



Spring Term 2009

Departmental Seminars

3:30 pm, Refreshments, A214 E-Quad

4:00 p.m., A224 E-Quad (Elgin Room)

- January 14 **David Colby**, University of California – San Francisco
From Misfolded Molecules to Mouse Models: Engineering Approaches to Neurological Disease
- January 21 **Akram Boukai**, University of California – Berkeley
Clean Energy: The Case for Thermoelectrics and Photovoltaics
- January 28 **Hadley Sikes**, California Institute of Technology
Biomolecular Engineering for Low-Cost Clinical Diagnostics and Cell-Free Mimics of the Oxidative Burst Immune Strategy
- February 4 **Paulette Clancy**, Cornell University
How Do Organic Semiconducting Molecules Fall Over Step Edges?
- February 11 **Fan Yang**, Massachusetts Institute of Technology
Stem Cell Engineering for Regenerative Medicine
- February 18 **Wenjun Zhang**, University of California – Los Angeles
Engineered Biosynthesis of Bacterial Aromatic Polyketides for Pharmaceutical Applications
- February 25 **Sanat Kumar**, Columbia University
Anisotropic Self-Assembly of Spherical Polymer-Grafted Nanoparticles
- March 11 **Katharina Krischer**, Technische Universität München
The Smaller, the Messier, the Faster: The Impact of Molecular Noise on Reactions at Nanoelectrodes
- March 25 **Lance Davidson**, University of Pittsburgh
Reverse Engineering the Physical Mechanics and Forces Shaping Embryos and Organs

Dudley A. Saville Lectureship

Thomas M. Truskett

Paul D. and Betty Robertson Meek Centennial Fellow
and Professor of Chemical Engineering at the
University of Texas – Austin

Refreshments: 3:30 pm, Friend Center FC113

Lecture: 4:00 pm, Friend Center FC113

- April 1 “*Structure and Dynamics of Confined Fluids*”
- April 8 **Gerald Fuller**, Stanford University
Oriented Collagen Materials for Contact Guidance of Cells
- April 15 **Melody Swartz**, Swiss Federal Institute of Technology
Interstitial and Lymphatic Flow: Roles in Immune Cell Trafficking, Cancer, and Tissue Engineering
- April 22 **James Liao**, University of California – Los Angeles
Synthetic Metabolism for Fuels and Chemicals: A Fusion of Chemistry, Biology, and Mathematics
- April 29 **James Dumesic**, University of Wisconsin – Madison
Catalytic Production of Liquid Fuels and Chemicals from Biomass-derived Oxygenated Hydrocarbons
- May 6 **David Corti**, Purdue University
Activated Instability of Homogeneous Nucleation and Growth in Metastable Fluids
- May 13 **Jeffrey Saven**, University of Pennsylvania
Theoretical Methods for Engineering Protein Structure and Function