

Session Topic 16 -- Applications

Chairs: Jack Agee, Rice University
 Connie Luthy, Medical Product Innovation
 Alice Chow, Rice University

TUESDAY, Room M11 Commercialization

Paper ID	Time	Title	Authors & Affiliations
PID642666	10:00 - 10:30	<i>Practical Issues In Commercial And Regulatory Development Of Nanotechnology, The Good, the Bad and the Ugly</i>	Charles R McConachie, McConachie Law, USA
PID621944	10:30 - 11:00	<i>Strategies for Closing the ITRS Funding Gap</i>	Yaw Obeng, NIST, USA; Stephen Knight, NIST, USA; and Joaquin Martinez de Pinillos , NIST, USA
PID596422	11:00 - 11:30	<i>Licensing Nanotechnology</i>	Robert Harrison, 24IP Law Group, Germany
PID621879	11:30 - 12:00	<i>Developing New Nanotechnology Products</i>	Connie L. Luthy, PhD, MBA, Medical Product Innovation, USA
	12:00 - 2:00	Lunch	

TUESDAY, Room M11 Defense

Paper ID	Time	Title	Authors & Affiliations
PID594733	2:00 - 2:45	<i>Development of Nanoenergetic Gas-Generators</i>	Karen Martirosyan, University of Houston, USA; Leizheng Wang, University of Houston, USA; and Dan Luss, University of Houston, USA
	2:45 - 3:00	Break	
PID595692	3:00 - 3:30	<i>ARRIpede: An Assembled Micro Crawler</i>	Rakesh Murthy, UT Arlington, USA; Dan Popa, UT Arlington, USA; and Aditya Das, UT Arlington, USA
PID597490	3:30 - 4:00	<i>Analysis of Electromagnetic Effect on the electrorheological Properties of Nano-Laden Systems</i>	Jose Gutierrez, UTPA, USA; Mircea Chipara, UTPA, USA; Karen Lozano, UTPA, USA; Carlos Ramos, UTPA, USA; and Steven French, UTPA, USA
PID595596	4:00 - 4:30	<i>CONTACT – Nanotechnology Research for Air Force Applications</i>	Jack Agee, Rice University, USA; and Alice Chow, Rice University, USA

WEDNESDAY, Room M11 Medical/Life Sciences

Paper ID	Time	Title	Authors & Affiliations
PID588647	10:00 - 10:30	<i>Inlaid Carbon Nanofiber Nanoelectrode Array as Highly Efficient Dielectrophoresis Device for Bacteria Trapping</i>	Jun Li, Kansas State University, USA
PID552338	10:30 - 11:00	<i>Nanoparticles for Uveal Melanoma Treatment</i>	Sheng Zhang, The University of Texas at Arlington, USA; Jun Zhou, The University of Texas at Arlington, USA; Zhibing Hu, The University of North Texas at Denton, USA; Ashwin Nair, The University of Texas at Arlington, USA; and Liping Tang, The University

PID596534	11:00 - 11:30	<i>Interdigitated Array Electrodes with Nano Gaps Using Optical Lithography and Controlled Undercut Method</i>	Joon Sub Shim, University of Cincinnati, USA; Michael Rust, University of Cincinnati, USA; and Chong H. Ahn, University of Cincinnati, USA
PID596602	11:30 - 12:00	<i>Methods to Measure Material Viscoelastic Properties using Sharp, Flat and Buckling Tips inside ESEM</i>	Mohd Ridzuan Ahmad, Nagoya University, Japan; Masahiro Nakajima, Nagoya University, Japan; Seiji Kojima, Nagoya University, Japan; Michio Homma, Nagoya University, Japan; and Toshio Fukuda, Nagoya University, Japan
	12:00 - 2:00	Lunch	

WEDNESDAY, Room M11 Manufacturing

Paper ID	Time	Title	Authors & Affiliations
PID595697	2:00 - 2:25	<i>Design and Manufacturing of a Fourier Transform Microspectrometer</i>	Aditya Das, UT Arlington, USA; Jeongsik Sin, UT Arlington, USA; Dan Popa, UT Arlington, USA; and Harry Stephanou, UT Arlington, USA
PID596488	2:25 - 2:45	<i>Automatic Tool Changer for SPMs</i>	Mattias Neitzel, Fraunhofer IFF, Germany; Ulrich Schmucker, Fraunhofer IFF, Germany; and Mikhail Zubtsov, Fraunhofer IFF, Germany
	2:45 - 3:00	Break	

