



July 2010 Newsletter

Dear LNN community,

A Welcome to New LNN Members

The LNN community has expanded with the addition of 24 new members! A big welcome to our new members:

ACI Technologies, Inc.

Applied Research and Photonics

Confluense

Element 3 Battery Venture LLC

Expert Systems Inc.

Harrisburg University of Science and Technology

Headwaters Technology Innovation

IPINTECH

KODAK

Leica Microsystems

Morgan Technical Ceramics

Nanotech Plus, LLC

NJIT

Pall Corporation

Pennsylvania Bio Nano Systems LLC

RADii Solutions, LLC

Raritan Valley Community College

Santech International Inc

Saul Ewing LLP

Sparks Business Institute

University of South Carolina

VF Licensed Sports Group

Villanova University

Waste Not Technologies, LLC

Funding Opportunities:

PA Initiative for Nanotechnology (PIN) PowerPoint presentation provides overview of DCED and BFTDA nanotech investments in PA

In Pennsylvania, micro and nanotech are being advanced as enabling technologies that are bringing innovative projects to the next generation of development. Funding through the Ben Franklin Technology Development Authority (BFTDA) and other PA DCED programs since 1998 has grown the PIN initiatives to levels of national recognition for innovation and educational contribution. [Click here for more details.](#)

Past Conferences/Meetings:

NANO FOR BUSINESS 2010 =>

[Click here for video coverage of last LNN event held on May 26!](#)

A big thanks to Lehigh Distance Education for their assistance in creating these videos!

Upcoming Conferences/Meetings:

NANO-ENERGY WORKSHOP

**Nanotechnology for Energy Applications 2010
Followed by LNN Energy Focus Group Meeting**

Date: September 13-14, 2010

Location: Iacocca Hall, Lehigh University

Cost: \$200

High-level world experts from academia and industry will review hot topics in Energy and Sustainability=>Sponsored by Lehigh University. Grand finale will include an LNN Energy Focus Group meeting and networking beer/wine hour.

Please see LNN website (www.lehigh.edu/lnn/events.shtml) for details in August.

LEHIGH VALLEY CHAPTER OF ASM PRESENTS METALLURGY FOR THE NON-METALLURGIST MEI CLASS

Date & Time: Meeting every Wednesday (starting 09/08/10 at 5:15 p.m. for ~10 weeks, approximate class length 2 hours)

Cost: \$500/student (Includes Text, Supplies, Knowledgeable Instructors, and CEUs)

CONTACT: Mark Burton, 610-208-3516 or MBurton@cartech.com by August 1

Upon completion of this course you should be able to: Describe how metals behave and why, including why and how they can be formed; Recognize how metals can be strengthened by alloying, cold-working, and heat treatment; Determine why metals and alloys are not behaving as expected and can be made to behave as needed; Choose what metal or alloy to use for specific combinations of properties.

Nanotechnology Institute (NTI) & Energy Commercialization Institute (ECI) Present=> 2010 Discovery to Commercialization

More details will follow: Please [click here](#) for website.

Date: October 12, 2010

Time: 8 a.m.-6:30 p.m.

Location: 315 Chestnut St., Philadelphia

Cost: Free

Nanotechnology Today 2010: NanoReg & Keller and Heckman Announce Continuation of Popular Nanotechnology Webinar Series

Building on last year's popular webinars on the regulation of nanotechnology, Keller and Heckman & NanoReg are pleased to announce Nanotechnology Today 2010, a series of four new webinars designed to address important regulatory issues and the challenges associated with the safe development of nano-enhanced products.

Nanotechnology Today 2010 will focus on state regulation of nanotechnology in the

Featuring New LNN Affiliate Member Company: Applied Research and Photonics

A big welcome to one of our newest LNN members, Applied Research and Photonics, Inc.!

ARP is commercializing terahertz technology: TeraSpectra and TeraScan are two products ready for customer use. TeraSpectra is a high-performance terahertz spectrometer having distinguishing features such as wider terahertz range (~20 THz), high power terahertz source (~5 mW), and very high sensitivity (~femto-molar). These unique features are effectively exploited for important applications in analytical, biological, biomedical, materials research, and a number of other areas. TeraScan is a terahertz scanner used for depth profiling of various substrates in a non-invasive manner.

