

PPPL Security, Emergency Preparedness Head Appointed

John T. Bavlish was recently appointed Head of the Security and Emergency Preparedness Division at PPPL. According to Steve Iverson, Head of the Offices of Human Resources and Administration, "John was chosen because of his extensive experience in the fields of security, emergency preparedness, and site protection, both in the commercial nuclear industry and in the United States Department of Energy (DOE) contractor system. We're pleased to have him on board."

In his new position, Bavlish is responsible for the areas of Security, Fire Protection, and Emergency Preparedness. Said Bavlish, "My emphasis will be on a professional approach to providing high quality service in all three areas and on enhancing an already well-managed program."

Before coming to PPPL, Bavlish was a Senior Consultant for the Security and Emergency Preparedness Consulting Division of Ogden Environmental and Energy Services, located in Fairfax, Virginia. As a consultant, he served as project manager in the areas of security program analysis, root cause analysis, and problem identification and resolution.

In addition, Bavlish has worked on site for various nuclear reactor programs, for DOE facilities such as Rocky Flats and Savannah River, and for the Federal Emergency Management Agency. Projects included nuclear background investigation programs, acoustical soundings for siren systems, and development of emergency action programs for large

complexes such as O'Hare International Airport.

Prior to his Ogden assignment, Bavlish served as Site Protection Manager for New Jersey Public Service Electric and Gas Company. There he was responsible for nuclear security programs, internal security, law enforcement, fire protection, safety, and emergency response programs. Previous to that he worked at General Public Utilities Nuclear Corporation where he developed long-term policies and programs to protect public health and safety.

Bavlish, who currently lives in Ocean City, New Jersey, will be relocating to the Princeton area with his wife Lois in the near future. Their two children, Jay and Janel, are recent college graduates. ♦



Photo: Dietmar Krause

John T. Bavlish, recently appointed Head of the Security and Emergency Preparedness Division

PPPL Assists Plainsboro Police with CAMEO Safety Software

The Plainsboro Township Police Department now has a new software tool to assist emergency planners in mapping the location of potentially hazardous chemicals at Township industries, according to Peter Del Gandio, who coordinated the computer training. Thanks to a week-long training course in CAMEO (Computer Aided Management of Emergency Operations), offered by PPPL, two members of the Police Department have been trained in the use of the software. The two are Patrolman Michael Kelly, who is Assistant Emergency Management Coordinator and Radiological Offi-

cer for the Township and Data Base Manager Cathy Lamkin.

Said Chief Clifford J. Maurer, Director of Public Safety for the Police Department, "The use of CAMEO software by the Police, the Fire Company, the Rescue Squad, and Emergency Management operations will prove invaluable in delivering more effective, efficient services to the community. The provision of the training by PPPL is another exemplary instance of the cooperative effort between the corporations (private sector) and government in Plainsboro Township."

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Cameo

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The Department of Energy (DOE) Tiger Team cited PPPL's use CAMEO as a "Noteworthy Practice" in 1991 (see the June 4, 1991 issue of the **HOTLINE**).

According to Del Gandio, who spearheaded the use of CAMEO at PPPL, "Typically, when a sudden emergency occurs, you don't have time to look up relevant information, even if it's available. CAMEO allows you to retrieve crucial information in *seconds*. For example, you can call up a list of all the chemicals stored in a certain location along with their Material Safety Data Sheet (MSDS) information, including potential hazards and remedies."

Says Kelly, "For Plainsboro Township, we're particularly concerned about having complete information from companies who have what's known as a threshold amount (a potentially threatening amount) of any hazardous chemical on site.

