Program for EMN Kaohsiung Meeting Tuesday morning, March 15 Room A		
7:50-8:00 AM	**Opening Ceremony**	
Session: Bioinspired Materials I Section chair: Cattani-Scholz Anna		
8:00-8:25 AM	A01: Washing-Free Electrochemical Immunosensor Using Redox Cycling	**Haesik Yang** Pusan National University, Korea
8:25-8:50 AM	A02:Immunosensing based on Biofunctionalized Gold Microshells	**Taek Dong Chung** Seoul National University, Korea
8:50-9:15 AM	A03:Biomaterials necessary for cell-based regenerative medicine	**Yasuhiko Tabata** Kyoto University, Japan
9:15-9:40 AM	A04: A New Look at the Corneal Nanonipple Structure of Butterfly Eyes	**Uwe Erb** University of Toronto, Canada
9:40-9:55 AM	**Session Break**	
Session: Field-Effect Transistor General I Section chair: Hiroji Kawai		
9:55-10:20 AM	A05: Advanced Ion-Sensitive Field Effect Transistor Biosensors for Biomedical Diagnosis	**Minhong Jeun** Korea Institute of Science and Technology, Korea
10:20-10:45 AM	A06: Printed Electronics without Using Inks	**Masatoshi Sakai** Chiba University, Japan
10:45-11:10 AM	A07: Modeling the defect states of the nanowire FET in 3D NAND Flash memory	**Young June Park** Seoul National University. Korea
11:10-11:35 AM	A08: FET and optically pumped lasing characteristics of epitaxially grown microneedles with phenylene/thiophene oligomers	**Hisao Yanagi** Nara Institute of Science and Technology, Japan

11:35-12:00 PM	A09: Step-Edge Vertical-Channel Organic Transistors Fabricated by Printing Process	**Kazuhiro Kudo** Chiba University, Japan
12:00 PM	**Lunch Break**	

Tuesday afternoon, March 15 **Room A**		
Session: Field-Effect Transistors and Integrated Circuit Section chair: Chadwin D. Young		
14:25-14:50 PM	A10: Kilovolt-range gallium nitride power transistors on a sapphire substrate platform using the polarization superjunction concept	**Hiroji Kawai** Power Wafers Development Corporation, Japan
14:50 -15:15 PM	A11: Designing New P- and N-Type Small Molecule Organic Semiconductor Materials for Organic Electronics	**Gavin Collis** CSIRO Manufacturing, Australia
15:15 -15:40 PM	A12: Reliability challenges in CMOS-compatible GaN-on-Si transistors for High-efficiency Energy Systems	**Gabriel Petrus Lansbergen** Taiwan Semiconductor Manufacturing Company, Taiwan
15:40-15:55 PM	**Session Break**	
Session: Bioinspired Materials II Section chair: Yasuhiko Tabata		
15:55-16:20 PM	A13: Near-Infrared responsive nanomaterials in cancer therapy	**Chen-Sheng Yeh** National Cheng Kung University, Taiwan
16:20-16:45 PM	A14: A facile method for temperature-responsive cell culture surfaces by using thioxanthone photo-initiator immobilized polystyrene surfaces	**Yoshikatsu Akiyama** Tokyo Women's Medical University, Japan
16:45-17:10 PM	A15: Can Artificial Protein Structures Be Assembled With Unusual Geometries?	**Jonathan Heddle** Jagiellonian University, Poland

17:10-17:35 PM	A16: Semiconductor organophosphonate biointerfaces	**Cattani-Scholz Anna** Technische Universität München, Germany
18:00 PM	**Dinner Social**	

