

At PPPL THIS WEEK

WEDNESDAY, OCT. 15
PPPL Photo/Video Shoot
Meet in Lobby at 10:50 a.m.

PPPL Colloquium
4:15 p.m. ♦ MBG Auditorium
Large Scale Superconducting Magnets
for a Variety of Applications
Joseph Minervini - M.I.T.

UPCOMING EVENTS

Oct. 20 - Nov. 15
**Open Enrollment for Princeton
Healthcare Plans**
Oct. 20
Benefits Changes Presentation
1 - 2 p.m. ♦ MBG Auditorium

Oct. 23
PPPL Benefits Fair
10 a.m. - 2 p.m. ♦ LSB Lobby

October 27-31
**56th Annual Meeting of the
APS Division of Plasma Physics**
New Orleans
<http://www.aps.org/>
Nov. 11
**PPPL's America Recycles Day
Celebration**
10:30 a.m. to 1 p.m. ♦ LSB Lobby

Nov. 11
Electronics Recycling Collection
7 - 10 a.m. ♦ Lower Parking Lot

November 4
PPPL Colloquium
4:15 p.m. ♦ MBG Auditorium
HTS and ARC for Fusion
Dennis Whyte - MIT

White brings talent, energy to PPPL's small business program

by Jeanne Jackson Devoe

Last August, Arlene White looked at the agenda for a conference on small businesses the night before the event and received a sudden jolt. Not only was she a panelist at the conference, she was listed as one of two guest speakers at the luncheon and she was introducing U.S. Rep. Donald Payne Jr.

White, who heads PPPL's Small Business program, wasn't flustered. Instead, she leaped into action, incorporating additional data about PPPL and ITER into her remarks. After ending her workday at about 11 p.m., she was ready to go. "I was delighted," she said. "Being prepared and talking about small business is what I do."


U.S. Rep. Donald Payne, Jr. and Arlene White.

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PPPL hosts gathering to discuss commercialization of novel filtration systems

By John Greenwald

PPPL scientists profiled two innovative filtration systems for members of the New Jersey-area business community this month. The session brought more than a dozen members of the Mid-Atlantic Chapter of the American Filtration & Separations Society to the Laboratory for a gathering to promote discussion of possible commercial applications for the two systems, which are under development at PPPL.

Featured during the half-day session were the Advanced Annular Couette Centrifuge (AACC), which enhances the separation of fluids and other materials, and the High-throughput Plasma Mass Filter, which could be employed to sort high-level from low-level nuclear waste.

Both systems are physical separation processes that can be performed without chemicals that add to the overall volume of waste, said engineer Charles Gentile, who hosted the gathering in conjunction with Gerard Lynch, president and CEO of Sigma Design, a Middlesex, N.J., firm that commercializes new technologies. A major application, Gentile noted, could be the treatment of nuclear waste at U.S. Department of Energy facilities such as the Hanford Site in Washington State, where estimated cleanup costs run in the hundreds of billions of dollars.

Physicists Erik Gilson and Nat Fisch discussed the Advanced Centrifuge and Plasma Mass Filter, respectively. Gilson said the centrifuge grew from a PPPL program to explore the physics behind accretion discs, the accumulations of matter that swirl around and ultimately spiral into stars and black holes. This centrifuge does not revolve as a single unit, as standard centrifuges do. Instead, the inner cylinder rotates independently of the outer cylinder, creating a powerful fluid flow that could deliver faster, more efficient and more economical separation of materials.

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“Dumpster Dive” finds cafeteria patrons shine at recycling & composting

PPPL’ers who eat in offices aren’t recycling and composting enough

By Jeanne Jackson DeVoe

When a few brave volunteers did a “dumpster dive” on Oct. 7 and combed through PPPL trash to see how well PPPLers are doing, they found that while PPPLers are doing well separating composting and recycling in the cafeteria, they have a long way to go when it comes to separating items in the bins outside their offices.

Volunteers Leanna Meyer, Dana Eckstein and Mark Hughes were fully garbed in white haz-mat suits when they took on the dirty job of separating the office trash and what they found was an eye-opener. Pizza crusts, vegetable platters, tissues, napkins and paper cups were all winding up in the trash instead of composting. The office garbage also had plenty of paper, cardboard, and bottles, which should be recycled.

