



Purdue part of effort to help businesses improve competitiveness

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WEST LAFAYETTE, Ind. – Purdue University is part of a new consortium designed to improve the competitiveness and innovation capacity of small- and medium-sized businesses in the U.S. manufacturing supply chain.

The National Digital Engineering and Manufacturing Consortium was announced Wednesday (March 2) in Washington, D.C. The Council on Competitiveness, a nonpartisan group of CEOs, university presidents and labor leaders working to ensure U.S. prosperity, is leading the project. NDEMC will provide education, training and access to computing resources to help manufacturers' work forces develop modeling and simulation skills.

As an example of how those skills might be used, advanced modeling and simulation could enable product designers to reduce the weight of engines and other automotive components, a key factor for improving gas mileage.

Purdue's participants are the Technology Assistance Program, nanoHUB.org and the HUBzero platform for scientific collaboration.

Through its Manufacturing Extension Partnership Center, TAP will help up to 50 Indiana manufacturing companies adopt and use advanced modeling and simulation. David McKinnis, TAP director and associate vice provost for engagement, and David Snow, director of Purdue's MEP, will lead this effort.

nanoHUB.org and HUBzero will develop hub infrastructure that will enable small manufacturers to use highly complex modeling and simulation software. Gerhard Klimeck, professor of electrical and computer engineering and leader of the Nanotechnology Modeling Group, and George Adams, associate director for Purdue's Network for Computational Nanotechnology, are heading up the NDEMC hub program for Purdue.

"Through this effort, Purdue is directly involved in supporting small- and medium-sized Indiana companies in their use of the advanced modeling and simulation capabilities needed to compete globally," McKinnis said.

TAP, a partnership among Purdue, the state and local communities, works with companies and health-care providers to improve performance and enhance the quality of life for Indiana residents.

nanoHUB.org, launched at Purdue in 2002, is an international resource for nanotechnology theory, simulation and education.

HUBzero is a Web platform that serves up interactive simulation and modeling tools in any Web browser.

NDEMC expects its efforts to result in a work force with enhanced technical skills, improved American products, better customization of American products, and job retention and growth.

Other partners in NDEMC are Procter & Gamble, Lockheed Martin, General Electric Energy, John Deere, Ohio Supercomputer Center, National Center for Supercomputing Applications and National Center for Manufacturing Sciences.

Writer: Judith Barra Austin, 765-494-2432, jbaustin@purdue.edu (<mailto:jbaustin@purdue.edu>)

Sources: David McKinnis, 765-494-9189, mckinnis@purdue.edu (<mailto:mckinnis@purdue.edu>)

Gerhard Klimeck, 765-494-9212, gekco@purdue.edu (<mailto:gekco@purdue.edu>)

George Adams, 765-494-2698, gba@purdue.edu (<mailto:gba@purdue.edu>)