Continues Kelly, "Our first priority is to use CAMEO to develop



Photo: Dietmar Krause

Two staff members of the Plainsboro Township Police Department have been trained in a safety-software program called CAMEO thanks to a class held at PPPL. Pictured, left to right, are Chief Clifford Maurer, Director of Public Safety for the Plainsboro Township Police Department, PPPL's Peter Del Gandio, who coordinated the training, and the two employees who recieved training—Police Department Data Base Manager Cathy Lamkin and Patrolman Michael Kelly, Assistant Emergency Management Coordinator and Radiological Officer for the Township.

floor plans of these sites that will pinpoint not only the location, but also the kinds of chemicals and types of containers being used. Eventually we hope to have such informa-

tion for all relevant businesses in the Township." Adds Kelly, "Our data base will include possible crisis scenarios—for example, how to react to an emergency such as a spill." ♦

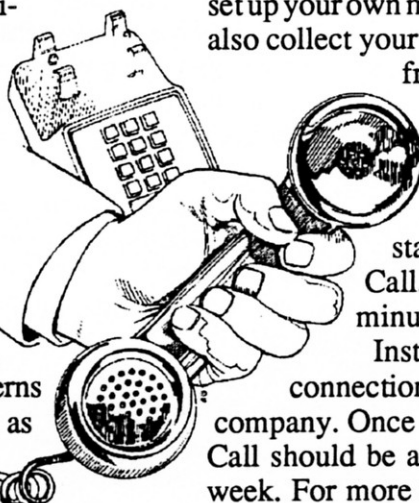
Stay Organized with Answer Call

By Molly Tompkins

In these days of deadlines, operational readiness reviews, and summer vacations, you may be in need of a little help to stay on top of things! The Telecommunications Office suggests a voice mail system called "Answer Call."

Answer Call is a computer driven voice mail system that New Jersey Bell offers for Centrex users. Answer Call provides all the convenience and services of an answering machine *but without the machine*. Therefore, with Answer Call, you are freed of the concerns of machine breakdown and power outages, as well as the extra clutter on your desk.

Answer Call allows you to program in your own password, record your own greeting, and



set up your own mailbox options. In addition, you may also collect your messages and change your greeting from a remote location—at home or on the road.

Other options are also available and will be discussed with you by a member of the Telecommunications staff should you decide on Answer Call. The cost is \$6.00 per month for 45 minutes of messages.

Installation requires no technician, since connection is made directly from the phone company. Once the request has been made, Answer Call should be available for your use in less than a week. For more information or installation, call the Telecommunications Office at 2694. ♦

Double Degree Graduate Dorland Wins DOE Post-Doc Award

William D. Dorland will graduate this summer with the unique distinction of simultaneously earning both his Ph.D. in Astrophysical Sciences (Plasma Physics) and his Masters in Public Affairs (MPA) from Princeton.

In addition, he has the honor of receiving an appointment in the Department of Energy (DOE) Fusion Energy Postdoctoral Research Program. Through the one-year award, Dorland will pursue research at the Institute for Fusion Studies at the University of Texas at Austin. A panel of physicists chose two award winners from among 21 candidates based on academic excellence and scientific achievement.

Through Dorland's Ph.D. thesis, titled "Gyrofluid Models of Plasma Turbulence," he has attempted to understand and predict thermal transport properties of fusion plasmas. Put simply, the research is directed at developing computer simulations of how much and how fast heat flows out of plasmas.

Said Dorland, "The novel part of this research is the approach we take—using economical fluid equations rather than more comprehensive, but more complicated, kinetic equations."

Greg Hammett, Dorland's thesis advisor said, "Bill showed great discipline and organizational skills in working on two degrees at once. Of course most of his time was spent on his plasma physics Ph.D. research, where he made fundamental insights into the role of the gyrating particle orbits on plasma turbulence. Bill brings a lot of enthusiasm to his research, and it has been fun working with him."

Regarding his appointment to the Institute for Fusion Studies, Dorland commented, "Many other physicists there are pursuing similar research, so I look forward to learning a great deal."

Woodrow Wilson MPA

In addition to his Ph.D. in Astrophysical Sciences, Dorland is the only Departmental graduate ever to receive simultaneously a Masters in Public Affairs (MPA) from Princeton's Woodrow Wilson School—one of the most selective schools for public policy in the country.

