

POSTER SESSION

POSTER SESSION A: 2:30—3:00

POSTER SESSION B: 4:00—4:30

POSTER SESSION C: 5:30—6:00

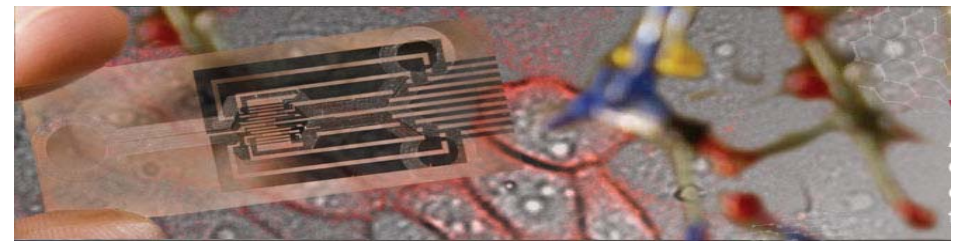
The broader VINSE research program is represented in the poster session. If you or anyone from your research group would like to participate in this year's poster competition, please contact Sarah Satterwhite for more information.

CONTACT INFORMATION

Vanderbilt University
Interdisciplinary Graduate Program in Materials Science
Vanderbilt Institute of Nanoscale Science and Engineering
6506 Stevenson Center
Nashville, TN 37240

Phone: 615-343-6868
Fax: 615-322-3202
Email: sarah.m.satterwhite@vanderbilt.edu

www.vanderbilt.edu/vinse



8TH ANNUAL NANO DAY NANOSCIENCE AND NANOTECHNOLOGY FORUM

**Wednesday,
October 24, 2007**

134 Featheringill Hall

A yearly forum for faculty, post-docs, and graduate students engaged in nanoscience and nanotechnology at Vanderbilt and Fisk Universities.

*Keynote Speaker: Evelyn Hu
University of California, Santa Barbara*

**VANDERBILT INSTITUTE OF
NANOSCALE SCIENCE AND
ENGINEERING**

**INTERDISCIPLINARY GRADUATE
PROGRAM IN MATERIALS SCIENCE**

SCHEDULE OF EVENTS

- 2:30—3:00 Poster Session A
- 3:00—3:15 Welcome
SANDRA ROSENTHAL, Chemistry
- 3:15—3:30 *"Nanotechnology for Health and Medicine"*
DAVID WRIGHT, Chemistry
- 3:30—3:45 *"Durability and performance of nano-modified cement-based materials"*
FLORENCE SANCHEZ, Civil Engineering
- 3:45—4:00 *"Quantum Dot Enabled Multiplexed Antigen Profiling - Catching cancers early"*
CHINMAY SOMAN, Materials Science Graduate Student
- 4:00—4:30 Poster Session B
- 4:30—5:30 **KEYNOTE SPEAKER**
"Building the "Nano-RoadMap: Foundations, Milestones and Destinations"
EVELYN HU, UCSB
- 5:30—6:00 Poster Session C
- 6:00—6:15 *"New Concept Coulter Counters"*
DEYU LI, Mechanical Engineering
- 6:15—6:30 *"Nanotube photophysics"*
TOBIAS HERTEL, Physics
- 6:30—6:45 *"Recent Progress in Electrophoretic Deposition of Nanomaterials"*
JAMES DICKERSON, Physics
- 6:45— Dinner & Awards

KEYNOTE SPEAKER EVELYN HU

BUILDING THE "NANO-ROADMAP": FOUNDATIONS, MILESTONES, AND DESTINATIONS

Abstract: Six years beyond the official launching of the National Nanotechnology Initiative, the excitement and promise of nanoscience and nanotechnology are undiminished. The scope of the research is tremendously broad, as are the potential applications. What is the measure of our collective progress, what tools do we still need to construct and what challenges remain? By focusing on specific examples and experience, this talk will try to illuminate the broader questions.

Biography: Professor Hu received her B.A. in Physics (summa cum laude) from Barnard College and her M.A. and Ph.D. in Physics from Columbia University. From 1975-81, Dr. Hu was a Member of Technical Staff at Bell Laboratories at Holmdel, NJ. From 1981 to 1984 she served as a Supervisor for VLSI Patterning Processes at Bell Laboratories at Murray Hill, NJ. In 1984 she joined UCSB as a Professor of Electrical and Computer Engineering (ECE). She currently holds joint appointments in ECE and Materials, and is the Scientific Co-Director of the newly-formed California Nanosystems Institute, a UCLA-UCSB collaborative California Institute for Science and Innovation. Her research focuses on high-resolution fabrication of compound semiconductor electronic and optoelectronic devices, candidate structures for the realization of quantum computation schemes, and on novel device structures formed through the heterogeneous integration of materials. Recently her work has involved the interaction of quantum dots in high Q microdisk and photonic crystal cavities. She is a member of the National Academy of Engineering, the Academia Sinica, a recipient of the AAAS Lifetime Mentor Award, and was named an NSF Distinguished Teaching Scholar. She was named the 2005 UCSB Faculty Research Lecturer. She is a Fellow of the IEEE, APS, and the AAAS, and holds an honorary Doctorate of Engineering from the University of Glasgow.