

Materials & Nanoscience Outreach News

Materials and Nanoscience outreach and education activities
in Nebraska

Recent Outreach Activities

High School Summer Internships

A new high school nanoscience internship program was started this summer thanks to special funding from a UNL alum. Eight high school students were given the opportunity to work in UNL research labs from 4 to 6 weeks on a variety of projects. The department of Chemistry, Physics and the Engineering College provided faculty mentoring. A final report and/or poster will be required at the end of each students experience.

Students Teaching Camp

A Nano Teaching Workshop for junior high students was offered by Bright Lights and NCMN in June on how to teach materials and nanoscience to elementary students. Nanoscience basics were shared using videos, demos, nanokits, and a tour of our new nanoscience facilities. Using the kits as a tool, students practiced teaching nanoscience concepts to each other in preparation for future opportunities.



NanoDays at Gateway Mall

NCMN, Nebraska EPSCoR, and UNL's MRSEC held Lincoln's third annual NanoDays event in March at Westfield Gateway Mall. The event attracted about 400 people to booths manned by UNL faculty, staff, and students and science educators. Free t-shirts, demonstrations, games and activities were presented about the special and unexpected properties found at the nanoscale and the promise that nanoscience holds for transforming our daily lives. NanoDays is organized by the Nanoscale Informal Science Education Network on a national level each year.



Women in Science Conference

On Friday, February 15, NCMN participated in the 15th Annual Nebraska Women in Science Conference at Embassy Suites in Lincoln. Terese Janovec, NCMN Outreach Coordinator and NCMN Undergraduate Fellows 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.



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](mailto:tjanvoec3@unl.edu), Education/Outreach Coordinator, 855 N. 16th Street, Room N201C, phone: 402 472-2716, fax: 402 472-6148, tjanvoec3@unl.edu.

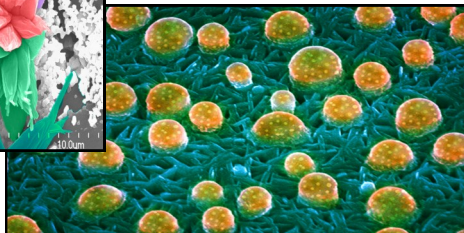
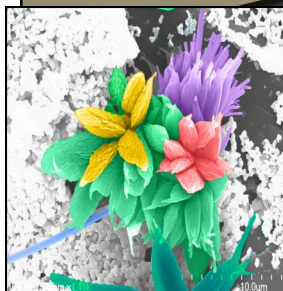
2013 NanoArt Contest and Exhibits



The second annual NanoArt competition was held in March to celebrate the aesthetic appeal and creativity of Materials & Nanoscience. Current faculty, postdocs, and students were eligible to submit entries that were displayed and awarded during Nanodays at Gateway Mall.

Individual Entries: Tyler Holm, (Mech & Materials Eng.)-1st Place, Zhangping Xu (Mech & Materials Eng)-2nd Place, Scientist/Artist Pair: Wei Xiong & Joel Brehm-1st Place.

www.unl.edu/ncmn/nanoart/.shtml



These entries, along with others were on display at UNL's City Union Gallery and will be exhibited at the East Campus Union and the Burkholder Project in the Haymarket in the fall.

NCMN Outreach Upcoming Events

EPSCoR NCPA NanoCamp
July
Jorgensen Hall

**Nebraska Association
of Teachers of Science
Conference (NATS)**
September 27-29

Burkholder Project
719 P Street
NanoArt Exhibit
September

East Campus Union
NanoArt Exhibit
October

WoPhy2013-"NanoTrek"
Oct. 24-26

Nature Center Exhibit

A Nano to Nature hands-on display was at the Pioneers Park Nature Center from November through January 2013. The public presentation "Nanoscience: Natural Beauty and Incredible Functions" introduced nanoscale science through snowflakes, lotus leaves, butterflies, and minerals. Visitors learned how nanoscientists mimic nanostructure principles and phenomena in nature to develop new products that are revolutionizing our lives.



Photo Credits:
Kat Buchanan from Daily Nebraskan

Resources

Nanoscience Kits

Interactive kits, covering a variety of nanoscience topics, are available for checkout for science outreach/teaching purposes from the NCMN education outreach office at 201C Voelte-Keegan Nanoscience Center. Examples are at:

<http://www.nisenet.org/catalog>

NCMN Outreach Link

www.unl.edu/ncmn/outreach/

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 and Astronomy, Chemistry, Electrical Engineering, Mechanical and Materials Engineering, Chemical & Biomolecular Engineering, and others. The 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. The NCMN also works with state and national industries in support of Nebraska's overall economic development.

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