Professor Thomas Stix, past Director of Graduate Studies, commented, "Bill was intensely interested in science policy even as an undergraduate at the University of Texas. He's a marvelously well-organized individual, and I was happy to support his dual course of study."

According to Dorland, "The MPA neatly complements my physics degree, because I concentrated in science policy, taking classes in energy studies, nuclear power, and weapons control."

"In addition, I worked for a summer at the State Department in Washington DC, in their Office of Nuclear Safety and Technology," continued Dorland. "My work there focused on preventing domestic technology from being subverted to military purposes. I also spent some time watching the ITER (International Thermonuclear Experimental Reactor) negotiations wind their way through the system, and my science policy background provided me with insight into that effort."

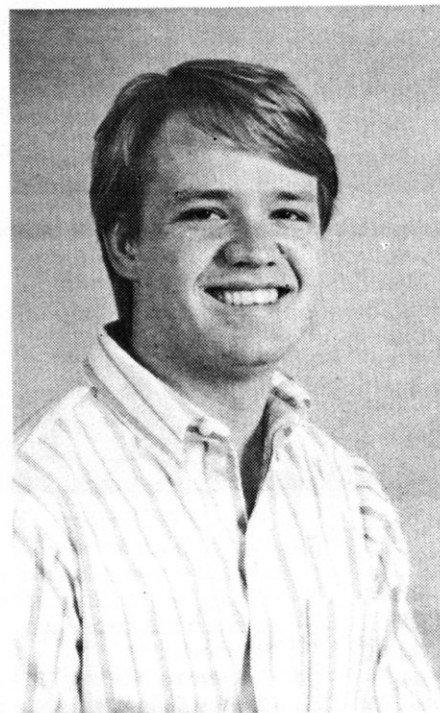


Photo: Dietmar Krause

William D. Dorland, soon-to-be Ph.D./MPA

On July 10, Dorland will marry Sarah Penniston. She is presently a science teacher at the Friends School in Mooresetown, New Jersey. They will then move to Austin where he will begin his postdoctoral work in the middle of August. ♦

HOTLINE

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| Reproduction: | Teri Daynorowicz Beverly Falkler |

The PPPL HOTLINE is issued by the Princeton University 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 or telephone 609-243-2754; Interoffice correspondence should be addressed to Room B366, LOB-Bldg, C-Site.

What's Happening at PPPL?



Photo: Dietmar Krause

The US ITER Home Team met at PPPL on May 18 and 19 to review activities and milestones for this year and to plan for the U.S. role in ITER (International Thermonuclear Experimental Reactor) next year. The meeting was attended by Home Team Managers and Task Area Leaders as well as DOE Office of Fusion Energy staff. (See list below.) Such meetings will continue to take place every three months at various sites around the country.

Attendee List:

Mohamed Abdou, UCLA*; Charles Baker, ORNL; Sam Berk, DOE; Curt Bolton, DOE; Sam Cohen, PPPL; James Doggett, LLNL; Charles Flanagan, ORNL; T.V. George, DOE; Don Grove, consultant; John Haines, MDA; Joseph Herndon, ORNL; M.J. Hitchler, WSRC; Robert Kratzke, DOE; Walter Lindquist, LLNL; James Luxon, GA; Warren Marton, DOE; Richard Mattas, ANL; David Morgan, MDA; Nelson Bradley, ORNL; William Nevins, LLNL; David Pettl, INEL; Douglass Post, PPPL; Robert Price, DOE; Robert Rocco, Ebasco; Arthur Rowcliffe, ORNL; David Swain, ORNL; Nermin Uckan, ORNL; Kenneth Wilson, SNL; and Kenneth Young, PPPL.

