## 2014 International Symposium on Nano Science & Technology (ISNST)

## 2014 ISNST Program

	October 17 (Fri)				
8:00-9:00	Registration & Coffee time (place: E13 lobby)				
9:00-9:30	Opening Ceremony (place: E1301) Opening remark: Professor Chein Tai, Chairman of Congress, The President of Southern Taiwan University of Science and Technology				
	Keynote Speaker (place: E1301)				
	Professor Donald A. Tomalia / CEO/Founder of NanoSynthons, USA				
	Title: A Systematic Framework for Unifying and Defining Nanoscience				
9:30 - 10:10	Based on Hard/Soft Quantized Building Blocks "Superatoms"				
	Chairman: Chair Professor Jyh-Ping Hsu, Department of Chemical Engineering, National Taiwan University, Taipei City, Taiwan				
10:10~10:30	Coffee Break				
	Invited Speaker 1 (place: E1301)				
	Chair Professor Chi-Chang Hu / Department of Chemical				
	Engineering, National Tsing Hua University, Taiwan, ROC				
10:30 – 11:00	<b>Title:</b> Synthesis of Hierarchically Porous Carbons and Composites for Supercapacitors				
	Chairman: Professor Kei Ameyama/Department of Mechanical Engineering, College of Science and Engineering, Ristumeikan University				
	Invited Speaker 2 (place: E1301)				
11:00 — 11:30	<b>Professor Kei Ameyama</b> /Department of Mechanical Engineering, College of Science and Engineering, Ristumeikan University				
	Title: Nano-Meso Harmonic Structure Design for High Performance Pure Ti and Ti-6Al-4V Alloy				
	Chairman: Chair Professor Chi-Chang Hu / Department of Chemical				
	Engineering, National Tsing Hua University, Taiwan, ROC				
11:30 — 12:00	Invited Speaker 3 (place: E1301)				
	Professor Lu-Ning Wang/School of Materials Science and Engineering, University of Science and Technology Beijing				
	Title: Electrochemical Anodization: Bridging the Gap between Corrosion and Nanotechnology- Self-Ordering Transition Metal Oxides Nanotubular Arrays for Biomedical Applications				
	Chairman: Professor Mitsunobu SATO / Associate to the President (Professor A. Mizuno) Kogakuin University, Japan				
12:00 – 13:30	Lunch Break & Poster Exhibition				
13:30 – 14:00	Invited Speaker 4 (place: E1301) Professor Mitsunobu SATO/Associate to the President (Professor A. Mizuno) Kogakuin University, Japan				

	Title: Photocatalytic Activity of Vis-Responsive Ag-Nanoparticles/TiO <sub>2</sub> Composite Thin Films Fabricated by Molecular Precursor Method (MPM)  Chairman: Professor Lu-Ning Wang/School of Materials Science and					
	Engineering, University of Science and Technology Beijing					
	Invited Speaker 5 (place: E1301) Professor Swapan K. Saha /Department of Chemistry, University of North Bengal, India.					
14:00 – 14:30	Title: Synergistic Effect of $\pi$ -conjugated Aromatic Systems on the Aggregation of Surfactants and Surface Active Ionic Liquids: Demonstration of Complex Fluidity Realized via Modified H-bonding and Cation- $\pi$ Iinteractions					
	Chair Professor Jyh-Ping Hsu, Department of Chemical Engineering, National Taiwan University, Taipei City, Taiwan					
14:30 – 15:00	Invited Speaker 6 (place: E1301)  Professor Shuichi TORII/Department of Mechanical System Engineering, Kumamoto University.					
	Title: Warming Suppression and Advanced Energy-Production Using Biomass					
	Chairman: Professor Cheng-Hsin Chuang/ Department of Mechanical Engineering, Southern Taiwan University of Science and Technology					
15:00 – 15:20	Coffee Break					
15:20 – 15:50	Invited Speaker 7 (place: E1301) Professor Cheng-Hsin Chuang/ Department of Mechanical Engineering, Southern Taiwan University of Science and Technology, Tainan City, Taiwan, ROC.  Title: Nanoparticle-based Biosensor for Impedance Sensing of Bladder Cancer Cell Lysate					
	Chairman: Professor Shuichi TORII/Department of Mechanical System Engineering, Kumamoto University					
	International Industry-Academic Forum:					
15:50 — 16:40	Topic 1: Applications of Nanomaterials and					
	Nanotechnology in the Present and Future					
	Topic 2: Strategies and Practices to Promote Industry-					
	Academic Cooperation					
	Topic 3: Promoting Industry-Academic Cooperation for					
	Innovation					
	Speakers: Professor Donald A. Tomalia (CEO/Founder of NanoSynthons, USA), Dr. Chien Yung Ma (Executive Director of Solar Applied Materials Technology Corporation), Professor Kei					

