

Diversification Efforts Gain Momentum

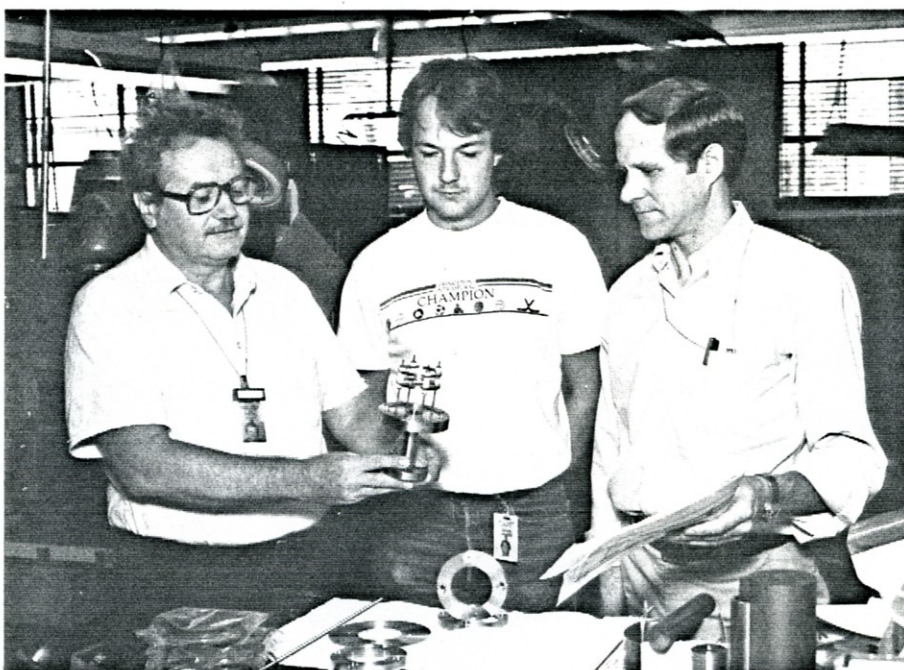
Two small, but significant, steps help PPPL strengthen its developing diversification program.

by Phyllis Rieger

A \$30,000 research grant and a \$20,000 purchase order are two small, but significant, steps PPPL has achieved, strengthening the linkage between the Lab and government agencies and industry in developing PPPL's diversification program.

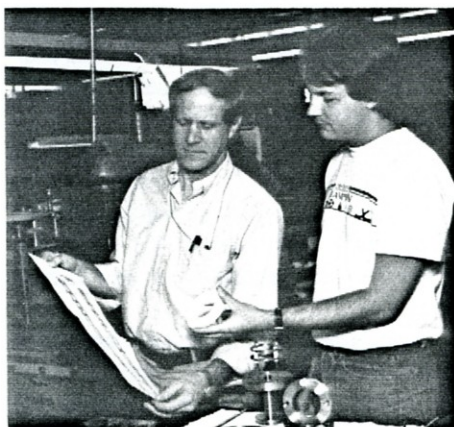
To broaden its program and funding base, the Lab has launched a number of proposed project initiatives. Essentially, this means the Lab is linking the interests and capabilities of the research and engineering staffs with the research and engineering programs of government agencies and industry.

According to Richard Rossi, who's coordinating the diversification efforts, PPPL received a \$30,000 grant from the National Institute of Standards and Technology, a branch of the U.S. Department of Commerce, and a \$20,000 purchase order from the Physics Department of Princeton University for engineering services. The



(Photo by Dietmar Krause)

PPPL machinist Nick Dereka (left) consults with Princeton University graduate student David Moore (center) and physicist Fred Dylla about machining an electron diffusion pressure gauge.



(Photo by Dietmar Krause)

Physicist Fred Dylla (left) with Princeton University graduate student David Moore looks over some of the materials to be used in devising an electron diffusion pressure gauge for vacuum calibration.

Physics Department project is expected to lead to an order for fabrication of a vacuum vessel with a total funding of as much as \$200,000.

Developing a Gauge

The \$30,000 grant is to continue experimental work developing an electron diffusion pressure gauge for vacuum calibration.

According to physicist Fred Dylla, who's leading the research, with Princeton University graduate student David Moore, "There's no universal standard to use for high vacuum measurements so it's difficult to obtain calibrated vacuum measurements. Using a pure electron plasma, we're working on developing a new type of pres-

sure gauge. This project has the possibility for developing a high vacuum pressure standard."

The research so intrigued David that it's now his thesis project. "Originally, it was only my theory project which we do in our second year, but the work was so fascinating I wanted to continue," he said.

Fred explained that he and David were studying a plasma configuration by Professor John Malmberg from the University of California at San Diego, and they noted information from his studies that proved useful to them.

According to Fred, recently the Project obtained a loan of \$10,000 worth of aluminum vacuum hardware, specially treated

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for ultrahigh vacuum studies, from the SMC Corporation in California. This will aid them in their research.

Vacuum Design & Budget

The \$20,000 purchase order is for the conceptual design and budget estimate of the fabrication of a vacuum vessel for a new scientific project to be sited at the Argonne National Laboratory in Illinois.

The order comes to PPPL's Mechanical Engineering Division via Dr. Frank Calaprice, Professor, in Princeton University's Physics Department. He and his colleague, Dr. Aksel Hallin, represent Princeton as one of five institutions collaborating on the proposed Atlas Positron Experiment, known as "APEX."

This large acceptance spectrometer would be used to study positrons and electrons produced in heavy ion collisions. Other participating institutions include: Florida State University, Michigan State University, Yale University and Argonne.

