

## Detailed Meeting Program of 2016 EMN Phuket Meeting & Collaborative Conference on Robotics

<b>Thursday Nov. 3 Afternoon</b>	
14:00-17:30PM	Onsite Registration & Sign up

<b>Friday Nov. 4 Room A (Taksina 1)</b>		
<b>Session: Nanocomposites for Advanced Technologies    Chair: Takashi Kyotani</b>		
9:00-9:30AM	A01: Nanocomposites of boron nitride nanotubes/nanosheets for energy applications ( <b>Keynote</b> )	<b>Yoshio Bando</b> National Institute for Materials Science, Japan
9:30-9:55AM	A02: The Impact of As-Grown Carbon Nanotubes Assembly Structure to Design its Dispersion State for Advanced Composites	<b>Kazufumi Kobashi</b> National Institute of Advanced Industrial Science and Technology, Japan
<b>Session: Graphene    Chair: Yoshio Bando</b>		
9:55-10:20AM	A03: Graphene-based porous carbons for energy applications	<b>Takashi Kyotani</b> Tohoku University, Japan
10:20-10:45AM	A04: Valley-symmetric quasi-1D transport in ballistic mono- and bi-layer graphene	<b>Hu-Jong Lee</b> Pohang University of Science and Technology, Korea
10:45-11:00AM	SESSION BREAK	

11:00-11:25AM	A05: 2D MoS <sub>2</sub> and Graphene layers for novel junction and solar cell applications	<b>Bodh Raj Mehta</b> Indian Institute of Technology Delhi, India
11:25-11:50AM	A06: Energy efficient ultra-conductive and covetic materials	<b>Mehmet Ertugrul</b> Ataturk University, Turkey
11:50-14:30	LUNCH BREAK	
<b>Session: Robotics General I    Chair: Igor Gaponov</b>		
14:30-14:55PM	A07: Robotic Preprocessor for Generating Cutter Location Source Data from Stereolithography Data	<b>Fusaomi Nagata</b> Tokyo University of Science, Japan
14:55-15:20PM	A08: The Evolution of Microsurgery: Robot Assisted Microsurgical Vasectomy Reversal	<b>Parviz K. Kavoussi</b> The University of Texas at Austin, USA
15:20-15:45PM	A09: Image analysis and training model in robotic thyroid surgery	<b>Hyungju Kwon</b> Ewha Womans University, Korea
15:45-16:00PM	SESSION BREAK	
16:00-16:25PM	A10: Advanced techniques of BABA robotic surgery	<b>Kyu Eun Lee</b> Seoul National University, Korea
16:25-16:50PM	A11: Robotic assisted Surgery for Endometrial Cancer. The Real Challenge for Gynecologic Oncology & The Future Perspectives of Robotic Surgery for Cervical Cancer	<b>Ioannis G. Papanikolaou</b> University of Athens, Greece

**Saturday Nov. 5  
Room A (Taksina 1)**

**Session: Phuket General I    Chair: Jose Martins**

9:00-9:25AM	A12: Quantum Chemical Molecular Dynamics Simulations on Control of Tribochemical Reaction Dynamics for Design of Super Low Friction System	<b>Momoji Kubo</b> Tohoku University, Japan
9:25-9:50AM	A13: Coupled Maxwell-Schrödinger approach to light-nanomaterial interaction	<b>Tokuei Sako</b> Nihon University, Japan
9:50-10:15AM	A14: Energy Storage by Tuning Adsorption	<b>Michael Probst</b> University of Innsbruck, Austria
10:15-10:30AM	SESSION BREAK	
10:30-10:55AM	A15: Millimeter-Wave Multiband RFIC Chips for Next-Generation Communications and Sensing Systems	<b>Cam Nguyen</b> Texas A&M University, USA
10:55-11:20AM	A16: Relationships between and environmental effects on the optical and Raman behavior of van Hove singularity in twisted bi- and fewlayer graphenes	<b>Sang-Yong Ju</b> Yonsei University, Korea
11:20-11:45AM	A17: On the crystallographic characterization of sub-micron size, truncated gold pyramids by TEM's electron precession diffraction	<b>Miguel Avalos-Borja</b> IPICyT, Mexico
11:45-12:10PM	A18: A novel concept of capturing industrial carbon to keep atmosphere pollution free	<b>Dilip K. De</b> Covenant University, Nigeria