***Key:**

UCLA—University of California at Los Angeles; ORNL—Oak Ridge National Laboratory; DOE—Department of Energy (Office of Fusion Energy); PPPL—Princeton Plasma Physics Laboratory; LLNL—Lawrence Livermore National Laboratory; MDA—McDonnell Douglas Astronautics (Company); WSRC—Westinghouse Savannah River Company; GA—General Atomics; ANL—Argonne National Laboratory; INEL—Idaho National Engineering Laboratory; SNL—Sandia National Laboratories



Photo: Dietmar Krause

Ed Gilsenan of FED (right) congratulates Daniel Galatro, a cooperative education student in carpentry at PPPL, for winning first place in the State Olympic Competition of the Vocational Industrial Clubs of America this spring.

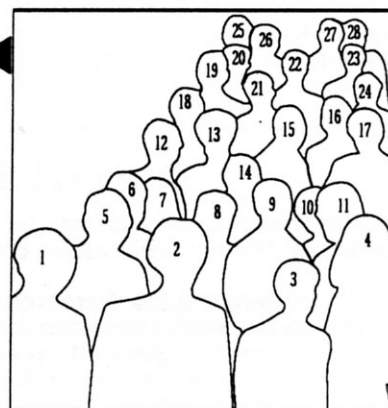


Photo: Dietmar Krause

Don Grove, who was with PPPL from 1982 to 1989 before retiring, has been named a Fellow of the American Association for the Advancement of Science. Grove is a Senior Consultant with Ebasco Services.

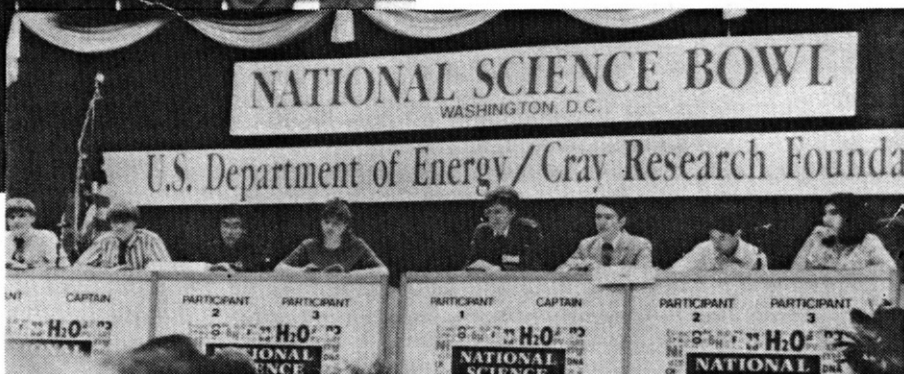


Inventors awarded for their creativity in FY92 were invited to the annual Patent Awards Dinner on May 18 at Princeton University's Prospect House. Pictured are: John Robinson (1), Charles Skinner (2), Ellen Donahue (3), Carrie Brown (4), Arnold Kritz (5), Larry Lagin (6), Martha Redi (7), Kenneth Wright (8), Peter Schwartz (9), Rhoda Stasiak (10), Forrest Jobes (11), Sam Cohen (12), Harold Furth (13), Harry Mynick (14), Larry Guttadora (15), Schweickhard VonGoeler (16), Nat Fisch (17), Lew Meixler (18), Charlie Ancher (19), James Stevens (20), John Schwarzmann (21), Joe Cecchi (22), Steve Scott (23), Manny Manickam (24), Michele Herzer (25), Shoichi Yoshikawa (26), Larry Johnson (27), and Darrell DiCicco (28). (For a full list of inventors and inventions, see March 19, 1993 HOTLINE.)



Left, Bill Davis of PPPL (center of photo), organizer of the New Jersey Regional Science Bowl Competition, is pictured with the regional winners, the East Brunswick team during their trip to compete in the DOE-sponsored National Science Bowl in Washington D.C. during April. Although they didn't win nationally, the team put up a good show and had a great time! Left to right are: Coach Paul Kimmel, Yi-Jun Wu, Joshua Scribner, Davis, Ephraim Tsalik, Duy Nguyen, and Zoltan Maliga.

