

Pennsylvania NanoMaterials Commercialization Center Announces Two New Funded Proposals

Center grants funding to two winning proposals for commercializing nanomaterials technology

PITTSBURGH, Oct. 1 /PRNewswire/ -- The Pennsylvania NanoMaterials Commercialization Center has announced its second round of funding for two commercialization projects in nanomaterials throughout the Commonwealth of Pennsylvania. The Center targets partnerships of researchers from universities, small companies, large companies and entrepreneurs in the growing field of nanomaterials, and it funds projects that have commercial or defense applications. The close date for this first round of proposals was June 29, 2007. The following companies were funded:

Integran Technologies USA was awarded \$248,241 in U.S. Air Force Research Laboratory funding to develop a novel new nanomaterials coaxial wire technology. This project will help to establish this new wire technology as a fully proven, mass production-ready process and to create a new technology and market support center in Pittsburgh to serve the wiring industry across the U.S. Integran is providing \$80,000 in matching funds.

Integran is a leading developer of metallurgical nanotechnologies. The development and commercialization of these new wire technologies will enhance the performance of lightweight electrical wiring systems. Overall weight reduction of electrical wiring systems has been a significant focus for military aircraft where advances in this area have been limited by wiring durability requirements. Integran's nano-metal co-axial cable design promises to achieve a combination of previously unattainable durability and weight reduction. In addition to defense applications, the developed technology is expected to be generally applicable to weight reduction and energy efficiency initiatives in the transportation sector, which includes automotive and commercial aircraft.

Crystalplex Corp. was awarded \$220,000 in Ben Franklin Technology Development Authority funding to commercialize innovative new quantum dot technology. Quantum dots are nano-sized semiconductor crystals that have unique optical properties. This project will use these nano-sized devices to improve the efficiency, while reducing the costs of light emitting diodes (LEDs) used in energy saving lighting and electronic displays. Crystalplex is providing \$55,000 in matching funds for this project.

Crystalplex develops and commercializes semiconductor nanocrystals (quantum dots) for optoelectronic, security and life science applications. The company's TriLite(TM) nanocrystals are manufactured using alloy gradient technology and exhibit superior brightness and stability compared to standard nanocrystals. TriLite nanocrystals are used as highly efficient down- converting phosphors and direct emitters in display and lighting applications. For security applications, TriLite nanocrystals are used as fluorescent taggants in security inks, polymers, papers, synthetic fibers and other materials in which it is desired to provide a distinct photonic signature or marking. In the life sciences Crystalplex provides innovative fluorescent markers for use in basic life science research, pharmaceutical research, diagnostics and histology. Crystalplex life science products provide test results from smaller samples and with reduced time, labor and less expensive instrumentation, as compared to traditional fluorescent reagents.

In April 2007, the Pennsylvania NanoMaterials Commercialization Center requested pre-proposal white papers prior to the formal proposals that resulted in submissions involving a broad range of partnerships between universities and small and large companies statewide. Each proposer received feedback from the Center on the suitability of their white paper and adherence to the Center's guidelines, along with advice on submitting a full proposal.

All proposals in the current round were judged by the Center's technical advisory committee that recommended the most promising ideas to the Center's governing board for funding. The advisory committee is made up of 19 leading researchers in the field of nanotechnology from Pennsylvania universities, small and large technology companies and federal laboratories.

The grants were made possible as a result of funding from the Commonwealth of Pennsylvania and the U.S. Air Force. A grant totaling \$1 million from the state's Ben Franklin Technology Development Authority to the Center was announced by Governor Rendell in August, 2006. This state support is part of the Pennsylvania Initiative in Nanotechnology which is intended to capitalize on the exciting new field of

nanotechnology to create new companies and high technology jobs throughout the commonwealth. To date, the Center has received total funding in the amount of \$1,743,424 from the Air Force Research Labs through the Wright Brothers Institute in Dayton, Ohio.

The invitation for the next round of proposals will be open in November of 2007, with additional awards expected in early 2008.

The mission of the Pennsylvania NanoMaterials Commercialization Center is to promote and support the commercialization of nanomaterials research for new and enhanced products critical to the U.S. economy and manufacturing base. The Center builds upon Pennsylvania's excellence in advanced materials research, development and manufacturing, and it acts as a new model for a public-private partnership among government, universities, entrepreneurs, small and large companies to accelerate the transition from nanomaterials invention and innovation to new products and new companies.

Visit: <http://www.pananocenter.org>
<http://www.integran.com>
<http://www.crystalplex.com>

Pennsylvania Initiative in Nanotechnology:
<http://www.newpa.com/newsDetail.aspx?id=500>