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A Collaborative National Center for Fusion & Plasma Research



July 28, 2014

At PPPL

THIS WEEK

WEDNESDAY, JULY 30

Yoga Class (held weekly) Noon - 1 p.m. \$ LSB Commons Carolyn J. Cohen, Jaya Healing Arts

UPCOMING EVENTS

August 8

Annual PPPL Bluefishing Trip 5 p.m.

Belmar Marina

Aboard the 80' Suzie Girl



August 13

Poster Session for Summer Students

10 a.m. • LSB Lobby

Deputy DOE Secretary hails PPPL role in dealing with climate change

By John Greenwald

esearch at PPPL plays a key role in addressing the long-term challenge of climate change, Daniel Poneman, deputy secretary of the U.S. Department of Energy (DOE) told Laboratory staffers and graduate students last week.

"We have got to redouble our efforts on climate change," Poneman said during an all-hands meeting in the Melvin B. Gottlieb Auditorium. He cited the central importance of the Laboratory in dealing with the problem, calling PPPL "the cynosure of plasma physics and fusion expertise."

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Deputy Secretary of Energy Daniel Poneman addresses PPPL staff during an allhands meeting in the MBG Auditorium on July 17.

DOE's Dikeakos bids farewell, returns to BNL Snyder to serve in acting role

By Jeanne Jackson DeVoe

aria Dikeakos, the DOE Site Office Manager at PPPL for the past three years, is returning to her roots to take a position as the director of Operations Management at the Brookhaven National Laboratory (BNL) in New York. Dikeakos will leave PPPL on Aug. 8.

Dikeakos, who is originally from Brooklyn, worked in BNL's Site Office as chief operating officer and deputy manager for four years before arriving at PPPL in 2011.

Roger Snyder, the DOE Site Office Manager of the Pacific Northwest National Laboratory (PNNL) in Richland, Wash., will become the acting Site Office Manager at PPPL on Aug. 1 and will serve in that capacity until a permanent replacement is named.

PPPL Director Stewart Prager said Dikeakos worked hard to move various projects forward at the Laboratory. "Maria has worked tirelessly and scrupulously to make things happen at PPPL," he said. "She leaves a very positive legacy at the Lab."

Prager said Dikeakos interacted often with PPPL leaders in her role at the Site Office, which connects PPPL and DOE headquarters. The office, which has a staff of nine people, including the manager, "is a critical link to getting anything done," he said.

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Deputy Secretary

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DOE "is enormously proud of PPPL," Poneman said. "You're doing some of the most fascinating and challenging science in the world and the world looks to you."

Professional satisfaction, he added, "comes from working hard every day on challenging problems that matter."

Poneman, who has served as deputy secretary of energy since 2009 and plans to step down in the fall, cited what he called the two great "existential challenges" now facing the world. He described these as creating a world free from the threat of nuclear terrorism and nuclear weapons, and coping with climate change. Both challenges fall into DOE's bailiwick, he said.

President Obama addressed both issues shortly after taking office in 2009, Poneman recalled. The president first outlined steps to rid the world of nuclear weapons and then laid out three key thrusts for dealing with climate change. These include:

- Mitigating the impact of climate change that has not yet occurred.
- Dealing with the consequences of climate change that already are "baked into the system." Climate change has brought drought to the Southwest and caused nuclear plants to shut down because of extreme heat, Poneman said. Among the moves needed to deal with such consequences are construction of modern and more resilient electric grids, he said.
- Promoting worldwide cooperation in confronting climate change.

Turning to fusion and the U.S. role in ITER, Poneman noted that "to get to where we need to go in fusion is beyond the means and capacity of any one nation. It's a huge lift." He called the 9 percent U.S. contribution to the cost of ITER in return for access to 100 percent of ITER research a worthwhile investment. "But what sounds great in theory does not always work out in practice," he said. "When we read the ITER management assessment last year we saw a lot of problems."

