

2011 George A. Jeffrey NanoExplorer Symposium

Wednesday, August 10, 1:00 – 6:30 p.m.

T.I. Auditorium (ECSS 2.102), The University of Texas at Dallas

1:00 Opening Remarks

Ray Baughman, Robert A. Welch Professor of Chemistry and Director, Alan G. MacDiarmid NanoTech Institute

Session A: Chair Austin Howard

1:15 (A1) The Study of Superconductivity in Carbon Nanotubes and Pnictides by LFMA/ESR Techniques

Alexa Nightingale

1:27 (A2) Carbon Nanotube Yarn Flow Sensor

Rusheel Guduru

1:39 (A3) DNA Methylation of TP53 in Cancerous and Normal Cells

Bhavaish Sharma and Nimi Bhattatiry

1:51 (A4) Synthesis and Characterization of TiO₂ Nanotubes via Deposition on MWCNT Sheets

Michael Trinh

2:03 (A5) Doping Carbon Nanotubes and Organic Solar Cells with Strong Organic Acceptor Molecules

Jamie Stone and Helen Xiong

2:15 (A6) Varying Hydrophobicities of Perfluorocyclobutyl Aryl Ether Polymers with Ionic Liquids

Cary Kuo

Session B: Chair Josef Velten

2:27 (B1) Doped and Undoped Multi-walled Carbon Nanotubes as Counter Electrode in Dye-sensitized Solar Cells

Rebecca Fang

2:39 (B2) Photoinduced Transparency in DSSC's Through Novel Use of Graphene Nanoribbons

Goutham Kandru

2:51 (B3) Optimization of Shape Memory Wire for Fuel Powered Muscle Applications

Evan Baum

3:03 (B4) Synthetic Lethal Genes as Drug Target Candidates for Leukemic Cells

Sheila Chandrahas and Sarah Brooks

3:15 (B5) Bi-Scrolled Yarns for Strain Sensing

Nihal Koduri

3:27 (B6) Human Motion Monitoring by Inertial Sensing

Roshni Janakiraman

3:39-4:00 Break

Section C: Chair Kamil Mielczarek

4:00 (C1) Novel Highly Porous Carbon Material from Ground Rubber Tire (GRT) and Acrylonitrile/Vinylimidazole (AN/VIM) Copolymer Composite

Manasi Bhatia

4:12 (C2) High Frequency Response of a Carbon Nanotube Speaker

Karthik Ravikumar

4:24 (C3) Study of Different Reaction Conditions (bases and temperature) for Perfluorocyclopentenyl (PFCP) Aryl Ether Polymer Synthesis

Sakthi Rajendran

4:36 (C4) Searching for Superconductivity in Nanotubes, Pnictides, and HOPG

Raahil Sha

4:48(C5) Nanoporous Materials Applications in Armed Forces Protection

Peter-Michael Webb and Alex Baughman

5:00 (C6) Modeling the Zinc Finger Protein: A Novel Optimization of the Kd Value for Site-Specific Gene Therapeutics

Kevin Chen and Alex Hong

Session D: Chair Shaoli Fang

5:12 (D1) Thermoacoustic Sound Generation using Flexible Encapsulated Carbon Nanotube Sheets

Kelvin Wang

5:24 (D2) Microwave Synthesis and Characterization of poly(3-hexylthiophene): Zinc Oxide(ZnO) Composites for Hybrid Solar Cells

Tyler Hostetter

5:36 (D3) Microwave Assisted Synthesis of Metal-Oxide Nanoparticles for Solution-Processed Transport Layers in Organic Solar Cells

Galen Gao

5:48 (D4) Bi-Scrolling Alloy Anode Material for Li-ion Batteries

Natalie Chee

6:00 (D5) Synthesis and Characterization of Novel Triarylamine Perfluorocyclobutane (PFCB) Polymer for Electro-Optic Applications

Denise Lee

6:12 (D6) Development of Carbon Nanotube Yarns as Electrical Conductors in Long-Life Cardiac Pacing Leads

Celeste Huang

6:24 Closing Remarks and Certificate Ceremony