

## Materials & Nanoscience Outreach

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

### Recent Outreaches



#### Nanoscience Camp

Sixty 10th grade students from Grand Island and Omaha high schools participated in a Nanoscience Camp sponsored by EPSCOR and held in June on the UNL campus. Part of the camp included tours of materials and nano related research in Physics' professor labs (Adenwalla, Ducharme, Binek) and facility tours of NCMN equipment. Students were a part of the [Nebraska College Prep Academy](#), a science/math focus program that encourages high school graduation and pursuit of a post-secondary degree.



#### Astronomy Day & Nano



The University of Nebraska State Museum hosted its annual Astronomy Day celebration. NCMN participated in the event which included a booth with information about our new building, emerging nano products, hands-on activities, and demonstrations by Physics & Astronomy graduate students. The event attracted over 600 visitors.



#### Nano Science Café



Associate professor of physics Christian Binek, assisted by post-doctoral researcher Steve Michalski, spoke about exciting, new discoveries in the nanosciences at a Nano Science Cafe' held at the Red9 on July 22. NCMN sponsored the event which included an illustration about nanowaves using an electric guitar and Rubin's tube fire. The audience of about 100 people put together buckyballs and learned how matter is manipulated at the atomic level in a fun environment.



### Administrative Support Available for NCMN Member Outreaches

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).

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

## 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 over 75 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.

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### College of Engineering / Bright Lights Camp Focuses on Nanoscience



Faculty presented hands-on activities and information about nanotechnology at the College of Engineering/ Bright Lights Camp held July 12-16. Prof. Eva Franke-Schubert (Electrical Engineering) and Prof. Stephen Ducharme (Physics & Astronomy) taught 6-8 graders about ferrofluids, nanostructures, solar cells, electron microscopes, nano-particle capacitors and quantum dots.

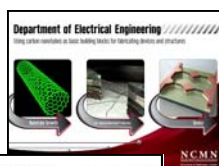


### High School Internships in Nanoscience areas

Prof. Wonyoung Choe, Chemistry, and Dr. Jeff Shield, Mech. Engineering, were a couple of the many faculty providing opportunities this summer for high school students to work in research labs on an internship basis. Dr. Shield's student from Omaha's Roncalli Catholic High School, worked with his summer undergraduate student visiting from the University of Wisconsin-Stout on a variety of projects. Dr. Choe's intern was financially supported by the American Chemical Society Project Seed 2010. The program sponsors participants in areas of meaningful research activities for 8 weeks to help raise students' goals and expand their horizons.



## Resources



Outreach Posters

Checkout items below at NCMN Office for use at your outreach events

### Science Kit Library

Or Order Directly Online:

Institute for Chemical Education  
<http://ice.chem.wisc.edu/Catalog.html>

### Science Posters

### Nanokits

See at <http://www.nisenet.org/catalog/all/nanodays>

### NanoLINKs for the Month

#### Emerging Nano Technologies

An inventory of nanotechnology based products currently on the market.  
[www.nanotechproject.org/inventories/consumer/](http://www.nanotechproject.org/inventories/consumer/)

#### Everyday Nanoscale Science

[www.newton.umsl.edu/run.me.html](http://www.newton.umsl.edu/run.me.html)

#### Contact:

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