THURSDAY, Room M11 Manufacturing

Paper ID	Time	Title	Authors & Affiliations
PID596576	9:00 - 9:45	<i>Fabrication of Very Large Area of Sub-100 nm Nanopillars Using Nanosphere Lithography</i>	Shih-Hsin Chang, University of Texas at Arlington, USA; and Yaowu Hao, University of Texas at Arlington, USA
	9:45 - 10:00	Break	
PID596711	10:00 - 10:30	<i>A Novel Anti Nano-Silver Particle Bacteria</i>	Chi-Yea Yang, Biotechnology; Yu-Hsin Kao, Biotechnology; and Tan Yi Huang, Biotechnology
PID596831	10:30 -- 11:00	<i>Computer Integrated Plasma Nano Manufacturing Workcell</i>	Jiangbo Zhang, Michigan State University, USA; Ning Xi, Michigan State University, USA; King Lai, Michigan State University, USA; Jeffri Narendra, Michigan State University, USA; Timothy Grotjohn, Michigan State University, USA; and Jes Asmussen, Mich
PID622004	11:00 -- 11:30	<i>The electrodeposition of high-strength nanocrystalline metals and alloys as a means to augment the performance of electrical conductors</i>	Edward Yokley, Integran Technologies USA, Inc., USA; Ian Winfield, Integran Technologies USA, Inc., USA; Iain Brooks, Integran Technologies, Inc., Canada; Gino Palumbo, Integran Technologies, Inc., Canada; and Robert Heard, Integran Technologies USA, Inc.
	11:30 -- 12:00	Poster Session (Manufacturing, Medical)	
	12:00 - 2:00	Lunch	
	2:00 - 3:00	Poster Session (Cont'd -- Medical)	

THURSDAY, Room M11 Posters - Manufacturing and Medical Applications

Paper ID	Time	Title	Authors & Affiliations
Poster Session (Thursday 11:30am -- 12:00 and 2:00pm - 3:00pm)			
PID551917	Manufacturing	<i>Rhodopsin Photon Receptor Energetics: Studies of Biomolecular Sensing and Processing</i>	Marina Lyshevski, Microsystems and Nanotechnologies, USA; Sergey Lyshevski, RIT, USA
PID590690	Manufacturing	<i>Micro Regular Octahedron and Truncated Octahedron Cavities on <111> Oriented Silicon Wafer</i>	Hui Ju, Nagoya University, Japan
PID596031	Medical	<i>Combined Multi-target Molecular Ultrasonography and Photothermal Therapy Using Cancer Targeting Gold Nano Rod Probes</i>	Dar-Bin Shieh, National Cheng Kung University, Taiwan; An An Ding, National Cheng Kung University, Taiwan; Ya-Na Wu, National Cheng Kung University, Taiwan; Ying-Yi Chen, National Chung Cheng University, Taiwan; Churng-Ren Chris Wang, National Chung Cheng
PID596003	Medical	<i>Photoactive Compound-Triplex-Forming Oligonucleotide Linked Gold Nanoparticle as an Artificial Gene Specific DNA Cleaver Assembly</i>	Tsung-Lin Tsai, National Cheng Kung University, Taiwan; Dar-Bin Shieh, National Cheng Kung University, Taiwan; and Wu-Chou Su, National Cheng Kung University, Taiwan
PID596297	Medical	<i>HER-2 Antibody Conjugated Gold Nano Rod for in Vivo Photothermal Therapy</i>	Ann-Ann Ding, National Cheng Kung University, Taiwan; and Dar-Bin Shieh, National Cheng Kung University, Taiwan
PID596451	Medical	<i>An Iron Oxide Nanoparticle Drug Carrier for Improved Cancer Chemotherapy in Drug Resistance Line</i>	Ping-Chin Wu, National Cheng Kung University, Taiwan; Tsung-Lin Tsai, National Cheng Kung University, Taiwan; Fong-Yu Cheng, National Cheng Kung University, Taiwan; Chen-Sheng Yeh, National Cheng Kung University, Taiwan; and Dar-Bin Shieh, National Che
PID596469	Medical	<i>Modeling and Control of Electroporation-mediated Gene Delivery</i>	Ou Ma, New Mexico State University, USA; and Mingjun Zhang, The University of Tennessee, USA