“The PSU Nanofabrication Facility: A National Resource for Micro- and Nanotechnology”

Mission Statement: The PSU Nanofabrication Facility is dedicated to research, development and education in micro- and nanotechnology. Its Nanofabrication Manufacturing Technology (NMT) Partnership is a Commonwealth funded initiative based on sharing the Penn State Nanofabrication Facility among Pennsylvania institutions. Using the resource-sharing approach, the NMT program addresses the tasks of (1) enhancing workforce development, (2) improving K-12 science and technology education, (3) increasing educators’ awareness of Nanofabrication-based technologies, and (4) providing training, research and development assistance to Pennsylvania industry. The NMT Program 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 July, 2001

Regional Center for Manufacturing Education in Nanofabrication Established:
On July 9 the National Science Foundation designated the Pennsylvania NMT Partnership as a Regional Center for Manufacturing Education in Nanofabrication. Through the new Center, NSF funding will be provided to Pennsylvania community colleges and the State System of Higher Education (SSHE) to assist with NMT program development, student services, and other activities.

Fourth NMT Partnership Job Fair:
The Fourth NMT Partnership Job Fair was held on July 16-17, 2001. The following Pennsylvania companies participated: Agere Systems Inc.; Angstrom Sciences Inc.; Fairchild Semiconductor; Molecular Electronics Corporation; Seagate Technology; Verimeta Inc./ Xactix Inc. The participating companies represented the Pennsylvania biotechnology, data storage, equipment vendor, micro-electromechanical systems (MEMS), microelectronic, power devices, and opto-electronics industries.

Chip Camps:
There were three chip camps in July. Thirteen students and four chaperones sponsored by Horizons for Youth attended a three-day chip camp on July 11-13. Twenty-one students and ten chaperones sponsored by Management and Environmental Technologies, Inc. attended a three-day chip camp on July 11-13. Twelve students and four chaperones sponsored by the Harrisburg Center for Healthy Child Development attended a three-day chip camp on July 16-18. A total of 62 students attended three-day chip camps this summer. For more information, please contact Christian Shaffer (cshaffer@engr.psu.edu).

Up-Coming Activities:
October 18-19 Fourth Annual Nanofabrication Manufacturing Technology Conference: This conference will be held at the Penn Stater Conference Center Hotel, University Park, PA. There is no registration fee for this conference. For more information please contact Christian Shaffer (cshaffer@engr.psu.edu).

In conjunction with the Fourth Annual Nanofabrication Manufacturing Technology Conference, the next meeting of the advisory board of the Pennsylvania NMT Partnership is scheduled for 7:00 p.m. on October 18, 2001 at the Penn Stater Conference Center Hotel.

October 8-10 Workshop for Educators and Industry Personnel:
Registration forms are now available for the October 8-10 professional development workshop, which will overview the processing and applications of micro- and nanofabrication. For more information on registration and availability please contact Christian Shaffer (cshaffer@engr.psu.edu). Secondary school educators will receive 21 hours of Act 48 credit for attending this workshop.

For further information on these Highlights or the NMT Program, contact:

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