12:10-14:10

LUNCH BREAK

**Session: Surface and Interface Analysis    Chair: Raghunath V. Chaudhari**

14:10-14:35PM	A19: In situ elucidation of the surface chemistry of colloidal nanoparticles with NMR: principles and applications	<b>Jose Martins</b> Ghent University, Belgium
14:35-15:00PM	A20: In situ hard x-ray photoemission spectroscopy of barrier-height control at metal/PMN-PT interfaces	<b>Hermann Kohlstedt</b> University of Kiel, Germany
15:00-15:25PM	A21: Enantiotopic Surfaces of Chiral and Achiral Crystals Trigger Asymmetric Autocatalysis with Amplification of Enantiomeric Excess. Implications in the Origin of Homochirality of Biomolecules	<b>Kenso Soai</b> Tokyo University of Science, Japan
15:25-15:55PM	<b>POSTER (P01-P03) &amp; SESSION BREAK</b>	
15:55-16:20PM	A22: Superconductivity in Topological & Related Spin Orbital Coupling Compounds Tuned via Pressure	<b>Changqing Jin</b> Institute of Physics, CAS, China
16:20-16:45PM	A23: Studies of surface and interface structures of complex functional materials using synchrotron radiation soft-X ray spectroscopies	<b>Junfa Zhu</b> University of Science and Technology of China, China

### POSTER

Saturday November 5<sup>th</sup> 15:25-15:55PM

P01: Asymmetric Autocatalysis on Enantiotopic Surface of Achiral Mineral Gypsum	<b>Arimasa Matsumoto</b> Tokyo University of Science, Japan
P02: Synthesis of high surface area magnetic nanocomposite from graphene nanoplatlets and ferrite prepared from spent Zn-C batteries and its application for removal of organic dye from water	<b>Mohamed A. Gabal</b> King Abdulaziz University, Jeddah, KSA
P03: Crystal Surface of Chiral Triglycine Sulfate Triggers Asymmetric Autocatalysis with Amplification of Enantiomeric Excess	<b>Seiya Shimada</b> Tokyo University of Science, Japan

**Sunday Nov. 6  
Room A (Taksina 1)**

**Session: Robotics General II    Chair: Fusaomi Nagata**

9:00-9:25AM	A24: Design and Analysis of Collaborative Automated Fiber Placement Machine	<b>Wen Fang Xie</b> Concordia university, Canada
9:25-9:50AM	A25: Wearable Systems to the Hand for Virtual Reality	<b>Joonbum Bae</b> Ulsan National Institute of Science and Technology, Korea
9:50-10:15AM	A26: Recent achievements in bionic robot hand for prosthesis	<b>Kyung-Soo Kim</b> Korea Advanced Institute of Science & Technology, Korea
10:15-10:30AM	SESSION BREAK	
10:30-10:55AM	A27: The interlaced continuum robot: towards follow-the-leader flexible tools	<b>Edoardo Sinibaldi</b> Italian Institute of Technology, Italy
10:55-11:20AM	A28: Twisted String Actuators: All You Need to Know	<b>Igor Gaponov</b> Korea University of Technology and Education, Korea
11:20-14:30	LUNCH BREAK	
<b>Session: Phuket General II    Chair: Hermann Kohlstedt</b>		
14:30-14:55PM	A29: Catalytic applications of novel structured bimetallic nanocatalysts for conversion of renewables to chemicals	<b>Raghunath V. Chaudhari</b> The University of Kansas, USA
14:55-15:20PM	A30: Utilizing Nanostructuring and Novel Materials to Develop Viable Thermoelectric Materials	<b>Takao Mori</b> National Institute for Materials Science, Japan

15:20-15:45PM	A31: Synthesis and applications of various oxide-based nanostructures with controlled morphologies	<b>Cengiz Kaya</b> Sabancı University, Turkey
15:45-16:00PM	SESSION BREAK	
16:00-16:25PM	A32: Fabrication and evaluation of LSCF-SDC carbonate for intermediate-low temperature solid oxide fuel cells	<b>Hamimah Abd. Rahman</b> Universiti Tun Hussein Onn Malaysia, Malaysia
16:25-16:50PM	A33: Local Structure, Optical, Transport and Magnetic Properties of (Mn/Ga,N) codoped ZnO films	<b>Rodica Plugaru</b> National Institute for R&D in Microtechnologies-IMT Bucharest, Romania