

**E. 4. UNIVERSITY OF WISCONSIN-STOUT  
FOCUS 2010 IMPLEMENTATION TEAM 4**

Team Name:	Nanotechnology Plan
Co-Sponsors:	CTEM Dean, Bob Meyer CAS Dean, John Murphy
Charge:	Develop an action plan for nanotechnology.
Outcome:	Identify academic program concentrations/specializations that can develop into program status.  Develop a proposal for extramural funding.  Develop a proposal for a pilot program with CVTC.  Propose pilot projects in nanotechnology.
Chairperson/Leader:	
Membership:	
Consultants/ Resource People	Reference Librarians Research Services
Training/Information Needed:	Report from the Summer 2004 group that is working to identify emerging trends and visits to major nanotechnology locations.
Method of Communication:	Monthly progress reports to the Chancellor and Provost.
Timeline:	June 2005

## FOCUS 2010 NANOTECHNOLOGY TASK FORCE

### Final Report

May 18, 2005

The Nanotechnology Plan Team was formed in October, 2004. Three sub-groups were formed to address the four outcomes identified in the charge to the team (identify possible concentrations/specializations, investigate extramural funding, develop pilot program with CVTC, propose pilot projects in nanotechnology).

#### Program/concentration development:

An environmental scan of national and local nano materials and processes was conducted fall semester 2005. There has been widespread use of nano information and materials long before the concept of nanotechnology was identified as a discipline. Several courses on campus deal with nanotechnology concepts in varying degrees. The consensus was that nanotechnology information/processes should be infused into existing curriculum first, rather than developing individual courses on nanotechnology. A draft proposal for an Applied Science concentration in nanotechnology was originally developed. However, after the Spring Nano Day on April 28<sup>th</sup> (in which representatives from Stout, UW-Madison, University of Minnesota, and CVCT attended) it was decided that Carolyn Barnhart, Scott Springer and Steve Nold would develop a “universal concentration” that could be adapted for use in the three colleges in the areas of food technology, applied science and engineering, creating a cross-disciplinary concentration. A proposal will be submitted by August 31, 2005.

#### Extramural funding proposals:

Various short and long-term funding sources were investigated. It is felt that building partnerships with business and industry first would facilitate the grant process. With this in mind Stout and CVCT will examine partnering with area businesses to use “clean rooms” and fabrication technology already in use. It was agreed to continue discussions regarding the development of a nanotechnology funding plan that would coordinate efforts between our academic partners and business and industry in meeting mutual needs for funding equipment and research and curriculum development/implementation as well as staff development. The external funding plan is to be designed to address all of the elements of the nanotechnology initiative. To begin with Forrest Schultz will receive grant development funding from CAS and support from Research Services to develop and submit a grant proposal for curriculum and lab improvement (most likely NSF). The proposal will be completed by August 31, 2005.

Proposal development with CVTC:

CVTC has been contacted regarding interest in joint nano-projects. In December the president of CVTC met with members of the Task Force to discuss mutual areas of interest. It was agreed that both institutions would share curriculum information/development. Alignment of the Applied Science Program with those at CVTC was also discussed. The April Nano Day also resulted in an agreement that UW-Stout and CVCT would collaborate to develop a 2+2 program in Nanotechnology.

Pilot projects in nanotechnology:

As mentioned above, it is felt that nanotechnology should first be infused into existing curriculum. A “How Will Nanotechnology Affect Me and My Course?” workshop was held during the January, 2005 Professional Development days to develop awareness. It was proposed that a professional development plan be created that would provide some level of support to encourage our current faculty and staff to enhance their expertise in nanotechnology. It is also suggested that future position descriptions in relevant disciplines include a statement regarding the preference for expertise in nanotechnology.

Members of the Task Force visited the National Institute of Standards and Technology in early February, 2005. The purpose of the visit was to explore expanded partnerships between UW-Stout and NIST regarding materials engineering research. Forrest Schultz will return to NIST this summer to set up opportunities for student internships for summer 2006 and for faculty short term visits.

A final outcome of the April Nano Day was an agreement to continue discussions with personnel from the University of Minnesota’s Nanotechnology Lab regarding how Stout and CVCT can collaborate in making the facility accessible to our faculty and students.