Founded in 2002, Applied Research and Photonics, Inc. (ARP) is based in Harrisburg, Pennsylvania. ARP has demonstrated a number of products based on its proprietary nanotechnology. ARP technology received the prestigious NASA TechBrief's nano-50 award in 2007 and 2008. ARP inventions have earned several patents (awarded and pending). ARP generates high power terahertz radiation from electro-optic dendrimer, a high $\chi^{(2)}$ nanomaterial. ARP's proprietary design is utilized to produce a few milliwatts of CW terahertz power. Utilizing this source ARP is producing terahertz spectrometer and other terahertz products. See [technical presentations](#) for details. Terahertz technology provides the next generation capabilities, overcoming the so-called terahertz gap, with new spectroscopy applications in this spectrum range.

For more information contact Anis Rahman at 717-220-1003 or by email at info@arphotonics.net.

Joan Stanescu
LNN Secretary

LNN Newsletter Chairman's Note

On May 26 the LNN and Lehigh Center for Advanced Materials and Nanotechnology conducted the third Nano for Business Conference at Lehigh University. We had about 100 attendees for a series of presentations, panels, exhibits, and a keynote by Tom Armstrong of PA DCED. Please check out the information, video presentations, and photos on the LNN website. We will also be publishing ideas from the panel sessions. If you attended, we welcome your comments and suggestions for the next "N4B" conference in 2012.

LNN members had two recent appearances on Berks County television's Berks Business, hosted by LNN member Bob Wert of Wells Fargo Advisors. On April 12, Gene Lucadamo discussed the LNN and nanotechnology at Lehigh ([Click here](#)). On July 12, Dr. Hai Lin and Gary Karnish of Silberline talked about their company and its award-winning nano-enhanced colors ([Click here](#)). We look forward to more opportunities to publicize our membership and to support Bob in this long-standing and worthwhile program.

Two Lehigh undergraduates were placed in internship positions at members Dynalene and Particle Sciences. These internships are financially supported by a PA DCED grant to CAMN. If you are interested in hiring an intern for summer 2011, look for our next announcement or contact Joan Stanescu at 610-758-3851 or jdsj@lehigh.edu.

absence of national regulation, the impact of nanomaterial regulation in Europe and North America, environmental applications of nanotechnology, and benefits and risk communication for nanomaterials.

This series features respected nanotechnology experts who work at the forefront of nanotechnology applications and implications.

Webinar Dates and Topics:

July 20, 1010 - State Regulation of Nanotechnology: What's Next?
http://online.krm.com/ieebms/coe/coe_p2_details.aspx?oc=10&cc=0010661&eventid=17044

September 1, 2010 - Manufactured Nanomaterials: Europe and North America Forecast
http://online.krm.com/ieebms/coe/coe_p2_details.aspx?oc=10&cc=0010661&eventid=17045

October 6, 2010 - Environmental Applications of Nanotechnology: Going Green
http://online.krm.com/ieebms/coe/coe_p2_details.aspx?oc=10&cc=0010661&eventid=17046

November 16, 2010 - Benefits and Risk Communication for Nanomaterials
http://online.krm.com/ieebms/coe/coe_p2_details.aspx?oc=10&cc=0010661&eventid=17047

All webinars will be conducted from 11 a.m. – 12:30 p.m. (U.S. Eastern Time)

The webinars will deliver live content via the Internet and can be attended from the convenience of an attendee's home or office where multiple attendees can participate for the cost of a single registration. The series offers small companies the assurance that they can keep abreast of nanotechnology science, policy, the law, and best practices.

For more information on Nanotechnology Today 2010: A Webinar Series
<http://www.khlaw.com/showevent.aspx?Show=3789>

Summary of LNN Websites:

Please join the "LNN" Discussion Group on Google Groups:

Where you find general information on new university facilities available to local businesses and presentations from the LNN Regional Meeting "Enabling Solutions" & "Nanotech-Global Perspective 2010"
=> [Click here](#) for more details.

A big thanks to "Energy Ways" Founder and President Pam Ryan for introducing the LNN to the Google Experience!

Also, please [click here](#) to update your member information (ie. changes in your contact information) when necessary or to change the Focus Group to which your organization has been assigned.

Follow us on Twitter ([Click here](#))!
Please visit these sites today!

Chairman's Note continued:

Our next LNN event is planned for September 14, 2010. Look for more details via email or the website in August.

Gene Lucadamo
LNN Chairman

BLANK PAGE