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Business Success Story

Next Proposal Round

Webinars

Center Funds Two New Projects

Update on the Center's 7th Proposal Round

With the support of the Department of Community and Economic Development, the Center engaged with Pennsylvania universities, small and large companies to develop new energy product concepts using advanced materials. The Center received a total of 18 proposals from all across Pennsylvania. Through its competitive peer review process, the Center awarded pre-commercialization and commercialization grants to transition these innovative new product concepts to working prototypes. The winners will be announced in April. So stay tuned!

Center Announces Next Proposal Round

The Center is pleased to announce that the 8th proposal round will open on May 24, 2010. The round will be for the commercialization of advanced materials in nanotechnology and will close on July 31, 2010. The Center plans to make awards of \$150,000 by September of 2010 to support promising projects which have both novel nanotechnology solutions and proven commercial potential.

How to Propose to the Center

With the 8th Proposal Round coming this summer, the Center is providing a series of webinars to help proposers prepare for the upcoming round. The dates for the webinar are as follows:

June 2, 2010: 12:00 p.m.
June 15, 2010: 12:00 p.m.
July 15, 2010: 12:00 p.m.

You can register by contacting Ms. Tricia Straw at tstraw@pananocenter.org or by calling 412.918.4244

Need Help Finding a Research or Industry Partner?

The Center offers a free service in matching innovative research with new product ideas. If you are looking to partner up and need a little help then contact the Center at info@pananocenter.org

NANOLAMBDA BRINGS COLOR MEASUREMENT TO LIGHT

by Kevin Lane

Unless one is familiar with the Greek alphabet, it would be somewhat obscure to know that lambda is the equivalent of the English letter "L."

But in the case of start-up company NanoLambda, Inc. it would not be a stretch to assume that "L" stood for light.

NanoLambda was incorporated in February of 2005 as a spin-off company from the University of Pittsburgh, but the core technologies had been in place since 1998. The company is developing a low-cost, chip-scale optical spectrum analyzer, called the Spectrum Sensor, which can determine the chemical make-up of any substance. This analysis is typically accomplished with big, bulky and costly devices called optical spectrometers, and currently there are more than 50 different fields or industries that use this cumbersome and expensive technology. But NanoLambda's device is less bulky and costs significantly less than a typical optical spectrometer, which often has a price tag as high as \$30,000.

The company's high-resolution spectrum sensing capability enables mobile or wearable health monitors, such as a truly non-intrusive glucose monitor, and other personal devices manufactured by the likes of consumer electronics giants Sony, Samsung, Panasonic and Phillips.

But beyond these types of end-products, NanoLambda's technology also has applications in sensing, measuring and controlling color consistency of light emitting diodes (LEDs.)

Recognizing opportunities in the soon-to-explode LED markets, the Pennsylvania NanoMaterials Commercialization Center recently awarded NanoLambda \$197,450 in Air Force Research Laboratory funding, subject to \$260,250 in matching funds.

Color monitoring and control of LED light has commercial applications in environments where small changes in the perception of color could compromise or affect the success of outcomes.

Perhaps nowhere is this more critical than in hospital operating rooms, where human organs may be distinguishable only by subtle variances or nuances of color. NanoLambda's wavelength sensor embedded in LED fixtures would monitor color wavelengths and provide feedback that automatically adjusts the light if it were, say, too blue.

Other less critical, yet no less commercially lucrative markets for NanoLambda's LED sensor would be museums, art galleries and design studios, as well as retail establishments where subtle variations in color perception could affect sales success.

"We are indeed fortunate to have the Pennsylvania NanoMaterials Commercialization Center in our corner," said NanoLambda CEO Bill Choi. "In addition to the funding we received, the Center also provided significant engineering expertise, quality reviews and business guidance. The Center actually helped us to focus on the previously overlooked LED market, and it was a major conduit to engineering and production process experts throughout the state. Their assistance was essential in enabling us to achieve critical milestones."

Although the Greek letter lambda ostensibly could stand for light, in the case of NanoLambda look for it to mean a laser-like focus on the LED market.

View a brief video of NanoLambda's technology at:

www.ustream.tv/recorded/3840286

DIRECTOR'S COMMENTS:

Welcome to this spring edition of our Quarterly Newsletter. As I mentioned in our fall 2009 edition, the Center has started a new initiative in commercializing advanced materials for energy. To kick-off this program, we hosted two industry-faculty workshops at Penn State and U. Pitt (with CMU) in November. These events resulted in over 40 areas of materials research showcased for industry representatives. Subsequent to these events, the Center had an invitation for proposals this past winter.

Recently, I had the opportunity to Chair a panel discussion, entitled "Nanotechnology This Revolution is Just Getting Started." This event was hosted by the Enterprise Forum of Pittsburgh on February 24. Representatives from several of our portfolio companies were on the panel and engaged with the audience on a range of topics.

One topic area of nanotechnology which was briefly discussed was the area of responsible handling, manufacturing and using of nanomaterials. Governments all around the world, including the U.S., are becoming more involved in understanding and proposing regulations to protect workers, consumers and the environment. I have included a link to an upcoming webinar hosted by RJ Lee to address this very important topic in more depth.

Thanks for your continued support.

Alan G. Brown
Executive Director



NANO CENTER NEWS

"NAVIGATING NANOTECHNOLOGY UNCERTAIN WATERS"

A webinar presented by Morgan Lewis, ChemRisk, & RJ Lee Group

Materials containing nanoparticles have made their way into the workplace, the environment, and the bodies of homes of workers and consumers. Yet regulatory guidance on the use of these products is sparse, and scientific research regarding the impacts of the materials has not kept pace with their proliferation. (+)

INTEGRAN TECHNOLOGIES USA AWARDED CONTRACT BY US DEPARTMENT OF TRANSPORTATION

Integrin Technologies USA Inc., a leading company in the area of metallurgical nano-technologies, has announced today that it has been awarded a Phase I SBIR contract by the US Department of Transportation (Volpe National Transportation Systems Center, Cambridge, MA) to develop hybrids of nanocrystalline metal and thermoplastic elastomers for use as Flangeway Gap Materials for rail crossings. (+)

PENNSYLVANIA NANOMATERIALS COMMERCIALIZATION CENTER AWARDS FUNDING TO TWO COMPANIES IN OCTOBER, 2009

The selection process is competitive, with proposals being reviewed and ranked by the Center's independent technical advisory committee. The project proposed by Kurt J. Lesker Company and NanoLambda fits both the technology roadmap and commercialization model developed by the Center. (+)

BRIDGING NANO COMMERCIALIZATION'S VALLEY OF DEATH – ARTICLE IN KEYSTONE EDGE

There's a place in business for concepts that can't find funding to reach production. It's called the "Valley of Death" and it's where the carcasses of good ideas go to die. (+)