

Materials & Nanoscience Outreach

to inform, resource, and support outreach efforts in the materials and nanoscience areas

Recent Outreach Activities

Big Red Road Show

NCMN helped recruit high school seniors to member departments this year by participating in the Big Red Road Show event on Sunday, February 13 at the Quest Center in Omaha.

Prof. Eva Franke-Schubert, Electrical Engineering and Terese Janovec, NCMN Outreach Coordinator visited with parents and students at the event, provided free giveaways, hands-on experiences, and personal advising to support students in their college search process.

Women in Science Conference

On Friday, February 18, NCMN participated in the 13th Annual Nebraska Women in Science Conference at the Holiday Inn in Lincoln. Prof. Eva Franke-Schubert and Terese Janovec, NCMN Outreach Coordinator represented the Center at our recruiting booth. The conference is held each year to help high school women explore science careers, interact with professional women in science, and meet other high school women interested in science.



Lincoln Childrens Museum

Children explored the very small world of nano and enjoyed a sweet treat at the Lincoln Children's Museum. NCMN teamed up with Department of Physics & Astronomy students, to demonstrate how to make "nano" ice cream with liquid nitrogen and gave away free samples to over 200 children & parents visiting the Museum. Graduate Student, Tathagata Mukherjee (*above*), works with the Prof. Christian Binek group at UNL.



Nano Science Café



A Nano Science Cafe' on January 20 at the Red9 featured Dr. Rebecca Lai, assistant professor of chemistry. Dr. Lai presented information about her research involving the engineering of new or improved electro-chemical biosensing platforms to develop a portable, real-time biosensor for on-site usage. Her goal is to make a handheld biosensor similar to the glucose sensor, but for the detection of targets such as DNA and proteins. Electrochemical sensing has the potential for diverse applications, ranging from cancer detection to finding toxins, explosives and even cocaine in the body and in the environment. Assisting Dr. Lai were graduate students Anita Zaitouna and Jennifer Gerasimov.



Administrative Support Available for NCMN Member Outreach Activities

NCMN offers additional outreach help, including some administrative services to NCMN faculty members in fulfilling the Broader Impacts outreach component in NSF grants. **Contact:** Terese Janovec, Assistant Director and Education/Outreach Coordinator, 855 N. 16th Street, Room 093, *phone:* 402 472-2716, *fax:* 402 472-6148, *e-mail:* tjanovec3@unl.edu.

Women in Physics Conference (WOPHY 2010)



NCMN partners annually with the Department of Physics and Astronomy, along with other sponsors, to bring together outstanding student researchers for WoPhy Conferences each October. Students from across the US attend to build on their current research experiences, interact with physics students from other universities, and attend science talks given by scientists who are leaders in their field.



UNL Speakers Bureau and NCMN

NCMN is now working with UNL Speakers Bureau as an outreach partner to promote Science Demonstrations in the Materials/Nanoscience area. Faculty are given the opportunity to present science talks or demonstrations to schools and in other community venues. (Dr. Christian Binck at Bennet Elementary School)

NCMN Outreach Upcoming Events

NanoDays

April 2, 1-4:00 pm
Westfield Mall
Epscor, MRSEC, NCMN

Professional Dev. Workshop for Teachers

June 7, 8:00-4:30 pm
Jorgensen Hall

Epscor NCPA NanoCamp

June 6 & 13, 2:30-5:00 pm
Jorgensen Hall

NCMN/Bright Lights NanoCamp

June 27-July 1, 9:00-12:00 pm
Jorgensen Hall

Resources

www.unl.edu/ncmn/outreach/index.shtml

New Nano Undergraduate Outreach Fellowships

Apply using online form at:
www.unl.edu/ncmn/outreach/index.shtml



NanoLINKs for the Month

Virtual Microscope

Interactive Java-powered virtual microscopes that operate like real-life microscopes on the web.

www.micro.magnet.fsu.edu/primer/virtual.html

How Small is a Nanometer Video

Available for checkout:

www.unl.edu/ncmn/album3.shtml

Nebraska Center for Materials and Nanoscience *Bridging Nanoworld Opportunities in Nebraska...*

The Nebraska Center for Materials and Nanoscience (NCMN) at the University of Nebraska is a multidisciplinary research organization involving 85 faculty members from the Departments of Physics, Chemistry, Electrical Engineering, Mechanical Engineering, Engineering Mechanics, Chemical & Biomolecular Engineering and others. NCMN strives for excellence in research, graduate and postdoctoral education and service in materials science and engineering, and nanoscience. It is on the forefront of research in a high-priority national program, the National Nanotechnology Initiative. NCMN also works with state and national industries in support of Nebraska's overall economic development.

NCMN

Dr. David Sellmyer, Director
095 Jorgensen Hall
P.O. Box 880298
University of Nebraska
Lincoln, Nebraska 68588-0298

NCMN Education and Outreach

Phone: 402-472-2716
Fax: 402-472-6148
E-mail: tjanovec3@unl.edu