Wednesday morning, March 16 **Room B**		
Session: Biomimetic synthesizing I Sction chair: Amihay Freeman		
8:00-8:25 AM	B01: Bio-inspired Light Weight and Impact Resistant Composites Derived from a Crustacean	**David Kisailus** University of California at Riverside, USA
8:25-8:50 AM	B02: Bioinspired low dimensional nanocomposites for energy storage applications	**Hui Ying Yang** Singapore University of Technology and Design (SUTD), Singapore
8:50-9:15 AM	B03: Bio-inspired structures enabled by electrospinning	**Avinash Baji** Singapore University of Technology and Design (SUTD), Singapore
9:15-9:40 AM	B04: Applications of peptidic bolaamphiphile molecules for biomimetic catalysts and energy-harvesting	**Sang-Yup Lee** Yonsei University, Korea
9:40-9:55 AM	**Session Break**	
Session: Nanopharmaceuticals I Section chair: David Kisailus		
9:55-10:20 AM	B05: Blood-Brain Barrier-Permeating Nanocomposites for Brain Tumor Theranostics	**Fong-Yu Cheng** National Cheng Kung University, Taiwan
10:20-10:45 AM	B06: Biomedical Applications of Biologically Active molecular Protein-Silver Hybrids	**Amihay Freeman** Tel Aviv University, Israel

10:45-11:10 AM	B07: Novel gambogic acid-mPEG2000 liposomes for improving antitumor effects and reducing toxicity	**Cai Lulu** Hospital of the University of Electronic Science and Technology of China and Sichuan Provincial People's Hospital, China
12:00 PM	**Lunch Break**	

Wednesday afternoon, March 16 **Room B**		
Session: Bio General I Section chair: Swarnlata Saraf		
14:00-14:25 PM	B08: The application of gelatin products in cardiovascular surgery	**Keigo Yamashita** Nara medical university, Japan
14:25-14:50 PM	B09: Bioremediation at radioactive paddy soils, sea water, and fresh water: in case of in Japan and Tanzania	**Kazue Tazaki** Kanazawa University, Japan
14:50 -15:15 PM	B10: Bio-inspired Techniques for Data Clustering	**P. G. Gaikwad** SVERI's College Of Engineering, India
15:15 -15:40 PM	B11: Hybrid integration of wearable devices on flexible substrate	**Geng Yang** Fudan University, China
15:40-16:10 PM	**Poster & Session Break**	
Session: Nanopharmaceuticals II Section chair: Kazue Tazaki		
16:10-16:35 PM	B12: Phytoconstituent conjugated nanocarrier for skin carcinoma	**Swarnlata Saraf** Pt. Ravishankar Shukla University, India

16:35-17:00 PM	B13: Opportunity of lipid carries in the applications of cosmetic and pharmaceuticals	**Pao Chi Chen** Lunghwa University of Science and Technology, Taiwan
17:00-17:25 PM	B14: Advancing Novel RNAi Therapeutics with Nanoparticle-Based Drug Delivery Systems	**Patrick Y. Lu** Sirnaomics, Inc., USA
17:25-17:50 PM	B15: Boron-containing polymeric nanostructures suitable for drug delivery	**Pavel Matejicek** Charles University in Prague, Czech Republic
18:00 PM	**Dinner Social**	

Wednesday morning, March 16 **Room C**		
Session: Biomimetic surface engineering I Section Chair: Sae Chae Jeoung		
8:00-8:25 AM	C01: Bioinspired Self-assembling Zwitterionic Antifouling Materials and Applications	**Chun-Jen Huang** National Central University, Taiwan
8:25-8:50 AM	C02: Bio-inspired Surface for Surgical Graspers Based on the Strong Wet Friction of Tree Frog Toe Pads	**Huawei Chen** Beihang University, China
8:50-9:15 AM	C03; Biomimetic preparation of organic-inorganic composite coatings for orthopedics and dentistry	**Helga Fueredi Milhofer** The Hebrew University of Jerusalem, Israel
9:15-9:40 AM	C04: Robust self-cleaning and micromanipulation capabilities of gecko spatulae and their bio-mimics	**Quan Xu** China University of Petroleum(Beijing), China
9:40-9:55 AM	**Session Break**	
Session: Biomimetic surface engineering II Section Chair: Helga Fueredi Milhofer		

