

Commerce Secretary Gutierrez Announces New Nanotechnology Center

March 20 2006

U.S. Secretary of Commerce Carlos M. Gutierrez today in Detroit announced the launch of a state-of-the-art center for collaborative nanotechnology research at Commerce's National Institute of Standards and Technology. Scientists from U.S. companies, universities and government will focus on overcoming major technical obstacles to cost-effective manufacturing of products made with components the size of atoms and molecules.

Speaking on the President's American Competitiveness Initiative to the Detroit Economic Club, Gutierrez described the new center as an important, and needed, addition to the nation's nanotechnology research efforts.

"The President is committed to strengthening American competitiveness by funding basic research," said Gutierrez. "The national Center for Nanoscale Science and Technology will help the private sector develop innovative products like more efficient batteries, lighter-weight and higher performing materials for aircraft and autos, and smaller computer chips to power digital devices."

NIST's new Center for Nanoscale Science and Technology (CNST) features a growing research staff that will blend many types of specialized expertise—physics and chemistry to mechanical engineering and computer science. CNST also houses a Nanofabrication Facility, or Nanofab. This large "clean room" is equipped with a still-growing array of state-of-the-art tools for making, testing and characterizing prototype

nanoscale devices and materials. These instruments will be available to collaborators and to outside users.

Under the American Competitiveness Initiative, the President has proposed a \$20 million increase in funding for NIST's nanotechnology research in fiscal year 2007. Part of the proposed increase would be used to speed the ramp-up of CNST research and services.

CNST is based in NIST's new Advanced Measurement Laboratory, ideal for nanotechnology research because environmental influences, such as vibration or variation in temperature, can be controlled to extreme levels. CNST's prime objective is to lay the technical groundwork necessary for U.S. industry to translate nanotechnology's many anticipated offerings into practical realities—manufacturable, market-ready products.

Through the CNST, partnering researchers also will have access to NIST's vast wealth of advanced measurement capabilities that exist outside its Nanofab.

Hallmarks of NIST's new center of excellence will be its twin focus on measurement and manufacturing at the nanoscale, which are two key priorities of the federal government's National Nanotechnology Initiative, and CNST's emphasis on long-term partnerships.

As it progresses to full-scale operation, CNST already has launched its in-house research program, and the center's Nanofab has completed installing a variety of fabrication equipment and measurement instrumentation, which is now being tested and verified. For more information on CNST, go to cnst.nist.gov.

Source: NIST

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