Program Highlights for the Month of January 2003

January 9
NMT Partnership Awareness
Ms. Phi-Oanh Pham gave a presentation on nanotechnology and the NMT Partnership to faculty and students from Penn State Fayette and surrounding high schools. The presentation was done using a conferencing system that provided students to experience the technology that allows groups or individuals to communicate in real time through sound and video.

January 27-28
Nano-Engineering Education Workshop
Dr. Stephen Fonash was a guest speaker at the Nano-Engineering Education Workshop held at the Santa Clara Convention Center in Santa Clara, CA. The workshop focused on the challenges of preparing students for work in this broad field. The workshop addressed undergraduate and graduate education, faculty enhancement, continuing education, and interdisciplinary programs.

Up-coming Activities

February 23-25
NMT Partnership Winter 2003 Partners Meeting
The 2003 NMT Winter Partners Meeting will be held at the Penn Stater Conference Center Hotel on February 23-25, 2003. The meeting will begin with a dinner on Sunday evening, February 23, and end after lunch on Tuesday, February 25th. This meeting is open only to representatives of funded NMT Partnership institutions. The meeting will include presentations and discussions with the new National Visiting Committee (NVC) of the Advanced Technology Education (ATE) Regional Center for Nanofabrication Manufacturing Education.

NSF Research Experience for Teachers (RET) Project
This NSF RET project will provide a three-day hands-on nanotechnology training and research experience for 20 high school science teachers from Virginia at the Penn State Nanofabrication Facility in late March. This project builds upon and expands the components of the Pennsylvania NMT Partnership associated with professional development of educators and will take the NMT Partnership beyond the boundaries of Pennsylvania through an alliance with the Initiative for Nanotechnology in Virginia (INanoVA). INanoVA is a statewide initiative involving higher education, national laboratories, state and local education, economic development organizations and private industry.

May 5-7
Hands-on Nanofabrication Workshop for Educators
This workshop will be a “hands-on” exploration of the world of nanotechnology. Participants will learn about the growing applications of nanotechnology in many industries including the biotechnology, MEMS, optoelectronics, chemical, and nanoelectronics industries. The fundamentals of nanofabrication processes and tools will be covered and practiced through hands-on processing labs in the class 10 cleanrooms of the Penn State Nanofabrication Facility. This three-day workshop is broken down to daily morning lectures by nationally recognized Penn State researchers and engineering staff and afternoon lab sessions in nanofabrication. Further information and registration will be available on the website link http://www.nanofab.psu.edu/events/default.htm

Nanotech Camps
Nanotech Camps are opportunities for secondary school students to learn about nanotechnology and nanofabrication. Students participate in classroom and cleanroom lab activities exploring the aspects of nanotechnology including nano-electronics, nanobiotechnology, and nano-optics. Students are introduced to the nanofabrication processes and to the tools used in these processes in the Penn State Nanofabrication Facility. Career opportunities are explored, and educational pathways to nanofabrication careers are discussed.

There are one-day Nanotech Camp opportunities for students in 7th grade and above throughout the year. These one-day camps are focused on introducing nanotechnology to students and on increasing student awareness of the impact of this technology and its career opportunities. There are also three-day Nanotech Camp Opportunities only offered during the summer for 9th grade and above students. The three-day camps are focused on a more detailed look at nanotechnology, nanofabrication, career opportunities and educational pathways. Further information will be available in future bulletins and at the website link http://www.nanofab.psu.edu/ATE/Education_Programs/k12.prog.htm

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