Nanoscale Science and Engineering Education (NSEE) Materials Exhibition
Part of an NSF funded NSEE Workshop

Free Event at the Westin Arlington Gateway
Fitzgerald Ballroom A
December 11, 2014  1:00 to 3:00 pm

NSE Provides Important New Perspectives to Education

It is important to introduce nanoscale science and engineering (NSE) into current teaching practice at all levels. For the past two decades people have been working on ways to do just that. After years of shaping nanoscale education resources into useful materials, they are ready for larger audiences.

At the nanoscale materials behave differently. This is why water rolls off of lotus leaves and geckos can walk on the ceiling. Looking at these differences brings fresh insights that fit nicely into standards-based teaching. Studying the nanoscale brings together biology, chemistry, physics and engineering into a truly multidisciplinary adventure.

Nanotech Is Enabling Solutions to Societal Challenges

Understanding the different ways materials behave at the nanoscale will lead to new solutions to societal problems. NSE is being used to upgrade information technologies; create new medical diagnostics and therapeutics; and build affordable, renewable energy sources. Further, we need an informed public in order to address concerns about nanostructures’ environmental, safety and health impacts.

For more information on what you will experience visit www.usc.edu/esvp and enter password NSEE

REFRESHMENTS AVAILABLE
Preliminary Listing of Exhibitor Participation

California NanoSystems Institute (CNSI), Education  
https://www.cnsi.ucsb.edu/education/  
Jia Ming Chen  
CNSI, University of California, Los Angeles

Center for Biological and Environmental Nanotechnology (retired NSEC), Education  
http://cben.rice.edu/education.aspx  
Vicki Colvin  
Rice University

Center for Hierarchical Manufacturing (CHM, NSEC), Education  
http://chm.pse.umass.edu/education_outreach  
Mark Tuominen  
University of Massachusetts, Amherst

Materials World Education Modules  
http://www.materialsworldmodules.org/NCLT  
Robert Chang  
Northwestern University

MRSEC Education Group  
http://education.mrsec.wisc.edu/index.htm  
Anne Lynn Gillian-Daniel  
University Wisconsin-Madison

nanoHUB, Education  
https://nanohub.org/groups/education  
Tanya Faltens, Gerhard Klimeck  
Network for Computational Nanotechnology, Purdue University

NanoLink  
http://www.nano-link.org/  
Deb Newberry  
Dakota County Technical College

NanoSchoolBox/NanoSchool Kits  
http://www.nanoschoolbox.de/en/nutzungsbedingungen.html  
Ralph Nonninger  
Advanced Materials Science, rano GmbH, Germany

Nanotechnology Applications and Career Knowledge (NACK)  
http://nano4me.org/  
Stephen Fonash  
Pennsylvania State University

National Nanotechnology Infrastructure Network, Education  
http://www.nmin.org/education-training  
Nancy Healy, Joyce Allen  
Georgia Institute of Technology

Nanoscale Informal Science Education (NISENet)  
http://www.nisenet.org/  
Larry Bell, Carol Lynn Alpert  
Boston Museum of Science

NanoScience Instruments  
http://www.nanoscience.com/applications/education/  
Mark Flowers  
NanoScience Instruments
National Science Teachers Association (NSTA)
http://learningcenter.nsta.org/discuss/default.aspx?tid=ScKJe0zFq28_E
Patricia Simmons
North Carolina State University

Nanoscale Instructional Materials
Robert Geer
CNSE, SUNY Polytechnic Institute

Nanoscale Instructional Materials
Nancy Burnham
Worcester Polytechnic Institute

Nanoscale Instructional Materials
Anna-Rita Mayol
Port Educational Consulting and University of Pennsylvania

Nanoscale Instructional Materials
http://chemistry.beloit.edu/edetc/nanolab
George Lisensky
Beloit College

Nanoscale Instructional Materials
Walt Trybula
Texas State University

Nanotechnology Handbooks and Encyclopedia
Bharat Bhushan
Ohio State University

Mid-continent Research for Education and Learning (McRel)
http://www.mcrel.org/nanoteach/
John Ristvey
University Corporation for Atmospheric Research (UCAR), formerly with McRel

Omni Nano
http://www.omninano.org/
Marco Curreli
Omni Nano

Atelgraphics
Lerwen Liu