“Look at that,” said Buildings and Grounds Supervisor Margaret Kevin-King, who was supervising the annual survey. “Everyone takes food to their office and they don’t recycle or compost. Some people do – but not everyone.”

When Kevin-King and her staff combed through the cafeteria trash early in the morning, they found people were pretty good about separating items. In most of the containers, there were no recyclables or compostables in the trash, although one trash container had 15 percent recyclables.

The folks in the Theory/Administration wing also fared well in the survey. They had no trash in the compost bin in one spot, just 7 percent in another and only 1 percent recyclables and compost in the trash.

However, PPPLers in the LSB building did not fare as well. Trash collected from bins in office halls found there was a whopping 57 percent of recyclables and compostable items in the trash: that amounted to more than 11 pounds of compost and 3 pounds of recyclables.



Volunteers (from left to right) Leanna Meyer, Dana Eckstein and Mark Hughes prepare to sort trash during a survey of PPPL trash cans on Oct. 7.

The maintenance staff had similarly poor results from rest room and office trash, where a whopping 68 percent of trash was made up of recyclables and compost, with 4 pounds of compost and 4 pounds of recyclables found in the trash. Trash bins also had miscellaneous items such as CDs and floppy discs, wires, cords, screws and metal. Kevin-King said maintenance staff even found a fork in the recycled paper towel bin.

Each office hallway has labeled bins for recycling (bottles, paper, cardboard etc.) and compostables (food, paper towels, tissues, used paper cups, pizza boxes etc.). So, please think before you toss! 🗑️



The volunteers take a break from their grubby task. From left to right: Eckstein, Meyer and Hughes.



Grounds Supervisor Margaret Kevin-King, far left looks on as volunteers comb the trash. From left to right: Meyer, Hughes and Eckstein.

White's invitation to speak at the conference came about through her networking skills. On a recent business trip to Tampa, Fla., White had re-introduced herself to John Hale, the director of the U.S. Department of Energy's (DOE) Office of Small and Disadvantaged Business Utilization (OSDBU). This agency oversees the DOE's small business achievements. White said she gave Hale "my personal introduction into what we do in Princeton." A few days later, Hale phoned with the invitation to represent the DOE at the event featuring Rep. Payne, sponsored by Rutgers Business School in Newark. "I believe in relationships," White says. "That's what makes me so resourceful in my position."

A model for other programs

White's leading role at the conference also reflects her reputation as one of the go-to experts on buying from small businesses at national laboratories. She is known as a dynamo inside the Lab, where she has worked for 37 years. Outside the Lab, she has developed a reputation for running a stellar small business program that takes its mandate to work with small businesses seriously and has served as a model for other programs.

Under White's leadership, PPPL has received numerous awards for its small business program. White and PPPL received the Department of Energy's "M&O Small Business Special Recognition Award" at the DOE's Small Business Conference in 2011. Prior to that, PPPL received the U.S. Small Business Administration Award of Distinction in 1998 and 2005 for the program. In 1999, PPPL received the Dwight D. Eisenhower Award, the federal Small Business Agency's most prestigious honor. White was awarded Princeton University's President's Achievement Award for her work in 1999.

White's work has also been recently recognized by PPPL. She was recently promoted to the management position of supervising procurement specialist. She directly supervises some employees and provides training and mentoring to other staff members.

"She is the consummate professional," says Andrea Moten, associate HR director, who has been friends with White since Moten joined PPPL 16 years ago. "She is always very conscientious about the work and making the Lab look good. She is a team player."

Small business protégée plays key role in NSTX

White was the first to start a mentor protégé program as a pilot program with the DOE in which PPPL mentored Zenex Precision Products Corp, a small family-owned machine shop in Paterson, N.J. White and Larry Dudek, head of Fabrication and Operations, and quality assurance engineer Frank Malinowski toured the company's plant and advised the company how it could improve its quality control processes. They also recommended that the firm's management purchase a water jet cutter. White further advised the company about how to put in bids on federal requests for proposals.

When PPPL was designing a more powerful center stack as part of its \$94 million upgrade, it needed flexible connectors that would be flexible enough to absorb the expansion of the innermost conductors due to the extreme heat during experiments. Robert Wronski, Zenex's owner, suggested flexible copper bars and PPPL engineers agreed with his solution.

