

## Department of Materials Science and Engineering

### Spring 2010 Seminar Series Schedule

Refreshments at 3:00 p.m., Presentation at 3:30 p.m.  
McBryde Hall 113

<b>Date</b>	<b>Title</b>	<b>Speaker/Affiliation</b>
January 22	<b>Quantitative metric for nano-filler dispersion in polymer composites</b>	<b>Luke Gibbons</b> Graduate Student, MSE, Virginia Tech
	<b>Magnetoelectric (ME) effect in multilayer structure</b>	<b>Zhiguang Wang</b> Graduate Student, MSE, Virginia Tech
January 29	<b>Mechanical and Cellular Response to Biomineralization of Ovalbumin Scaffolds for Bone Healing Applications</b>	<b>Kevin Sheets</b> Graduate Student, MSE, Virginia Tech
	<b>Magnetoelectric phase diagram of lead-free (1-x)BaTiO<sub>3</sub>-BiFeO<sub>3</sub> composites</b>	<b>Su Chul Yang</b> Graduate Student, MSE, Virginia Tech
	<b>Dislocation Behavior and Crack Nucleation in Nickel using Atomistic Simulations</b>	<b>Niklas Floyd</b> Graduate Student, MSE, Virginia Tech
February 5	<b>Antimonide-based type II heterostructures in narrow-gap III-V systems</b>	<b>Dr. Konstantin Moiseev</b> Ioffe Institute of Physics and Technology Saint Petersburg, Russia
February 12	<b>Virginia Tech Hot Spots on the Moon</b>	<b>Prof. Kathryn Logan</b>  MSE, Virginia Tech
February 19	<b>Characterization of Gold Nanoparticle base Conductive Network Composites in Ionic Electroactive Polymer Actuator Devices</b>	<b>Reza Montazami</b> Graduate Student, MSE, Virginia Tech
	<b>Understanding the structure-function relationship of nano-composite materials: Experimental methods and tools to visualize damage mechanisms</b>	<b>Luke Gibbons</b> Graduate Student, MSE, Virginia Tech
February 26	<b>Silicon Carbide Power Electronic Devices – From Fundamental Materials Research to Marketplace</b>	<b>Dr. Brett Hull</b> Cree Power Device R&D Group Durham, NC
March 5	<b>Electrical Insulation Materials</b>	<b>Dr. Bandeep Singh</b> AAB, Incorporated Bland, VA
<b>March 12</b>	<b>No seminar (Spring Break)</b>	
March 19	<b>Development and Applications of Optical Materials at the Naval Research Laboratory</b>	<b>Dr. Jas Sanghera</b>  Naval Research Laboratory  Washington, DC
March 26	<b>Structure Property Relations of Asymmetric Dielectric Elastomers</b>	<b>Brian Stewart</b>  Graduate Student, MSE, Virginia Tech
	<b>Directed Assembly of Aligned Nanofibers</b>	<b>Andrea Rojas</b>  Graduate Student, MSE, Virginia Tech
	<b>Silicon Optical Fibers: Fabrication, Processing and Structure</b>	<b>Brian Scott</b>  Graduate Student, MSE, Virginia Tech
April 2	<b>Deposition of GaN and InGaN for a Buffer Layer in CdTe Solar Cells</b>	<b>David Gouldey</b>  Graduate Student, MSE, Virginia Tech
	<b>Silica nanoparticles for targeted drug delivery</b>	<b>Prabhakaran Munusamy</b>  Graduate Student, MSE, Virginia Tech
April 9	<b>Characterization and Optimization of Passive Magnetic Sensor Configurations</b>	<b>David Berry</b>  Graduate Student, MSE, Virginia Tech
	<b>Si-SiO<sub>2</sub> Optical Nanofibers - A Top-Down Approach</b>	<b>Charles Sprinkle</b>  Graduate Student, MSE, Virginia Tech
<b>April 16</b>	<b>No seminar (University Remembrance Day)</b>	