Of particular concern has been the fact that the United States lacks the type of control over ITER that it has over the domestic fusion program, Poneman said. This creates challenges "in defending our contribution when we don't

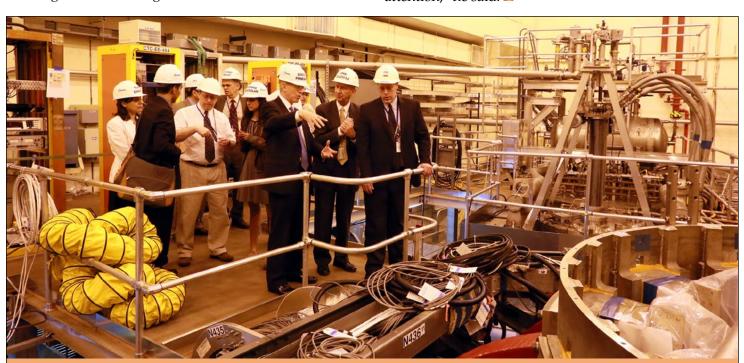


Poneman said PPPL is "doing some of the most fascinating and challenging science in the world" during his speech to PPPL staff.

control the outcome," and causes defense of the contribution to be "a very hard case to make."

Such issues have led Poneman to speak candidly with ITER's international partners about what it will take for the project to succeed. "We have made progress in terms of setting management on the right course," he said.

Responding to a question about how best to communicate fusion to the general public, Poneman advocated using social media and finding ways to make the subject widely accessible. He cited the animated television series "The Magic School Bus" as an appealing form of science education, and recommended stressing the potential of fusion to create limitless carbon-free energy. "That gets people's attention," he said. D



Poneman, front left, along with his staff members got a tour of the National Spherical Torus Experiment Upgrade (NSTX-U) from John DeLooper, head of Best Practices and Outreach, center, and Jon Menard, head of the NSTX-U Program, front right. Behind them are Poneman's staff members along with PPPL Site Office Manager Maria Dikeakos, left; David Gates, interim head of Advanced Projects, middle; and PPPL Director Stewart Prager, right.

DOE video on PPPL's Angie Capece aims to encourage girls in STEM fields

By Jeanne Jackson DeVoe

PPL associate research physicist Angie Capece urges young women to pursue their passion in science and technology fields in a short video interview on women in STEM fields on the U.S. Department of Energy website.

In the video, "WomenInSTEM: A Physicist Focuses on Scientific Advancement," Capece (pronounced "ka-peasee") discusses how much she enjoys her work. She researches material science and plasma surface interactions, specifically the use of lithium coatings on metal surfaces in support of the National Spherical Torus Experiment. "It's exciting because you get to play with things and see right in front of your eyes how things work," Capece says in the video.

The video was filmed in February when DOE videographer Matty Greene and Ben Dotson, the DOE's project coordinator for digital reform, came to PPPL to film the video, "Creating a Star on Earth," which was posted to the website in March and also featured Capece. She was also the subject of an article on the DOE website that was posted in March.

Inspired by Voyager

Capece recalls in the video how her interest in science began early in her childhood. "I was fascinated by the Voyager mission," she explains, referring to NASA's unmanned space missions into outer space. She went on to join the local Aviation Explorer Post in Allentown, Pa. The video shows a photo of Capece as a teenager poring over a map during a meeting of the group. (Capece provided a few photos of herself for the video)

The video also shows photos of Capece walking by NA-SA's Atlantis and another photo of her inside the space shuttle. The photos date back to her work as a college student at NASA's Kennedy Space Center in Florida. There, she worked on the solid rocket boosters and the thermal protection system for the space shuttle Orbiter. She also helped analyze a thermal tile from the space shuttle Columbia debris to determine the cause of failure. She went on to work as a graduate student at NASA's Jet Propulsion Laboratory in Pasadena, Calif. She came to PPPL in 2012

after receiving a PhD from the California Institute of Technology where she researched plasma-surface interactions in hollow cathodes for electric thrusters.

A role model

Capece says she is happy to serve as a role model in a video that en-



courages young women in the STEM fields. "I think it's great that the DOE is doing videos like this," she said. "You're showing someone that went through middle school and high school and college and has been through all these hurdles and is now at this laboratory working on this cool stuff. It shows that it's possible."

Capece's father helped foster her interest in science and technology from an early age by always encouraging her to figure out how to assemble furniture or fix things around the house. Capece said she would like to see more effort to discourage the kind of stereotyping in which parents offer girls dolls while encouraging boys to play with trucks. "It's subtle things that I think prevent women from going into science," she said.

In the video, Capece tells girls that the future of the U.S. depends on scientific advancement. She urges girls to take plenty of science classes in high school and then go on to find their passion in college, graduate school and especially in their careers. "Do something that interests you because ultimately you want to be motivated when you come to work every day," she tells young women. "And it's much easier to be motivated when it's something that you truly love and you're truly passionate about it."