In the end, Zenex won a contract to produce 74 of them at \$5,000 each for the Lab. "It's a small business in Paterson but its owner Rob Wronski is pretty sharp on manufacturing methods so he's recommended methods to us and helped us on some things that have been difficult to fabricate," Dudek said.

Dudek credits White with discovering firms like Zenex that offer an ideal partnership between PPPL and other companies. "She's very good at finding suppliers, very aggressive at tracking down suppliers that meet our needs," said Dudek, who has worked with White for more than 20 years.

Other national laboratories have hired Zenex, including Oak Ridge and General Atomics and it recently got some work on ITER components, White said. Zenex was awarded the HUBZone Contractor of the Year in 2006 by the DOE Office of Small and Disadvantaged Business Utilization in Washington, D.C.

PPPL also mentored officials at A. Pomerantz & Co., a furniture business owned by a disabled veteran in the Philadelphia area. PPPL awarded a \$60,000 contract to the company in fiscal year 2013. The Lab no longer serves as the company's mentor but still does business with the company.

White points out that PPPL and other laboratories have to follow federal guidelines mandating that federal facilities buy a certain percentage of goods from small businesses. PPPL has an obligation to purchase products and services from small businesses as part of its contract with the DOE. PPPL has concrete goals to meet each fiscal year on what percentage of its purchases will be made from small businesses. That category includes disadvantaged businesses, women-owned businesses, veteran-owned businesses, businesses owned by disabled veterans and businesses in urban areas labeled HUB Zones by the federal government.

Exceeding annual goals

In fiscal year 2014, which ended Sept. 30, PPPL's goal was to make nearly 27 percent of its purchases from small businesses or about \$12 million in purchases. PPPL far exceeded that goal – making 40 percent of its purchases from small businesses and exceeding its goals in each category.

"If you look at our achievements, we have an extremely successful program," White said. "Princeton is one of the smallest laboratories with one of the smallest budgets. I just say we're the little engine that could and big things come in small packages."

Other national laboratories haven't always had the same success and many program leaders have called on White for advice on how to create a successful small business program. PPPL has long had best practices that have contributed to its success, she said. For example, White works in the Procurement Department so she gets to see all the purchasing requests from staff at various departments at PPPL. That gives her the opportunity to approach various staff members with ideas for small businesses that could provide the goods or services they're looking for.

White has also spent decades educating PPPLers about the advantages of buying from small businesses. "I have worked tirelessly to dispel the myth that when you do business with small businesses you pay more than you normally would – you pay a premium," White said. "You do not pay a premium and I've shown that." Small businesses that manufacture goods can often provide a better price than a business that acts as a go-between to sell goods, White said. And small businesses often offer more personal service. "Small businesses have better buying power," she said. "They're small and they care about Princeton."

Going to the top for the best deal

White has no trouble going to the top of the chain to speak to executives at small businesses if it means getting the best deal for PPPL. "I will talk to the president or the owner of the company in a heartbeat," she says. When one com-

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Filtration

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Fisch described the evolution of the Plasma Mass Filter from a project begun at a firm called the Archimedes Technology Group to the work being now done at the Laboratory. This filter would ionize nuclear waste to turn the material into plasma, and would rotate the plasma in a vacuum chamber. High- and low-level radioactive wastes would then be separately expelled through opposite ends of the chamber. Current work at the Lab focuses on separating argon and krypton, two non-radioactive gaseous elements, from one another.

Lew Meixler, head of the technology transfer office at PPPL, described spinoffs from Laboratory research ranging from the MINDS device that detects and identifies potential harmful nuclear materials, to a novel method for pasteurizing eggs and a fusion propulsion system for spacecraft. He went on to outline methods for partnering with PPPL. "We're open for business," Meixler said, "and have mechanisms for working with you." ☞



Fred Levinton, president of Nova Photonics, a PPPL subcontractor, shows video of plasma inside the plasma mass filter (PMF) to members of the American Filtration and Separations Society during a tour of the PMF laboratory.

White

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pany wanted an additional fee for something the company was shipping, for example, White called him up and asked, "Can I not pay you for that?" The executive agreed and PPPL avoided the fee.

