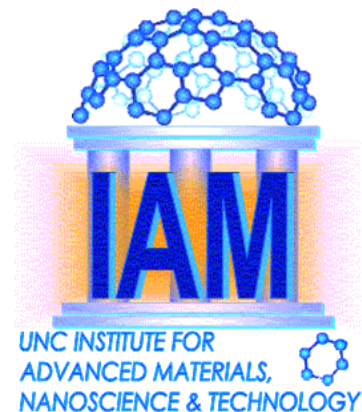


## Materials Science Seminars at UNC

SPRING 2008

This is a combined list of UNC seminars on topics related to the fields of materials science and nanoscience compiled by the Institute for Advanced Materials, Nanoscience and Technology. To add a seminar to this list, please contact Bob Pinschmidt at pinschrk@email.unc.edu or 919-843-6555.



**Wednesday, 3/26**

### Biological

Function and Misfunction of the Human Vasopressin Precursor  
Esther Breslow, Cornell Medical School  
12:00 PM, Chapman 125

**Thursday, 3/27**

### Organic - Witten Lecture

TBA  
Ronald Breslow, Columbia University  
11:00 AM, Chapman 125

**Friday, 3/28**

### CCNE, 17th Annual Avery Steelman Lectureship

Structure and Dynamics of the Human beta 2 Adrenergic Receptor  
Brian Koblka, M.D., Stanford University  
2:00 PM, 1131 Bioinformatics Auditorium

### Materials

New Developments in Specialty Copolyesters  
Chris Killian, Director Polymers Technology, Eastman Chemical Company  
4:00 PM, Chapman 125

### CCNE, 17th Annual Avery Steelman Lectureship

Brian Koblka, M.D., Stanford University  
Adrenergic Receptor Signaling: Insights from Molecules and Mice  
4:00 PM, 1131 Bioinformatics Auditorium

**Monday, 3/31**

### Analytical

Laser tweezers/trapping  
BJ Privett, UNC  
12:00 PM, Chapman 125

Separation and analysis of membrane-bound proteins  
Nathan Westcott, UNC  
12:30 PM, Chapman 125

## **Materials/Physical Chemistry**

TBA

Dennis Discher, University of Pennsylvania  
4:00 PM, Chapman 125

## **Wednesday, 4/2**

### **Biological**

Better Living Through Hyper-Mutation  
Myron Goodman, University of Southern California  
12:00 PM, Chapman 125

## **IAM Distinguished Speaker Seminar**

Grand Scientific Challenges in Energy  
Dr. Michelle Buchanan, ORNL  
2:00 PM, Chapman 125

## **CCNE Medchem Seminar Series**

Richard Silverman, Ph.D, Northwestern University  
"Design of Selective Neuronal Nitric Oxide Synthase Inhibitors for the Treatment and Prevention of Neurodegenerative Diseases"  
3:00 PM, 2001 Kerr Hall

## **Friday, 4/4**

### **Organic - Evans Lecture**

Free Radical Lipid Chemistry: The Isolation and Identification of Plasma Protein Lipid Adducts  
Ned Porter, Vanderbilt University  
12:00 PM, Chapman 125

## **Polymer and Materials**

Precision Polyolefins  
Ken Wagener, University of Florida  
4:00 PM, Chapman 125

## **Tuesday, 4/8**

### **Biochemistry and Biophysics**

Mechanisms of DNA Replication and Repair  
Johannes Walter, Ph.D., Harvard University  
11:00 AM, 408 Mary Ellen Jones Building

## **Wednesday, 4/9**

### **Biological**

Application of Quantum Dots in Studies of Nucleotide Excision Repair Proteins  
Hong Wang, NEIHS  
12:00 PM, Chapman

**Friday, 4/11****Applied Mathematics Colloquium**

Complex Particles and Patterned Substrates: Opportunities in Life Sciences and Material Science

Joseph M. DeSimone, IAM, UNC

4:00 PM, Phillips 332, refreshments in Phillips 330 at 3:30pm

**Monday, 4/14****Analytical**

Analytical chemistry using nanotube technology

Vanessa Van Vranken, UNC

12:00 PM, Chapman 125

Salivary diagnostics

April Holland, UNC

12:30 PM, Chapman 125

**Polymer and Materials**

Recent Progress in Multiphoton Absorption Polymerization

John Fourkas, University of Maryland

4:00 PM, Chapman 125

**Tuesday, 4/15**

Biochemistry and Biophysics Seminar

Modeling Ion Permeation and Selectivity in Calcium Channels

Dirk Gillespie, Ph.D., Rush University Medical Center

11:00 AM, 408 Mary Ellen Jones Building

**Wednesday, 4/16****Biological**

Application of Quantum Dots in Studies of Nucleotide Excision Repair Proteins

Hong Wang, NEIHS

12:00 PM, Chapman 125

**Thursday, 4/17****Microbiology and Immunology Seminar**

Antigen cross-presentation by MHC class I - how do external proteins get in?

Peter Cresswell, Ph.D., Yale University School of Medicine

3:30 PM, 00-002 Joseph S. Pagano Conference Room, UNC Lineberger Cancer Center

**Friday, 4/18**

John Perona, PhD - University of California, Santa Barbara

A Rationally Engineered Misacylating Aminoacyl-tRNA Synthetase

**Monday, 4/21**

**Analytical**

Integrated Micro- and Nanofluidic Devices for Separations and Analysis

Steve Jacobson, University of Indiana

12:00 PM, Chapman 125

**Materials/Physical Chemistry**

Electro-wetting at the Nanoscale

Alenka Luzar, VCU

4:00 PM, Chapman 125

**Tuesday, 4/22**

**Biochemistry and Biophysics Seminar**

Structure of the "30nm" Chromatin Fibre and the Regulation of Its Compaction

Daniela Rhodes, Ph.D., Cambridge

11:00 AM, 408 Mary Ellen Jones Building

**Inorganic**

Nanostructural Design of Photocatalysts and Photoelectrochemical Cells

Prof. Thomas Mallouk, Pennsylvania State University

11:00 AM, Chapman 125

**Wednesday, 4/23**

**Biological**

De Novo Design of Helix Bundle Proteins with Explicit Negative Design

Grant Murphy, UNC

12:00 PM, Chapman 125

**Tuesday 5/13**

**C-CCNE Seminar Series**

Keith Bonin, Ph.D., Wake Forest University

Combined Atomic Force/Fluorescence Microscopy to Select Aptamers in Single Cycle from a Pool of Random Oligonucleotides

12:00 PM 00-002 UNC Lineberger Comprehensive Cancer Center, Plaza Conference Room