Maria Dikeakos

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Campus plan highlights Dikeakos's tenure

During her tenure at PPPL, Dikeakos helped oversee efforts to create a stronger safety culture at PPPL. The Site Office also oversees PPPL's \$94 million upgrade of the National Spherical Torus Experiment (NSTX-U), Prager said. Most importantly, he said, Dikeakos was "a substantial driver" in working with the Lab's leadership on a sweeping 10-year campus plan to transform many of the Laboratory's buildings to create modern spaces for experiments, offices and meeting places and to upgrade the Laboratory's infrastructure.

A.J. Stewart Smith, Princeton University vice president for PPPL, also praised Dikeakos's efforts on the campus plan. "From the University's point of view we were very pleased with her effort and enthusiasm that made the campus plan a reality," he said.

PPPL's Director of Operations Adam Cohen said Dikeakos would be missed. "We're sad to see her go but we absolutely wish her well as she moves to her next position," he said.

A bittersweet departure

For her part, Dikeakos said leaving PPPL is bittersweet, especially since the campus plan is still being formulated. "I think we've made some changes and improvements that could be very good for the future of this Laboratory," she said. "There is a part of me that is sad about not being here to see those projects completed."

Dikeakos said the BNL position opened up when Robert Desmarais, the previous director of Operations Management, retired. Brookhaven National Laboratory has a staff of nearly 3,000 scientists, engineers and support staff and a Site Office staff of 26 people.

The new position is a good fit with her engineering and safety background, Dikeakos noted. She has a master's degree in environmental engineering from Stanford University as well as a master's degree in public health, occupational and environmental health from the Harvard School of Public Health.

"I'm very excited about getting back to New York and with Bob's retirement it was actually great timing to be

able to take on a position that is very suited to my background and in which I feel I can contribute a lot," she said.

Her husband, a strategic management consultant in information technology, will also be working in New York. Dikeakos said she and her husband are looking forward to being closer to Dikeakos's family, who live in Brooklyn, Queens and on Long Island.

Leaving Site Office in good hands

Dikeakos said the PPPL Site Office will be in good hands under the temporary leadership of Roger Snyder. Snyder has been working for the DOE since 1990 and has been Site Office manager at PNNL for three years. He was previously Deputy Manager for the DOE National Nuclear Security Administration's Los Alamos Site Office.

Cohen said he and Snyder have developed a good working relationship through their work together on DOE initiatives. He and Snyder were co-leads in the effort to develop the Lab Operations Board assessment criteria, which outlined the criteria for national laboratories to assess their facilities and was recently used by PPPL in its assessments. They are also working together on the DOE Infrastructure Strategic Plan effort. "I'm excited to welcome Roger to PPPL and look forward to working with him in his new capacity," Cohen said.



PPPL bids a fond farewell to retiring employees!



Sonja Patterson
Office Assistant,

Office Assistant, Human Resources *37 years*



Bruce Paul

Technician, Drafting *15 years*



Barbara Sarfaty

Administrator, Graduate Program in Plasma Physics, Academic Affairs 33 years



Site Protection Division • TIP•OF•THE•WEEK • STINGING INSECTS

There have been reports of active bees and hornets in several nests around the Laboratory.

Staff should take appropriate precautions when working outdoors. Nests and hives are typically found in trees, under roof eaves and sheltered areas around houses, or on equipment such as ladders. Avoid the nest area and notify ESU or Facilities to post or tape the area. Place work orders to address active nests or contact Margaret King at ext. 3652.

Individuals who exhibit signs of reacting to a sting, including itching and rash, should notify ESU as a precaution (ext. 2536 or ext. 3333 in case of emergency).

The Center for Disease Control provides the following preventative measures that outdoor workers should take to prevent insect stings:

- Wear light-colored, smooth-finished clothing.
- Avoid perfumed soaps, shampoos, and deodorants.
- Don't wear cologne or perfume.
- Wear clothing to cover as much of the body as possible.
- · Avoid flowering plants when possible.
- · Keep work areas clean.
- Remain calm and still if a single stinging insect is flying around - swatting at an insect may cause it to sting.
- If a bee comes inside your vehicle, stop the car slowly, and open all the windows.

