banquet (off site at Grand Shanghai Restaurant, preceded by a boat tour) The boat dock is adjacent to the hotel – as this is a regularly scheduled boat, please be on time as the boat leaves promptly.

Wednesday, August 4, 2010 - Parallel Session B

- 10:40 **Session 15: Graphene Characterization (Spectroscopy, Raman, etc.) 3**
Session Chair: Shen ze xiang; Yu Ting
- 10:40 - 11:00 Invited Talk
Marcos A. Pimenta, *Department of Physics, Universidade Federal de Minas Gerais*
DISPERSION OF ELECTRONICS AND PHONONS, AND ELECTRON-PHONON INTERACTIONS IN BILAYER GRAPHENE INVESTIGATED BY RESONANCE RAMAN SCATTERING
- 11:00 - 11:20 Andrew T. S. Wee, *National University of Singapore*
STRUCTURE AND MOLECULAR SELF-ASSEMBLY ON EPITAXIAL GRAPHENE
- 11:20 - 11:40
- 11:40 - 14:00 Lunch break
- 14:00 **Session 16: Chemical and Biosensors on Graphene**
Session Chair: Liu Yun-Qi
- 14:00 - 14:20 Invited Talk
Vikas Berry, *Kansas State University*
BIOLOGICAL, MECHANICAL AND CHEMICAL MANIPULATION OF GRAPHENE FOR BIOSENSORS AND QUANTUM DEVICES
- 14:20 - 14:40 J. Kim, *Korea University*
GRAPHENE-BASED GAS SENSORS
- 14:40 - 15:00 Invited Talk
Zhuang Liu, *Soochow University*
BIOMEDICAL APPLICATION OF SP² CARBON NANOMATERIALS FOR CANCER THERAPY AND MOLECULAR IMAGING
- 15:00 **Session 17: Functionalization and Surface Modification of Graphene 1**
Session Chairs: Goki Eda
- 15:00 - 15:20 Invited Talk
Sunmin Ryu, *Kyung Hee University*
FUNCTIONALIZATION AND CHEMICAL PROPERTIES OF GRAPHENE

Wednesday, August 4, 2010 - Parallel Session B (continued)

- 15:20 - 15:40 Ian D. Sharp, *Walter Schottky Institute, Technical University of Munich*
GRAPHENE FUNCTIONALIZATION WITH STRUCTURE POLYMER BRUSHES
- 15:40 - 16:10 Tea break
- 16:10 **Session18: Functionalization and Surface Modification of Graphene 2**
Session Chairs: Jose Garrido
- 16:10 - 16:30 Wencai Ren, *Institute of Metal Research, Chinese Academy of Science*
EFFICIENT PREPARATION, REDUCTION AND TRANSPARENT CONDUCTING FILM APPLICATION OF LARGE AREA GRAPHENE OXIDE SHEETS
- 16:30 - 16:50 O. Barbaros, *Department of Physics, National University of Singapore*
SPIN TRANSPORT IN BILAYER GRAPHENE
- 16:50 - 17:10 Invited Talk
Andrivo Rusydi, *Department of Physics, Faculty of Science, National University of Singapore*
HIGH ENERGY OPTICAL CONDUCTIVITY STUDIES OF MULTILAYER GRAPHENE: EVIDENCE OF RESONANT ECITONIC EFFECTS AND POOR SCREENING IN GRAPHENE
- 17:10 - 17:30 Chua Lay-Lay, *National University of Singapore*
ELECTRONIC AND OPTICAL PROPERTIES OF CHEMICALLY-FUNCTIONALIZED SUB-STOICHIOMETRIC GRAPHENE OXIDES
- 18:00 – 21:30 Conference Banquet (off site at Grand Shanghai Restaurant, preceded by a boat tour) The boat dock is adjacent to the hotel – as this is a regularly scheduled boat, please be on time as the boat leaves promptly.

