Mission Statement: The PSU Nanofabrication Facility is dedicated to research, development and education across all aspects of micro- and nanotechnology. Its Nanofabrication Manufacturing Technology (NMT) Partnership is a National Science Foundation and Commonwealth funded initiative based on sharing the Penn State Nanofabrication Facility across Pennsylvania. Using the resource-sharing approach, the NMT Partnership addresses the tasks of (1) enhancing workforce development, (2) improving K-12 science and technology education, (3) increasing educators’ awareness of Micro- and Nanofabrication-based technologies, and (4) providing training, research and development assistance to Pennsylvania industry. The NMT Partnership has the goals of increasing job opportunities for Pennsylvanians and of nurturing and growing microfabrication-based, nanofabrication-based, semiconductor, and semiconductor-supplier industries in the Commonwealth.

Program Highlights for the Month of December 2002

Fall 2002 Term:
Nineteen students completed the capstone semester at the Penn State Nanofabrication Facility on December 16th. Four of these students are from Cambria County Community College, three are from Delaware County Community College, two students each come from the Northampton and the Lehigh Carbon County Community Colleges, and one student each come from California University, Penn College, Community College of Beaver County, Lock Haven University, Shippensburg University, Penn State Hazleton Campus, Penn State Berks-Lehigh Valley Campus, and Penn State York Campus. A total of 172 students have completed the capstone semester since its inception four years ago.

NMT Partnership Capstone Semester Evaluation Study
The purpose of the study is to gauge both the effectiveness of the NMT Capstone Semester and the impact of the NMT Program as a whole. This ongoing study has incorporated the NSF MTS Internship Program, which matches a trained evaluator with an ATE Center. The evaluator is Dr. Janet May. Her evaluation work plan, focusing on the correlation between curriculum and class content and assessment practices, will contribute to the overall study.

Up-coming Activities

Spring 2003 Term: Spring term begins January 13th and will end May 2nd.

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.

The purpose of the NVC is to assist NSF projects fulfill their goals and objectives in achieving excellence in undergraduate education by providing advice, assessing progress, and providing assistance to the Center. NVC members are:
- Don Goodwin, Dean of Technologies, Albuquerque Vocational Technical Institute, Albuquerque, NM
- Phil Jones, Vice President, Imerys USA, Inc., Roswell, GA
- Eleni Kousvelari, Chief, Biomaterials, Biomimetics, and Tissue Engineering Branch, Division of Extramural Research, National Institute of Dental and Craniofacial Research, National Institutes of Health, Bethesda, MD
- Michael Lesiecki, Director, Maricopa Advanced Technology Education Center, Tempe, AZ
- Robin McCasland, Director of Workforce Strategy, Semiconductor Industry Association, Dallas, TX

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