	Chairman: Professor Chien-Hsiang Chang/Department of Chemical					
	Engineering, National Cheng Kung University, Tainan City, Taiwan, ROC					
16:50 – 17:50	Oral Presentation (Place: E1304 & E1305)					
10.50 17.50	12 minutes per one speaker					
18:30	Banquet (place: Evergreen Plaza Hotel Tainan 2F, 台糖長榮酒店 2F)					
	October 18 (Sat)					
8:00-9:30	Registration & Coffee time (place: E13 lobby)					
09:30 - 10:00	Invited Speaker 8 (place: E1301) Professor Chang-Ning Huang/Department of Chemical and Materials Engineering, Southern Taiwan University of Science and Technology, Tainan City, Taiwan, ROC.					
	Title: Structural Properties of Planar Defects in GaN Layers Grown on Ordered Arrays of Nanorods by Metal–Organic Vapour Phase Epitaxy					
	Chairman: Professor Chien-Hsiang Chang/Department of Chemical Engineering, National Cheng Kung University, Tainan City, Taiwan, ROC					
10:00 – 10:30	Invited Speaker 9 (place: E1301) Professor Anirban Misra/Department of Chemistry, University of North Bengal, India.					
	Title: Quantum Magnets: Design, Assessment, Application  Chairman: Professor Hong-Ru Lin/Department of Chemical and Materials Engineering, Southern Taiwan University of Science and Technology, Tainan City, Taiwan, ROC.					
10:30 – 10:50	Coffee Break					
10:50 — 11:20	Invited Speaker 10 (place: E1301)  Professor Chi Wang/Department of Chemical Engineering, National Cheng-Kung University, Tainan City, Taiwan, ROC.					
	Title: Electrospinning Fundamentals and Nanofiber Applications					
	Chairman: Professor Ching-Feng Mao/Department of Chemical and Materials Engineering, Southern Taiwan University of Science and Technology, Tainan City, Taiwan, ROC.					
11:20 – 12:00	Award & Closing Remark (place: E1301)					
	Professor Deng-Maw Lu, The Vice President of Academic Affairs of Southern Taiwan University of Science and Technology					

## **Oral Section A (Conference Room:E1304)**

**Chairman: 1. Professor Swapan K. Saha** /Department of Chemistry, University of North Bengal, India

**2. Professor Chang-Ning Huang**/Department of Chemical and Materials Engineering, Southern Taiwan University of Science and Technology, Taiwan

ID/Time	Authors	Title		
OA1/	Chun-Yuan Su and	Diffusiophoresis of a Charged-Regulated		
16:50-17:02	Jyh-Ping Hsu	Polyelectrolyte in a Necked Nanopore		
OA2/	H. Keno, R. Uchida, T.	Characterization of Interfacial Properties on the		
17:02-17:14	Fukuzawa, A. Mori and	Explosively Welded Niobium Foil on Stainless		
	K. Hokamoto	Steel Base Plate Using Underwater Shockwave		
OA3/	You-Cheng Jhang and	Electroluminescence of Si <sub>x</sub> C <sub>y</sub> O <sub>1-x-y</sub> MOSLED		
17:14-17:26	Chih-Cheng Kao			
OA4/	Chien-Wen Liu,	Characterization of Vesicles and Langmuir		
17:26-17:38	Hui-Ting Yan, An-Tsung	Monolayers Composed of Ion Pair Amphiphile with		
	Kuo, Ching-Yun Wu,	Ionic Lipids		
	Ting-Pin Chou, and			
	Chien-Hsiang Chang			
OA5/	CH. Chuang, CH.	Rapid Detection of Cell Lysate Using Impedance		
17:38-17:50	Chen, TF. Wu, Vo Van	Measurement of Immunoreaction Coupled with		
	Nhan, LY. Chang, KC.	Conductive Carbon Black Nanoprobe		
	Chang			

## Oral Section B (Conference Room:E1305)

**Chairman: 1. Professor Anirban Misra**/Department of Chemistry, University of North Bengal, India.

**2. Professor Ching-Ming Hsu**/Department of Electro-Optical Engineering, Southern Taiwan University of Science and Technology, Taiwan

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ID/Time	Authors	Title		
OB1/	Wei-Fen Chang, Yu-Ting	Physical Stability and Vitamin E-Acetate		
16:50-17:02	Wang, Chien-Hsiang	Encapsulation Efficiency of Catanionic Vesicles		
	Chang	Fabricated from Ion Pair Amphiphile and		
		Dihexadecyl Phosphate with Cholesterol		
OB2/	Keisuke Goto and	Investigation of The Stabilityof Water in Diesel		
17:02-17:14	Shuichi Torii	Emulsion Fuel Ganerated by Underwater Explosion		
OB3/	Ruei-Yang Syu,	Effect of Sintering Temperature on Microwave		
17:14-17:26	Yih-Chien Chen,	Dielectric Properties of Li <sub>2</sub> SnO <sub>3</sub> Ceramics		
	Yen-Nien Wang, and			
	Min-Zhe Weng			
OB4/	Fukuoka Yukiko, and	Study of the Heat Transfer Capability Uses Al <sub>2</sub> O <sub>3</sub>		
17:26-17:38	Torii Shuichi	Nanofluid as the Working Fluid of Heat Exchanger		
OB5/	Chang-Yu Shih,	Growth of Nano-Crystals of Er Doped Si <sub>x</sub> Ge <sub>y</sub> O <sub>1-x-y</sub>		
17:38-17:50	Chih-Cheng Kao	Film		
OB6/	Wei-Chin Wang, and	Electroluminescence of Si <sub>x</sub> Ge <sub>y</sub> O <sub>1-x-y</sub> MOSLED		
17:50-18:02	Chih-Cheng Kao			