For additional preventative and first aid measures, please see: http://www.cdc.gov/niosh/topics/insects/

http://www.state.nj.us/agriculture/divisions/pi/pdf/ AboutHoneyBee.pdf

BROCK LAPPE MEN

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**

COUNTRY KETTLE **GRILLE SPECIAL** DELI

EARLY RISER

SPECIAL PANINI



Creamy Chicken Fantasia with Bacon over **Fettuccine**

Steak, Egg & Cheese Quesadilla

Vegetable Bean

Patty Melt with Caramelized Onions and Swiss on Rye

Egg Salad Hoagie

Sausage, Peppers, Onions & Provolone Torpedo



Eggplant Parmesan served with Pasta

Bacon, Ham, Sausage, Egg & Cheese Torpedo

Chicken RIce

2 Hot Dogs with Pickle, Relish & Mustard served with Onion Rings

Fried Flounder with Tomato, Cheddar & Tartar Sauce Torpedo



Create Your Own **Beef Burrito served with Black Beans & Rice**

Turkey Bacon, Egg & Pepperjack Wrap

Vegetarian Lentil

California Turkey Cheeseburger with Fries

Jersey Submarine Sandwich with Classic Greek Tomato Salad

Turkey Club Wrap Griller



Chicken, Andouille Sausage & Shrimp Gumbo over Rice

Spinach, Mushroom, Onion, Tomato, Swiss Omelet, Home Fries

Beef Noodle

Chicken Tender Parmesan Hoagie with Fries

Fried Cod with Peppers, Onions & Cajun Mayo on a Kaiser Roll

Grilled Portobello Mushroom. Peppers & Goat Cheese Focaccia



Outdoor Cookout

PULLED PORK, HAMBURGERS, BEANS, CORN, MACARONI SALAD, WATERMELON & BEVERAGE

Steak, Egg & Cheese Bagel

Creamy Red Pepper

Fish & Chips

Santa Fe Chicken Salad

Roast Beef, Cheddar, Horseradish, Sweet Peppers on an Onion Roll

MENU SUBJECT TO CHANGE WITHOUT NOTICE

VEGETARIAN OPTION

CLICK HERE FOR A PRINTABLE WEEKLY MENU

COMMAND PERFORMANCE CHEF'S FEATURE

EARLY RISER COUNTRY KETTLE GRILLE SPECIAL

DELI SPECIAL

PANINI



Chicken Parmesan served with Pasta & Vegetable

Blueberry Pancakes served with Sausage

Split Pea with Ham

BBQ Bacon Supreme Burger

Focaccia Sandwich with Spring Greens, Mozzarella & Tomatoes

Turkey, Pepperoni, & Mozzarella Wrap Panini



Linguine with Broccoli, Garlic & Olive Oil

Strawberry Banana Pancakes with Whipped Cream

Mushroom Barley

Spicy Andouille Sausage Sandwich with Onion Rings

Salami & Swiss with Spicy Mustard Lettuce & Tomato

Open-Faced Seafood Salad Melt with Provolone & Cheddar



3 Cheese Lasagna with **Meat Sauce & Garlic Bread**

Egg White Omelet with Turkey, Broccoli & Cheese

Cream of Chicken

Corned Beef Reuben

risco Sweet Chipotle Chicken Stac with Peanutty Coleslaw

Crispy Buffalo Chicken Tender Wrap



Empire Roast Beef, Tomato, Vegetable Salad & Horseradish Dressing

Bacon & Egg Lasagna

Tomato with Spinach & Lentil

Turkey Bacon & 3 Cheese Quesadilla

Tuna Salad Club Sandwich with Hard-Cooked Egg

Eggplant Parmesan Torpedo



Sliced Turkey Breast with **Buttered Rice, Vegetable** & Gravy

2 eggs any style, Pancakes, Choice of Meat & Homefries

Beef Chili

Homemade Bean & Nut Burger on a Whole Wheat Roll

Chicken Caesar Wrap

Ham, Turkey, Provolone & Chipotle Mayo

MENU SUBJECT TO CHANGE WITHOUT NOTICE



VEGETARIAN OPTION

CLICK HERE FOR A PRINTABLE WEEKLY MENU



Editor: Jeanne Jackson DeVoe Layout and graphic design: Gregory J. Czechowicz Photography: Elle Starkman Webmaster: Chris Cane

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