In more than three decades at PPPL, White has also worked on areas outside of the procurement arena. She is currently a member of the Lab's emergency response team and has worked on committees examining issues in safety and diversity, among many others.

White may draw her energy from her free time, from her daily gym workouts that include 14-mile treadmill walks.

She has lived in Lawrenceville since she was in fifth grade. White has strong family ties and delights in visits from her daughter Kysha and Kysha's husband, Holden Pierre-Louis. They live in Potomac, Md., with their two children, Holden Jr., 9, and Cole, 5. White's grandsons

call her "Ma Mere." Last summer she took them to Paris. While showing them around one of her favorite places, she also was able to practice her attempts at fluent French.

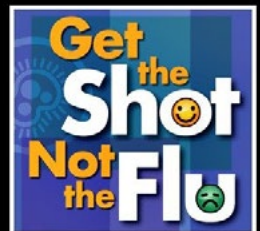
PPPL is "family"

Though she has worked at the Lab for years, White enjoys coming to work daily. "There's a reason I've been here 37 years," she says. "It's the people in the Laboratory. It's a family. It's definitely a family."

As for her speaking engagements, White's invitations continue to mount up. She is scheduled to once again represent the DOE at small business conference in Washington, D.C. later this month. And her work with small businesses never stops because she always is striving to "make something happen." "This is my philosophy," she said. "Keep your feet moving and make something happen." ☞

Make your flu vaccine appointment today!

Influenza is a contagious disease caused by a virus. It can be spread by coughing, sneezing or nasal secretions. By getting the flu vaccine, you can protect yourself from influenza and may also avoid spreading this illness to others. Please call the **OMO** at **x3200** to make an appointment.



Hotel Information for Visitors to PPPL

Individuals can use these links to make their reservations and obtain the PPPL negotiated rates. The negotiated rates and links below are valid for a hotel stay up to 12/20/2014.

PPPL negotiated hotels:

Crowne Plaza	\$124.00 per night
Residence Inn So. Brunswick	\$ 93.00 per night
Holiday Inn Express Plainsboro	\$118.00 per night
Sonesta Hotel	\$ 86.00 per night
Homewood Suites	\$124.00 per night
Holiday Inn Princeton	\$ 99.00 per night

PPPL Photo/Video Shoot Wed. Oct. 15 - 10:50 a.m. LSB Lobby



Fire Prevention Week at PPPL

PPPL celebrated Fire Prevention Week on Oct. 6 with fire prevention demonstrations and information. This year's theme was "Working Smoke Alarms Save Lives. Test Yours Every Month!" It focused on how working fire alarms can save lives.

More information is available at <http://www.nfpa.org/safety-information/fire-prevention-week>. 



Safety Engineer Julia Toth, right, puts out a fire as Galie looks on.



Antonio Morgado uses a fire hose to put out a fire in a "house" outside the LSB Building as ESU Officer Sean Galie looks on.



Toth tries out a large fire hose with some assistance from Galie.



Galie, left, watches as Chi Man Cheung practices his skills putting out a fire.



Officer Galie, far left, discusses fire safety outside the LSB building with, from left, Jerry Levine, Julia Toth, Mark Snyder, Garry Stevens, and John DeLooper.

COLLOQUIUM



Large Scale Superconducting Magnets for a Variety of Applications

JOSEPH MINERVINI

Massachusetts Institute of Technology

Wednesday, October 15

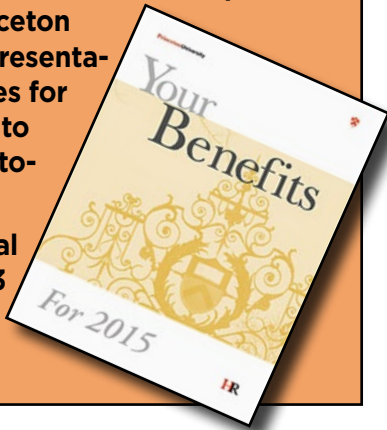
4:15 p.m. (Coffee/Tea at 4 p.m.)
M.B.G Auditorium, Lyman Spitzer Building

Open Enrollment begins Oct. 20

OPEN ENROLLMENT will begin on Monday, Oct. 20 and continue through Friday, Nov. 14.