9:55-10:20 AM	C05: Self-rolled polymer film: a route to functionalized microfluidic devices	**Florent Malloggi** LIONS/NIMBE, CEA, CNRS, Université Paris-Saclay, France
10:20-10:45 AM	C06: Dynamics for fs-laser surface modification of PDMS	**Sae Chae Jeoung** Korea Research Institute Standards and Science, Korea
10:45-11:10 AM	C07: Bio-Inspired Liquid Film Surfaces Showing Anti-X Proeprties	**Atsushi Hozumi** National Institute of Advance Industrial Science and Technology, Japan
12:00 PM	**Lunch Break**	

Wednesday afternoon, March 16 **Room C**		
Session: 2D Material Field-Effect Transistors Section Chair: Joseph Freedsman		
14:00-14:25 PM	C08: Challenges to Fabrication and Characterization of Top-gated, Few Layer MoS2 Field Effect Transistors	**Chadwin D. Young** University of Texas - Dallas, USA
14:25-14:50 PM	C09: 2D Material and All-Graphene Field-Effect Transistor Architectures Utilizing CVD Graphene	**Juha Riikonen** Aalto University, Finland
14:50 -15:15 PM	C10: Heterojunction Field-Effect Transistors with Widegap AlN and Diamond Semiconductors	**Masataka Imura** National Institute for Materials Science, Japan
15:15 -15:40 PM	C11: 2D Materials based Transistors for Piezoresistive and Potentiometric Sensors	**Meng-Yen Tsai** Georgia Institute of Technology USA
15:40-15:55 PM	**Session Break**	
15:55-16:20 PM	C12:Solution-Based Process on Semiconductors and Their Applications	**Kuan-Wei Lee** I-Shou University, Taiwan

16:20-16:45 PM	C13: Graphene FET as a tool of studying dielectrics	**Dongseok Suh** Sungkyunkwan University, Korea
16:45-17:10 PM	C14: Electrical Contact Analysis of Multilayer MoS2 Thin Film Transistor	**Min Suk Oh** Korea Electronics Technology Institute, Korea
17:10-17:35 PM	C15: Solution processed gate dielectrics for their use in Thin Film Transistors employing metal oxide-based semiconducting channels	**George Adamopoulos** Lancaster University, UK
18:00 PM	**Dinner Social**	

Thursday morning, March 17 **Room B**		
Session: Nanosensing and Bioanalytical Technology Section chair: Xiaoheng Liu		
8:00-8:25 AM	B16: MIP/IIP functionalised surface acoustic wave sensors for bio and chemical sensing	**Najla Fourati** Conservatoire National des Arts et Métiers (Cnam), France
8:25-8:50 AM	B17: Diatoms - Nature's Nanosensor	**Yvonne Lang** National University of Ireland, Galway/Institute of Technology of Sligo, Ireland
8:50-9:15 AM	B18: A Bead-Based Digital Microfluidic Immunoassay with Ultra-Low Sample Volume for In Vitro Fertilization	**Wensyang Hsu** National Chiao Tung University, Taiwan
9:15-9:40 AM	B19: DNA Interaction Probed by Evanescent Wave Cavity Ring-down Absorption Spectroscopy and C-dots Optical Characterization	**King-Chuen Lin** National Taiwan University, Taiwan
9:40-9:55 AM	**Session Break**	

Session: Bio General II Section chair: Wensyang Hsu		
9:55-10:20 AM	B20: Culturing liver tissue slices in a simple three-dimensional microfluidic device for ex vivo drug efficacy test	**Chau-Ting Yeh** Chang Gung Mermorial Hospital, Taiwan
10:20-10:45 AM	B21: Stabilization of metallic oxide nanoparticles by means of macromolecules and biomacromolecules	**Xiaoheng Liu** Nanjing University of Science and Technology, China
10:45-11:10 AM	B22: Mesoporous Silica NanoShuttles (MSNSs) in Cancer Drug Delivery System	**Li-chen Wu** National Chi Nan University,Taiwan
12:00 PM	**Lunch Break**	

