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HOTLINE

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

American Physical Society Elects Kaita and Pomphrey as Fellows

PPPL physicists Robert Kaita and Neil Pomphrey have been elected Fellows of the American Physical Society (APS). Kaita and Pomphrey received the lifetime appointments in recognition of their contributions to the field of plasma physics. APS officials announced the Fellows during the society's Division of Plasma Physics annual meeting, held in Albuquerque in October. The APS rules limit the maximum number of Fellows selected each year to be no more than half of one percent of the Division membership. Kaita and Pomphrey are Principal Research Physicsts at PPPL.

Kaita was honored for his research concerning the fundamentals of heating plasmas to the temperatures required for fusion. Kaita has been involved in many projects at PPPL since joining the Lab as a post-doctoral fellow in 1978. Presently, he is co-principal investigator of the Current Drive Experiment-Upgrade and the head of Diagnostic Operations for the National Spherical Torus Experiment.

PPPL Director Rob Goldston said, "Dr. Kaita is a master of the measurement. No one sees more deeply and more insightfully into a 500-million-degree plasma than Bob Kaita. His contributions to understanding energetic particles in plasmas have been at the forefront of our research."

Kaita received a bachelor of science degree with departmental honors in physics from the State University of New York at Stony Brook in 1973 and a Ph.D. in nuclear physics from Rutgers University in 1978. Kaita is the author or co-author of nearly 300 publications in nuclear and plasma physics and has been invited to give lectures at institutions in China, England, France, Germany, Japan, Russia, South Korea, Switzerland, and the U.S. He is a member of the American Association for the Advancement of Science and is the secretary and past president of the Princeton Chapter of Sigma Xi, the Scientific Research Society.

Pomphrey was cited for his pioneering theoretical and computational investigations of fusion plasmas interacting with magnetic fields and circuits. Pomphrey's work serves as a foundation for predictions of plasma performance in magnetic fusion energy devices such as stellarators.

Robert Kaita

Neil Pomphrey

"Dr. Pomphrey's computational investigations of physical science issues are unsurpassed. His contributions to the complex three-dimensional design of the new National Compact Stellarator Experiment have been critical to its success," said Goldston. The National Compact Stellarator Experiment is planned as the centerpiece of the U.S. effort to develop the physics and determine the attractiveness of the compact stellarator as the basis for a fusion power reactor. It is being designed and is scheduled to operate beginning in 2007 at PPPL, in partnership with Oak Ridge National Laboratory.

Pomphrey received a bachelor of science degree in chemical physics from Edinburgh University in Scotland and a Ph.D. in physics from Stirling University in Scotland. He completed post doctoral research at Queen Mary College in London and at the University of California at Berkeley before joining the staff of the La Jolla Institute in California in 1980. Three years later, he came to PPPL. He is the author or co-author of more than 100 papers published in journals and conference proceedings.

Congratulations, Bob and Neil! ●

PPPL Celebrates Sixth America Recycles Day

To provide an uplifting update to rejuvenate, reactivate, and reinforce PPPL's recycling efforts, the Lab held its Sixth Annual America Recycles Day event on November 13. PPPL's John Bennevich, Margaret Kevin-King, and T.J. McGeachen "starred" in a program about PPPL's recycling efforts. Following the skit, held in the MBG Auditorium, PPPL Director Rob Goldston presented the 2003 Green Machine awards. Also as part of America Recycles Day, Executive Business Products displayed office materials with recycle content in the Lobby. At bottom left are the 2003 Green Machine award recipients. Clockwise, from bottom left, are Sandy Schmidt, John Bennevich, Greg Czechowicz, and John Semler. In the middle is Joanne Savino. Not pictured is Sly Vinson. The awards honor individuals at the Lab for recycling and buying recycled products. The top two photos are of the skit. At left, from left, are Joanne Bianco and T.J. McGeachen as Chef Cycle, and at right, from left, are Margaret Kevin-King as Chef Re and John Bennevich as the special dumpster diver. At bottom right is the Executive Business Products display. Facing the display are PPPL'ers Jerry Siminoff (left) and Spence Holcombe.

Hotline

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The Plasma Hutch Opens December 1

Biewer Wins Store Naming Contest

PPPL store committee members congratulate "Name That Store" contest winner Ted Biewer for his winning entry, "The Plasma Hutch." From left are committee members James Morgan, Patti Wieser, Susan Murphy-LaMarche, and Bobbie Forcier (not pictured is Jackie Robinson Pursell) with Biewer.

PPPL goods will be available for staff to purchase beginning Monday, December 1. The Grand Opening of the new PPPL store, "The Plasma Hutch," is scheduled then from 11 a.m. to 1 p.m. Items for sale — all emblazoned with the PPPL logo — include T-shirts, golf shirts, clocks, pens, hats, mugs, and other "stuff." The hutch is on the first floor of the Lyman Spitzer Building around the corner from the history wall.

Recently, the store committee held a contest for naming the merchandise mart. "The Plasma Hutch" was selected from more than 40 entries. PPPL's Ted Biewer came up with the winning entry, tying the name to the Lab's origins. Fusion research began on the Forrestal Campus in the early 1950s as a classified project known as "Project Matterhorn." The project began in a metal building, which had earlier served the Rockefeller Institute for Medical Research as a rabbit hutch. Biewer will receive a $20 gift certificate to the store.

