

National Nanotechnology Infrastructure Network Vol.1 # 2



A Periodic Newsletter of NNIN News and Announcements

Sept. 2006

NNIN

The National Nanotechnology Infrastructure Network consists of 13 nanotechnology user facilities at 13 major academic institutions. Funded by the National Science Foundation, our facilities are available to the national user community on an open basis. We provide accessible resources across the entire breadth of nanotechnology. To this end, each site has specialized areas of expertise within the network, ranging from biology and chemistry, to materials characterization and traditional microfabrication. Complete information on NNIN sites, resources and access is available via the web site at nnin.org

NNIN Events

2nd Annual CNF Fall Computation Workshop "Building Nanostructures Bit by Bit" October 23-25, 2006

Computational modeling provides a crucial window into the nanoscale world. The **Cornell Nanoscale Facility**, in conjunction with the NNIN, is proud to host a workshop focused on the wide range of modeling tools that help us understand the nanoscale world. The workshop will provide morning lectures on the theory behind different approaches followed by hands-on afternoon sessions on each code. In some cases, the participants will be able to learn directly from the code's creator. Sessions will focus on tools for nano-materials (multilayers, nanowires, etc), chemistry on the nanoscale (clusters, molecules, etc), and nanophotonics (FDTD approaches, photonic crystals). Graduate students and young researchers with theory or experimental backgrounds are encouraged to attend.

CNF houses one of two primary computational resources for NNIN, consisting of a computational cluster and a variety of supported software resources for nanoscale materials and devices with a staff liaison to support users in their computational endeavors.

http://www.cnf.cornell.edu/cnf_fallworkshop2006.html

Organizer: Derek Stewart (stewart@cnf.cornell.edu) 607-255-2856

Location: Cornell University, Ithaca, NY

**Hands-On Nanofabrication Workshop for Educators
Penn State University
November 14-16, 2006**

Mark your calendars for the next offering of this workshop. Registration continues for the **November 14-16, 2006**, three-day Hands-On Nanofabrication Workshop for Educators. Participants will learn about the growing applications of nanotechnology in many industries including the biotechnology, MEMs, optoelectronics, chemical and electronics industries. The basics of nanofabrication processes and tools will be covered and practiced through a combination of classroom lectures and hands-on processing labs in the class 10 clean rooms of the **Penn State Nanofabrication Facility**. Please contact Darlene Fink at 814-863-2955 (dfink@engr.psu.edu) to register, or for further information. Workshop spaces fill up quickly, so please register as soon as possible.

**Northern Nano Workshop
University of Minnesota
Nov. 9, 2006**

This full-day workshop, co-hosted by the University of Minnesota's NNIN node (National Nanotechnology Infrastructure Network) and the Canadian Government, offers presentations and discussions on issues relating to active nanostructures including nano-energy, sensors, nano-bio and more.

The workshop aims to attract researchers from the University's Academic Health Centers, College of Biological Sciences and the Institute of Technology as well as industry and government researchers and technology professionals. This will be an opportunity to bring together professionals from a wide variety of fields to allow networking and discussion of problems of mutual interest.

The workshop will be followed on Friday, November 10 by the Third Annual Minnesota Biomedical Nanotechnology Workshop. This full-day workshop, co-hosted by the University of Minnesota and the Mayo Clinic will focus on nanotechnology applications, issues and impact in medicine, therapy and biological sciences.

For more information: <http://www.nano.umn.edu/northernnano/>
Contact Becky Von Dissen at vondi001@umn.edu or 612-625-3069

**Third Annual Minnesota Biomedical Nanotechnology Workshop
University of Minnesota
November 10, 2006**

The University of Minnesota and the Mayo Clinic in Rochester will co-host this workshop to continue to make connections between those physical and life scientists in academia and industry that are developing nanotechnology for the betterment of health in Minnesota.

Invited speakers include Dr. Mostafa El-Sayed of Georgia Institute of Technology and Dr. Vince Rotello of the University of Massachusetts.

This day-long workshop is free to attend, but registration is required.
Contact Tricia Conway at conwa012@umn.edu or 612-624-0653

**Technology and Characterization at the Nanoscale (TCN) Short Course
Cornell University
Jan. 16-19 , 2007**

This intensive 3.5-day short course, the CNF TCN, offered by the Cornell NanoScale Science & Technology Facility, combines lectures and laboratory demonstrations designed to impart a broad understanding of the science and technology required to undertake research in nanoscience. Attendance is open to the general scientific community, but class size is limited. We strongly encourage all persons expecting to become CNF users in 2007 to attend this course. It is suitable for both new and experienced researchers interested in nanoscale science. An emphasis will be placed on CNF laboratory resources, however, the concepts and techniques discussed are generally applicable to research in this field and do not require use of CNF.

A complete calendar of NNIN events is available at the [NNIN web site](#).

Access to NNIN Resources

All NNIN resources are operated on an open, user-accessible basis. Each site offers equipment, processes, and technical staff support of facilitate nanotechnology research in its area of expertise. User contacts at each site are accessible from the NNIN web site. We encourage you to call one of the NNIN sites to discuss your nanotechnology requirements.