Linda Nilsen, Executive Director of Compensation & Benefits for Princeton University, will give a presentation on benefits changes for 2015 on Oct. 20 from 1 to 2 p.m. in the MBG Auditorium.

PPPL will hold its annual Benefits Fair on Oct. 23 from 10 a.m. to 2 p.m. in the LSB Lobby.



SPD • TIP • OF • THE • WEEK •

Current Security Threat Information

Social engineering is one method cyber criminals might use to steal personal information and obtain remote access to your computer. Cyber criminals may even try to access your computer to secretly install malicious software giving them access to your passwords and personal information.

You may receive a suspicious telephone call here at the Laboratory and/or at home, from callers claiming to be from Microsoft Tech Support, Windows Helpdesk, and other legitimate-sounding IT organizations. They will try to convince you they have detected a cyber security issue with your computer, and that they can assist you with that issue. Do NOT provide the caller with any information.

Refer to the instructions below to help prevent this type of telephone scam:

- Take down the caller's information and immediately report it to the PPPL IT helpdesk at help-desk@pppl.gov.
- Never give control of your computer to a third party unless you can confirm that it is a legitimate representative of a computer support team with whom you are already a customer, and you have previously requested support from that company.
- Never provide your credit card or financial information to someone claiming to be from Microsoft tech support.

If you have been a victim of this scam and have not previously reported the encounter, please contact Jim Hirsch (jhirsch@pppl.gov) via email with details. Below is a link to a document published by Microsoft with information on how to recognize and respond to this telephone scam:

<http://www.microsoft.com/security/online-privacy/avoid-phone-scams.aspx>

BROCK Café Menu

BREAKFAST 7 a.m. • 10 a.m.
CONTINENTAL BREAKFAST 10 a.m. • 11:30 a.m.
LUNCH 11:30 a.m. • 1:30 p.m.
SNACK SERVICE until 2:30 p.m.

— MARK GAZO, *Chef Manager*

COMMAND PERFORMANCE
CHEF'S FEATURE

	MON. 13 SEPT.	TUE. 14 SEPT.	WED. 15 OCT.	THU. 16 OCT.	FRI. 17 OCT.
	Chicken-Fried Chicken Steak with Mashed Potatoes	Potato Cheese Pierogies with Sour Cream & Onions and Vegetable	Classic Chicken Cacciatore	Carved Pork with Herb Stuffing, Peach Cobbler and Vegetable	Open-Faced Sloppy Joe served with Mashed Potatoes & Vegetable
EARLY RISER	Fried Pancakes with Apple Compote and Powdered Sugar	Autumn Pear-Berry Baked Oatmeal	Chicken, Spinach, Mushroom, Cheese Omelet with Home Fries	Hash Brown, Bacon, Egg & Cheese Wrap	Breakfast Pizza
COUNTRY KETTLE	Cream of Cauliflower	Tomato Basil Bisque	Chicken Noodle Soup	Sweet Potato Peanut Bisque	Creamy Chicken Rice
GRILLE SPECIAL	The Works-Beef Cheesesteak with Peppers, Onions & more	Grilled Cheese with Ham & Tomato	Fish Cake Po' Boy Torpedo served with Hushpuppies	Cheesy Mexican Chicken Torpedo with Peppers & Onions	Portobello Parmesan Sandwich
DELI SPECIAL	Veggie Antipasto Wrap with Assorted Cheeses & Vegetables	Liverwurst & Onion on Rye with Mustard	New Orleans Muffuletta	Lemon Grilled Shrimp Salad Wrap	Breaded Chicken Cutlet with Lettuce, Tomato & Onion
PANINI	Salami, Ham, Provolone Cheese, Banana Peppers on Ciabatta Bread	Tuna, Swiss, Tomato & Bacon Wrap	Chicken Enchilada Burrito	Roasted Vegetables with Hummus & Provolone Cheese	Roast Beef, Caramelized Onion & Provolone Cheese Panini

MENU SUBJECT TO CHANGE WITHOUT NOTICE

VEGETARIAN OPTION

CLICK HERE FOR A PRINTABLE WEEKLY MENU

WEEKLY

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