

HOTLINE

The Princeton Plasma Physics Laboratory is a United States Department of Energy Facility

MINDS Tech Transfer Success Awarded

In recognition of PPPL's successful transfer of the Miniature Integrated Nuclear Detection System (MINDS), the Federal Laboratory Consortium (FLC) Northeast Region recently presented the Lab with the Excellence in Technology Transfer Award.

"I am very pleased that technology we have developed here at the Princeton Plasma Physics Laboratory can be applied to enhance the security of our nation," said PPPL Director Rob Goldston.

An anti-terrorism technology, MINDS was developed for detection of the radiation emitted from a nuclear threat, such as a dirty bomb or from dangerous nuclear material. This technology employs a conventional off-the-shelf hardware approach to detecting the nuclear radiation spectrum coupled with an innovative detection scheme.

Using a scintillating crystal to detect X-ray and gamma ray radiation, the emitted signal is then coupled to a multi-channel analyzer (MCA) with appropriate amplification. The generated spectra is analyzed in real time by the propriety software developed by PPPL for the identification of specific radionuclides that may be associated with the threat of nuclear terrorism. The analysis is generally done in a laptop or other conventional computing environment.

PPPL Technology Transfer Head Lewis Meixler accepted the award on behalf of the Laboratory in September at the FLC Northeast Region meeting in Natick, Mass. The PPPL MINDS team includes Andy Carpe, Bill Davis, Charles Gentile, Steve Langish, Lewis Meixler, Dana Mastrovito, and Kenny Silber.

In 2005, Princeton University signed a licensing agreement with InSitech, a not-for-profit organization that brings government-developed technology to market. "Since we started on the path of developing MINDS for homeland security purposes, the system has been successfully deployed at a major commuter rail station in the northeast,

at the Port of Oakland in California, at a U.S. military base, and with an international security company. Currently, plans are underway to employ MINDS algorithms in hand-held detectors that are being developed by SAIC. I find it particularly satisfying that our Laboratory is able to support the country in the current war on terrorism, in parallel with pursuing our primary mission of developing viable fusion energy," said Gentile, who heads the MINDS team. ●



The MINDS team includes (from left, seated) Bill Davis, Dana Mastrovito, and Andy Carpe; (standing) Steve Langish, Lewis Meixler, Charles Gentile, and Kenny Silber.



PPPL Holds Benefits Fair for 2008 Open Enrollment



Maureen Abbott, of PPPL's Occupational Medicine Office, checks Antonio Morgado's blood pressure during the benefits fair.



PPPL's Jeff Bennett (tan jacket) checks out information at the fair.

Representatives from health, welfare and retirement vendors were on hand at PPPL's Benefits Fair in the Lobby October 17. The fair also featured presentations by representatives of the Greater Mercer Transportation Management Association, Vanguard, and TIAA-CREF in the MBG Auditorium.

Open Enrollment — through October 26th — is the time for staff members to make any changes to their health and dental benefits for 2008 and to enroll or re-

enroll in the Expense Reimbursement Accounts (Health, Dependent, Parking & Transit).

Employees may enroll using the online benefits enrollment system e-Benefits. eBenefits is available at <http://www.princeton.edu/selfservice>. To access eBenefits, an employee needs his or her Princeton University NetID and password. Personal benefits information is confidential and secured by the employee's password. ●

Ridesharing — Want more information? Call: 609-452-8988

Visit the Greater Mercer Transportation Management Association online at: www.gmtma.org

News Notes

PPPL's Hutch Neilson has been elected to the Administrative Committee of the IEEE Nuclear and Plasma Sciences Society. IEEE (the Institute of Electrical and Electronics Engineers, Inc.) is the world's leading professional association for the advancement of technology.

PPPL Environment, Safety, & Health and Infrastructure Support Head Jack Anderson is joining Oak Ridge National Laboratory as Director of the Office of Performance Management on November 1.

Transitions

Retirements

PPPL Principal Research Physicist and Nobel Laureate Russell Hulse retired in July after 30 years of service.

PPPL Senior Network Systems Engineer Bob Persing retired in September after 27 years of service.

Hotline

Editor/Writer: Patti Wieser
Photographer: Elle Starkman

Graphic Artist: Greg Czechowicz
Layout: Patti Wieser and Greg Czechowicz

The HOTLINE is issued by the Princeton Plasma Physics Laboratory, a research facility supported by the United States Department of Energy. It is primarily an internal publication. Correspondence and requests to reprint material should be directed to the Editor, PPPL HOTLINE, P.O. Box 451, Princeton, NJ 08543; Interoffice correspondence should be addressed to MS-38, LSB Bldg., C-Site; fax 609-243-2751; telephone 609-243-2757; e-mail pwieser@pppl.gov.

What's Happening at PPPL?