Thursday, August 5, 2010

- 09:00 **Session 19: Chemistry of Graphene Composites and Derivatives 1**
Session Chair: Zhang Hua
- 09:30 - 09:30 KEYNOTE TALK
Robert C. Haddon, *University of California at Riverside*
ADVANCES IN GRAPHENE CHEMISTRY
- 09:30 - 09:50 Benjamin V. Cunning, *Queensland Micro- and Nanotechnology Centre*
ONE-POT COVALENT FUNCTIONALIZATION OF GRAPHENE
- 09:50 - 10:10 Il-Kwoh Oh, *Centre for Graphene Nano-Bio Transducers, Department of Mechanical Systems Engineering, Chonnam National University*
GREEN SYNTHESIS OF GRAPHENE NANO-SHEETS
- 10:10 - 10:40 Coffee break
- 10:40 **Session 20: Chemistry of Graphene Composites and Derivatives 2**
Session Chair: GAO HONG JUN
- 10:40 - 11:10 KEYNOTE TALK
Shuit Tong Lee, *Center of Super-Diamond and Advanced Films (COSDAF), City University of Hong Kong & Institute of Functional Nano & Soft Materials (FUNSOM), Soochow University*
FACILE SYNTHESIS AND APPLICATIONS OF GRAPHENES AND CARBON QUANTUM DOTS
- 11:10 - 11:30 Kian Ping Loh, *Department of Chemistry, National University of Singapore*
THE CHEMISTRY OF GRAPHENE
- 11:30 - 11:50 Chun Zhang, *Department of Physics / Chemistry, National University of Singapore*
STRAIN-ENHANCED STABILIZATION AND CATALYTIC ACTIVITY OF METAL NANOCLUSTERS ON GRAPHENE
- 11:50 - 12:10 Insik In, *Chungju National University*
PREPARATION OF WATER SOLUBLE GRAPHENE USING NON-COVALENT INTERACTIONS
- 12:10 - 14:00 Lunch break

Thursday, August 5, 2010 (continued) - Parallel Session A

- 14:00 **Session 21: Chemistry of Graphene Composites and Derivatives 2**
Session Chair: Shuit-Tong Lee, Chua Lay Lay
- 14:00 - 14:20 Invited talk
Zhang Hua, *Nanyang Technological University*
GRAPHENE-BASED NANOMATERIALS AND NANOSTRUCTURES: SYTHESIS, CHARACTERIZATION AND APPLICATIONS
- 14:20 - 14:40 Invited talk
Liu Yun-Qi, *Institute of Chemistry, Chinese Academy of Sciences*
SYNTHESIS AND ELECTRONIC PROPERTIES OF CHEMICAL VAPOR DEPOSITED FEW-LAYER GRAPHENES
- 14:40 - 15:00 Ming-Shien Hu, *Institute of Atomic and Molecular Sciences, Academia Sinica*
SYNTHESIS OF STRAINED GRAPHENE NANOWALLS AS ELECTROCATALYST SUPPORT FOR METHANOL OXIDATION
- 15:00 - 15:20 Seokwoo Jeon, *Department of Materials Science and Engineering, KAIST*
PREPARATION OF HIGH QUALITY GRAPHENE FLAKES THROUGH INTERCALATION
- 15:20 - 15:40 Goki Eda, *Imperial College London*
PARTIALLY OXIDIZED GRAPHENE AS PRECURSOR TO GRAPHENE
- 15:40 - 16:50 TEA BREAK
- 16:50 - 17:10 Closing of Conference
- 17:30 - 21:00 Optional tours

Thursday, August 5, 2010 (continued) - Parallel Session B

- 14:00 **Session 22: Properties and Applications of Graphene 1**
Session Chair: Robert Haddon, Zhuang Liu
- 14:00 - 14:20 Invited Talk
Gao Hong Jun, *Institute of Physics, Chinese Academy of Sciences*
PROPERTIES AND APPLICATIONS OF CENTIMETER-SCALE, HIGHLY-ORDERED, CONTINUOUS GRAPHENE ON METAL SURFACES
- 14:20 - 14:40 Hak Rim Jeon, *SKKU*
A WET CHEMICAL APPROACH TO GRAPHENE NANORIBBONS
- 14:40 - 15:00 Bao Qiaoliang, *Department of Chemistry, National University of Singapore*
OPTICAL PROPERTIES OF GRAPHENE AND ITS APPLICATION IN MODE-LOCKING
- 15:00 - 15:20 Chen Wei, *Department of Chemistry/Physics, National University of Singapore*
SURFACE TRANSFER DOPING OF EPITAXIAL GRAPHENE ON SIC
- 15:20 - 15:40 Hyeong Keun Kim, *SKKU*
ELECTROMAGNETIC INTERFERENCE SHIELDING BY LARGE-SCALE GRAPHENE FILMS
- 15:40 - 16:10 Tea break
- 16:10 **Session 23: Properties and Applications of Graphene 2**
Session Chair: Vlikas Berry
- 16:10 - 16:30 Manu Jaiswal, *National University of Singapore*
CONTROLLED HYDROGENATION OF GRAPHENE SHEETS AND NANORIBBONS
- 16:30 - 16:50 Xu Xiangfan, *National University of Singapore*
THERMAL CONDUCTIVITY MEASUREMENTS IN SUSPENDED GRAPHENE
- 16:50 - 17:10 Closing of Conference
- 17:30 - 21:00 Optional Tours