

## Materials & Nanoscience Outreach News

*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, March 4 at CenturyLink in Omaha. Prof. Rebecca Lai, Chemistry, 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.



#### Astronomy Day

The University of Nebraska State Museum hosted its annual Astronomy Day celebration where NCMN participated with two booths about the new nano building, emerging nano products, hands-on activities and demonstrations by Dr. Yunshan Zhou and Xi Huang (Lu group) Electrical Engineering.



#### Women in Science Conference

On Friday, February 18, NCMN participated in the 14th Annual Nebraska Women in Science Conference at Embassy Suites 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.

<http://www.scimath.unl.edu/csmce/wis.php>



#### NanoDays 2012

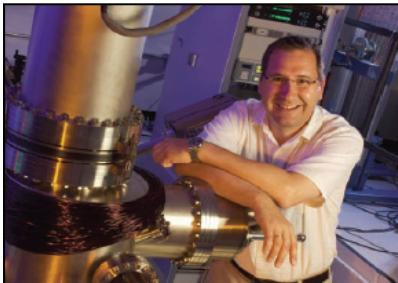
NCMN, Nebraska EPSCoR, and UNL's Materials Research Science and Engineering Center (MRSEC) held Lincoln's second annual NanoDays event in March at Westfield Gateway Shopping Center. The event attracted more than 400 people to booths manned by UNL faculty, staff, and students and science educators. Free 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 and takes place nationally each year.



#### 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](mailto:tjanovec3@unl.edu).

## Nanoscience Café



NCMN faculty member, Axel Enders, Physics and Astronomy professor, presented a NanoScience Café at Red9 on April 26 about the use of molecules and atoms as building blocks, similar to Legos, for a new class of adaptive, pre-programmed materials. Dr. Enders' research program is dedicated to the exploration of surface-supported self-assembled nanostructures.

<http://www.unl.edu/ncmn/faculty/enders.shtml>

## Junior STEM Program



NCMN partnered with the College of Education and Human Sciences this spring to provide inquiry science lab experience for 7th and 8th grade students from Class C & D schools in Nebraska, with an interest in science. Students worked with Prof. Steve Ducharme and Prof. Yunshen Zhou on lab activities as well as experienced research being done in scientists' labs.

<http://newsroom.unl.edu/announce/csmce/1305/7707>

## 2012 Science Art Competition



The first NanoArt competition was held in March to celebrate the aesthetic appeal and creativity of Nanoscience. Current faculty, staff, and students affiliated with NCMN were eligible to submit entries that were displayed and awarded during Nanodays at Westfield Mall.

Yang Gao, (Elec. Eng)—1st Place, Matt Mitchell (Elec. Eng) —2nd Place, Thomas Guillemet (Materials Eng)-3rd Place

[www.unl.edu/ncmn/nanoart.shtml](http://www.unl.edu/ncmn/nanoart.shtml)

## NCMN Outreach Upcoming Events

### **Nano Workshop for Teachers**

June 7, 8:00-12:00 pm  
Jorgensen Hall

### **Sunday with a Scientist**

June 17, 1:30 - 4:30 pm  
Dept of Chemistry & NCMN  
Univ. of Neb State Museum

### **NCMN/Bright Lights NanoCamp**

June 25-29, 9:00-12:00 pm  
Jorgensen Hall

### **EPSCoR NCPA NanoCamp**

July  
Jorgensen Hall

## Resources

### **NanoLINKs**

#### **Scale of the Universe**

Interactive tool that zooms from the edge of the universe to the quantum foam of spacetime  
[www.h2twins.net/scale2/](http://www.h2twins.net/scale2/)

#### **Education and Careers in Nanotechnology**

Classroom presentations, slideshows, laboratories, and multimedia resources.

[www.nano4me.org/educators.html](http://www.nano4me.org/educators.html)

#### **NCMN Outreach Link**

[www.unl.edu/ncmn/outreach/](http://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, 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**

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