PPPL Hosts Environmental Meeting



About 40 participants from around the country came to PPPL October 16-18 for the DOE Annual Site Environmental Review (ASER) Workshop and Environmental Monitoring Meeting. The group discussed ASER reviews, ASER asset management and assurance acquisition, pollution prevention, global warming, radiation monitoring, environmental monitoring for nanotechnologies, and conservation and sustainability issues, among other topics. Participants also toured the National Spherical Torus Experiment and the National Compact Stellarator Experiment coil winding facility. PPPL's Materiel and Environmental Services Division hosted the meeting. Above are some of the participants, who came from DOE Headquarters and other national laboratories and institutions. ●

Jeopardy! Clue Taped at PPPL Last Fall to Air October 25

Once again, PPPL will be featured on the TV show Jeopardy! A clue taped at PPPL last fall will be included under the Odds and Ends category on Thursday, October 25, on ABC at 7 p.m. EST. Tune in! ●



NCSX Coil Work Proceeds



PPPL technician Bob Tucker, Jr., installs the final coil clamps on a Type B modular coil at the NCSX coil winding facility. There are 18 NCSX modular coils of three shapes being manufactured and wound for the machine, which is expected to be completed and begin operating in a few years. ●

Beautifying PPPL



PPPL is getting greener ...and much more colorful. As part of the Lab's beneficial landscaping efforts, the Maintenance & Operations and Materiel and Environmental Services Divisions have worked together over the past two years to reduce the amount of grass requiring regular mowing and plant ornamental grass, trees, and perennial flowers across the site. Above is a small garden blossoming in the library courtyard. Beneficial landscaping efforts are coordinated through the Laboratory's Environmental Review Committee. ●

Spotlight



Name: Manny Fernandez

Position: Technician, critical crane operator and qualified rigger specialist. Responsible for running the crane at the National Spherical Torus Experiment (NSTX), the National Compact Stellarator Experiment (NCSX) coil winding facility, and RESA building. Manny joined PPPL as a three-year term employee on the Tokamak Fusion Test Reactor Decontamination and Decommissioning project in 1999 after working as a rigging and crane operator for 30 years at American Cyanamid in Bound Brook. He has been a permanent employee at PPPL for the past four years.

Quote: “PPPL is great. Everyone is nice and this is a good place to work,” Manny says.

A typical day for Manny begins with getting the cranes ready. He makes sure the machinery is in good working order and all the belts are in place, and then gathers necessary rigging. For example, he may need rigging to flip the magnetic coils being manufactured for NCSX and to lift them for hole drilling at RESA. “That’s a big part of my work now,” he says of NCSX coil lifts and flips. “Working on the stellarator is a big task.”

With his characteristic smile and enthusiasm, he adds, “It’s interesting. It’s cool.”

Other interests: Outside of PPPL, Manny’s loves are his wife of 21 years, Maggie, and doo-wop, the blues, oldies bands, vintage cars, and guitars. “I love all music, but doo-wop and the blues are my favorites,” Manny says.

Luckily, family time and hobbies go hand in hand. Manny and Maggie enjoy oldies and blues festivals, often bringing their 9-year-old niece, Rosemary, and 7-year-old nephew, Thomas, with them, as well as Maggie’s sister, Mary. The couple head to Lead East — the world’s biggest 50’s party — every Labor Day (most recently held in Parsippany). This year, Rosemary sported a poodle skirt and Thomas greased his hair to attend the festival, and Manny harmonized and danced until the wee hours. A former band member, these



days Manny is content to jam with friends — playing one of his four guitars (two electric and two acoustic) or singing a capella with them. “Me and my friends all like to harmonize for fun,” he says. “And I just mess around on the guitar and still like to jam, just for fun.”

He’s passing on his love of the guitar to Thomas. “We just got him a guitar and I like showing him how to play.”

He is hard-pressed to name a favorite doo-wop band, but offered Johnny Maestro and The Brooklyn Bridge. “He still cooks,” Manny says of Maestro.

Manny and Maggie live in Manny’s hometown of Dunellen, which he and his pals call “the miracle mile” (the town is one square mile). The son of emigrant parents from Spain, Manny recalls turning to the neighborhood kids to learn English, which he fine-tuned after entering school. He visited Spain a few times while growing up, and still enjoys some of the traditional dishes — arroz con pollo and paella — his mother used to prepare.

Manny also likes to shoot pool and heads his local team. Those who know the upbeat and energetic technician might wonder if he ever rests. “I’ve been going since Woodstock,” he quips. ●

PPPL United Way Campaign Kicks Off

Mark Your Calendars! The PPPL United Way Meeting is scheduled for Thursday, November 29, at 2 p.m. in the Auditorium. Please join other staff for brief presentations by United Way of Greater Mercer County representatives. The guest speaker at the PPPL United Way meeting is Enable, Inc., Executive Director Sharon Copeland. Enable serves people with disabilities and their families throughout Central New Jersey. There also will be light refreshments and prizes. ●