Thursday afternoon, March 17 **Room B**		
Session: Biomimetic synthesizing II Section chair: Wolfgang Fischer		
14:30-14:55 PM	B23: Stereospecific Liquid-Liquid Extraction of Amino Acids Coupled with Racemization	**Kwan Mook Kim** Ewha Womans University, Korea
14:55 -15:20 PM	B24: Biomimetic synthesis of porous oxides and gold nanoparticles mediated by polypeptides	**Jeng-Shiung Jan** National Cheng Kung University, Taiwan
15:20 -15:45 PM	B25: Blood-clotting-inspired polymer-colloid composite assembly in flow	**Hsieh Chen** Aramco Research Center-Boston, USA
15:45-16:00 PM	Session Break	
Session: Nanopharmaceuticals III Section chair: Kwan Mook Kim		
16:00-16:25 PM	B26: Oligomerization of viral channel proteins along a bio-inspired pathway	**Wolfgang Fischer** National Yang-Ming University, Taiwan

16:25-16:50 PM	B27: Receptor Targeting Potential of Polysaccharide Conjugated Nanoparticles for Gene Delivery	**Wen Jen Lin** National Taiwan University, Taiwan
16:50-17:15 PM	B28: Synthesis of bifunctional wound-healing agent with proliferative and antibacterial activities	**Joon Myong Song** Seoul National University, Korea
18:00 PM	**Dinner Social**	

Thursday morning, March 17 **Room C**		
Session: FET General II Section chair: Denis Mamaluy		
8:00-8:25 AM	C16: Application of Field Effect Transistors and Extended-Gate Field Effect Transistors for Chemo- and Biosensor Construction	**Krzysztof Noworyta** Institute of Physical Chemistry,Polish Academy of Sciences, Poland
8:25-8:50 AM	C17: Degeneracy and confinement quantum corrections for ensemble Monte Carlo simulation of FinFET transistors	**Dax M. CrumThe** University of Texas at Austin, USA
8:50-9:15 AM	C18: Novel Deposition Technique of Thin Films for Organic Thin Film Transistors (OTFTs) by Rapid Expansion of Supercritical Solutions (RESS) Using Carbon Dioxide	**Hirohisa Uchida** Shinshu University, Japan
9:15-9:40 AM	C19: Towards AlInN/GaN heterostructure based Field Effect Transistors on silicon substrate	**Joseph Freedsman** Nagoya Institute of Technology Japan
9:40-9:55 AM	**Session Break**	
Session: Transistors for Future Generations of Digital Logic Section chair: Hirohisa Uchida		
9:55-10:20 AM	C19: New ON current Boosting Technology in Silicon-based Tunnel Field-Effect Transistors Utilizing Isoelectronic Trap	**Takahiro Mori** Nanoelectronics Research Institute (NeRI), AIST, Japan

10:20-10:45 AM	C20: Improvement of Current Drive of Ge-nMISFETs by Epitaxially Grown n+-Ge:P Source and Drain	**Yoshihiko Moriyama** Toshiba Corporaton, Japan
10:45-11:10 AM	C21: Fundamental downscaling limit of field effect transistors	**Denis Mamaluy** Sandia National Laboratories, USA
11:10 -11:35AM	C22: Perfecting hetero-interfaces for pushing the ultimate complementary metal-oxide-semiconductor field-effect-transistors	**Minghwei Hong** National Taiwan University, Taiwan
12:00 PM	**Lunch Break**	

Wednesday afternoon, March 16 **Room**	
Poster Session	
P01:Cationic Poly (ethylene glycol)/Poly (l-lysine) Miktoarm Copolymer as a New Gene Delivery Carrier	**Yu Gyeong Kim** Chungnam National University, Korea
P02:Effect of Daily Commodities on Bacterial Growth in Flower Vase Water	**Fumie Tazaki** Osaka Kawasaki Rehabilitation University, Japan