Right, some of the competitors in the National Science Bowl Competition are shown in action.





Physicist Kevin McGuire addresses 36 Merck Science Teaching Fellows during a day-long fusion seminar held at PPPL on May 11. The program is a part of the New Jersey Department of Education Academy for Teaching and Management.

Science on Saturday Videos Available

A note of thanks to Denis Murphy, Jr., son of Sue Murphy of the Training Department, who videotaped the 1993 Science on Saturday presentations!

The videos, available through the Training Office, feature nuclear physics, neuropsychology, physics of sports, lasers, astrophysics, fusion, and space science. (See the May 26 issue of **HOTLINE** for a fuller description of all the programs.)❖



Science Education Summer Calendar

Summer means vacation to some, but summer is the busiest time for PPPL Science Education, with eight programs (listed below) underway. For more information, contact the Science Education Office at extension 2106.

Undergraduate Research Opportunities Eight to ten weeks between June 1 and August 28

Princeton University students and previous Summer Science Award Program participants work with PPPL scientists and engineers in such areas as data analysis, surface science, materials testing, applied physics, and engineering.

National Undergraduate Fellowship Program in Plasma Physics and Fusion Engineering June 14 to August 20

The Department of Energy sponsored National Undergraduate Fellowship Program offers outstanding undergraduates an opportunity to participate in fusion energy-related projects and research. During the first week (June 14 to 18) students take an introductory course in plasma physics at PPPL. Starting June 21, each student takes part in nine weeks of fusion research in areas including theoretical, computational and applied physics, materials science, and electrical and mechanical engineering at one of the 13 participating universities and national laboratories.

Historically Black Colleges and Universities (HBCU) Summer Fellowship Program—June 14 to August 13
Two students from Historically Black Colleges and Universities will participate in fusion research projects at PPPL this summer.

Teacher Research Associates Program—TRAC June 28 to August 20

Eleven high school teachers of science-related subjects were selected to work with PPPL scientists and engineers to provide them with hands-on experience doing scientific research in fusion-related areas. This year, there are six teachers from New Jersey, two from Pennsylvania, and one each from California, Oregon, and South Carolina. Seminars and discussion groups are conducted to assist TRAC teachers in developing strategies that use their research experience to enhance classroom teaching. Two follow-up workshops are conducted during the school year.

Summer Science Awards for High School Students June 30 to August 24

Fifteen outstanding high school juniors and seniors who intend to major in science-related areas in college work with PPPL scientists and engineers in such areas as data analysis, materials testing, applied physics, and engineering.

Summer Teachers' Leadership Institutes Grades 6 to 8—July 6 to 16 Grades K to 2—July 19 to 23 Grades 3 to 5—July 26 to 30

Teachers of sixth through eighth grade spend nine days in workshops and activities led by other teachers who have extensive experience in presenting science and mathematics topics in the classroom. Basic physics concepts are presented with emphasis on effectively teaching them to students. Teachers of younger students spend five days in workshops and activities based on the Great Explorations in Math and Science Program (GEMS) program developed by Lawrence Hall of Science at Berkeley.

National Geographic Society (NGS) Kids Network Institute—August 2 to 6

Twenty-six teachers of grades 3 to 7 learn how to use the NGS Kids Network Program, an innovative computer and telecommunications-based hands-on science curriculum in which student-scientists investigate new ideas and exchange information with students around the world. This year's topic will be "What's in Our Water."

Symposium on Fractals, Chaos, and Dynamics— A Hands On Experience—August 9 to 13

During parallel sessions held at the Woodrow Wilson School on Princeton's main campus, teachers of middle school, high school, and college increase both their content knowledge and their ability to teach concepts related to fractals, chaos, and dynamics. Graphing calculator experiments, and computer activities provide teachers with firsthand knowledge of the field. Sessions will be conducted by some of the world's leading researchers in the field.