The hutch is expected to be open during the lunch hour on Fridays, and staffed by PPPL's Sonja Patterson and Lena Scimeca. So stock up before the holidays! ●

Special thanks to Steve Iverson for his guidance in getting the store off the ground.

PPPL's Mueller Awarded by Alma Mater

Dennis Mueller

In October, PPPL physicist Dennis Mueller received the MacMurray College "Distinguished Career Award 2003" from the college's Alumni Association. The awards ceremony was held at MacMurray in Jacksonville, Ill. The award recognizes Mueller for the impact he has made scientifically, academically, and professionally since he received a bachelor's degree in physics from MacMurray in 1968. The citation on the award, written by his classmate, Richard Firebaugh, said, "You have used and nurtured the talents that you brought to MacMurray and applied them effectively throughout your professional career. You made an impact on the College while you were here, and continue to make a profound impact scientifically, academically, and professionally... we are here today to recognize you for a most distinguished career."

Mueller, who came to PPPL in 1978, received a Ph.D. in physics from Michigan State in 1976. ●

IT Works!

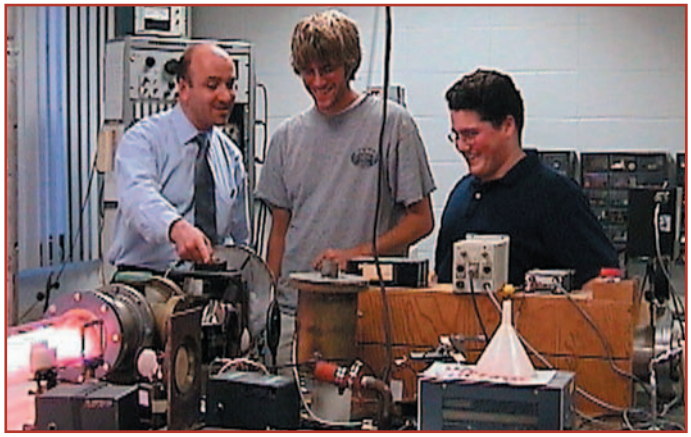
Welcome to IT Works!, a periodic column in ***Hotline*** with updates about what's new in the Information Technology (IT) arena, as well as IT tips from the PPPL Computing Division.

What's new: Because of the increase in e-mail spam, PPPL Computer Division staff have implemented a SPAM flagging system. The Lab's central e-mail servers now use a program called SpamAssassin **(http://www.spamassassin.org/)** to identify possible spam. To take advantage of this system, a user must configure his or her e-mail client (such as eudora) to recognize the Spam flag and divert spam to a "junk" folder. Instructions for using the new system and for configuring the e-mail client are on the web at: **http://www-local.pppl.gov/spam/**. For help with SpamAssassin, please contact the Helpdesk by sending an e-mail to helpdesk@pppl.gov or calling 609-243-2275. Don't bypass this opportunity to eliminate an annoyance and increase productivity.

Another quick reference source for information about computing at PPPL is the Computer Division's home page, which can be linked to from the Employee Services home page, or accessed directly at **http://csd.pppl.gov/.** ●

Let's Talk Fusion

PPPL'ers Bring Plasma Physics to the Next Generation through Outreach Programs



Above left, PPPL physicist Raffi Nazikian (far left) talks to University of Wisconsin-La Crosse students about their research using a gas discharge device. At right, Nazikian delivers a lecture.

As an American Physical Society Distinguished Lecturer, PPPL's Raffi Nazikian discussed the scientific frontiers of fusion energy and met with students and faculty at the Universityof Wisconsin-La Crosse in October.

His one-day visit to the campus included giving a talk to 65 physics students and faculty, discussing the undergraduate curriculum with the dean of the science school and chancellor of the university, and meeting with undergraduate students to hear about their research projects, which included high-precision spectroscopy using far infrared lasers and nuclear magnetic resonance in medical applications.

"I greatly enjoyed the experience. It is always a pleasure to kindle the wonder and joy of science in young people, and to remind oneself of the importance of our great mission." said Nazikian.

The APS Distinguished Lecturer program is designed to disseminate information in leading areas of research to colleges around the United States. ●

Educator of the Year

PPPL's Alex Nagy, coordinator of the Scientist-in-the-Classroom Program at General Atomics (GA) in San Diego, recently was recognized for his education outreach efforts in San Diego County. The San Diego Science Education Association recently presented Nagy with a "Community Science Educator of the Year" award for 2003.

The association specifically honored Nagy, who is on long-term assignment at GA, for his high-quality presentations on plasma science to students in classrooms throughout San Diego County. Through GA's seven-year-old program, scientists visit a classroom for a day to discuss plasma and do hands-on science demonstrations using plasmas. The education association honors several teachers and two community teachers (those from industry working with students) each year for their outstanding efforts in stimulating science learning growth.

Congratulations, Alex! ●

San Diego Science Education Association board member Tanya McMartin presents PPPL's Alex Nagy with the Community Science Educator of the Year award.