PPPL's Bob Walls is the engineer in charge of conducting the conceptual design and budget. According to Jack Joyce, Head of PPPL's Engineering Department, "This means PPPL will be in a strong position to get the vacuum vessel fabrication job. It's also a rejuvenation of efforts by the Engineering Department in the Lab's diversification endeavors."

PPPL's Technology Transfer Officer Joe File pointed out that the Lab has recently published a 19-page booklet which

outlines PPPL's engineering capabilities. Joe undertook a detailed analysis of the Engineering Department outlining its specific areas of expertise for the various engineering divisions including electrical, mechanical, engineering analysis, engineering computing and drafting.

"The booklet is disseminated to representatives from other laboratories and government agencies who are interested in PPPL's capabilities," Joe explained. "So far, I've handed out over 100."

Dick Rossi said, "Diversification efforts are picking up steam. We'll continue to print news of contracts, grants, etc. in HOTLINE on a periodic basis so that the staff is aware of new programs and activities." *

Recycling—PPPLers Make It Work



(Photo by John Peoples)

Recycling Right—Jerry Williams (left) and Wayne Robinson (right) recycle their office paper in one of PPPL's special containers.

by Phyllis Rieger

So far, so good. That's the feeling of Jerry Williams who's supervising PPPL's recycling program.

"Recycling's been in effect since July 17th," said Jerry. "We're pleased most staff do recycle. I've had a lot of calls about what should be and shouldn't be recycled, and the kinds of containers needed. That shows me people are interested. It is the law, but we try to make it easy for employees to comply."

According to Jerry, many questions concern the recycling containers which, due to manufacturer delays, have been inadequate in some areas of the Lab. As soon as the new containers become available, they'll be used. You can also use your own receptacles and these can be ordered from Philadelphia Stationers.

"It's important to label all containers," Jerry emphasized. "If you need labels, please contact me at extension 3595 or pager #059." The labels list which recyclables can be deposited into a container.

Jerry's been asked about foam plates and cups (they go into "garbage only" containers), plastic (we don't recycle this now but may in the future), and aluminum foil (goes into "garbage only"). Office paper recyclables shouldn't be crumpled and staples should be removed.

"Overall, recycling is working well at PPPL," said Jerry. "Most people make the effort and my staff and I appreciate it." *

JAERI Delegation Visits PPPL



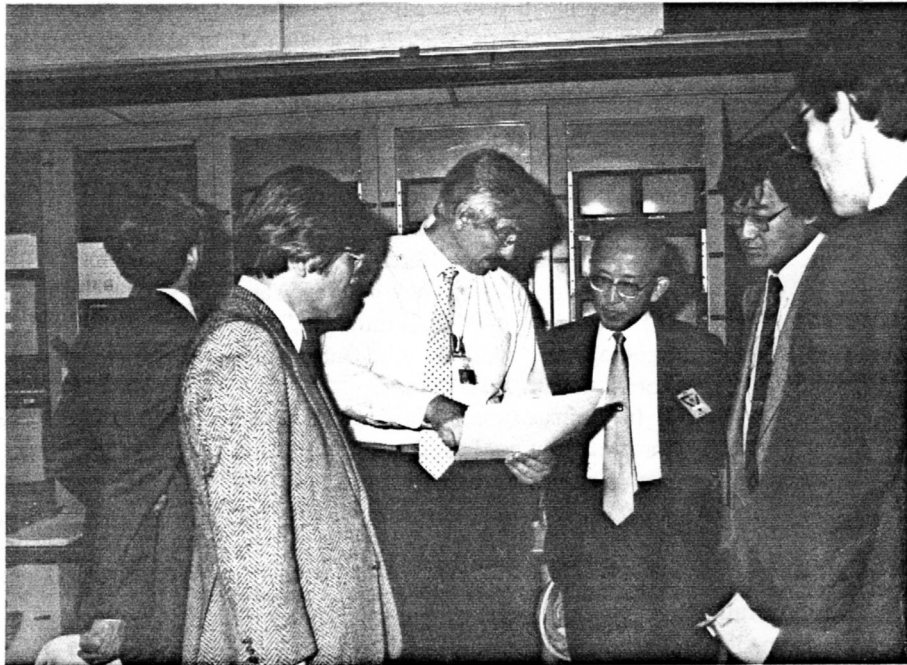
(Photo by John Peoples)

PPPL Director Harold Furth welcomes Yoshinori Ihara, President of the Japanese Atomic Energy Research Institute (JAERI), to the Laboratory on September 29.



(Photo by John Peoples)

JAERI President Ihara finds the Daruma in the lobby, a gift of the JT-60 (Japanese tokamak) group to TFTR, very interesting. With the Japanese delegation are PPPL's Assistant Director Rush Holt and TFTR Head Dale Meade.



(Photo by John Peoples)

TFTR Head Dale Meade introduces JAERI President Ihara and delegation to the TFTR Control Room.

Bleach Named Division Head

by Phyllis Rieger

Tony Bleach is the new Head of the Accounting and Financial Controls Division, replacing Wanda Mizutowicz who left to work for the Supercollider Project in Texas.

"In this position I'll be overseeing three sections: Accounts Payable, Payroll, and General Accounting with a total of 19 employees," explained Tony. "My Division has the responsibility for collecting all pertinent backup, the recording, processing and reporting of all Laboratory financial transactions in a timely manner and in accordance with Generally Accepted Accounting Principles and other applicable regulations.

"We also have the responsibility for coordinating audits and reconciling PPPL accounts with University records. Additionally, petty cash and travel arrangements come under our purview. My administrative staff also finds itself highly involved in special projects for the Controller's Office," Tony pointed out.

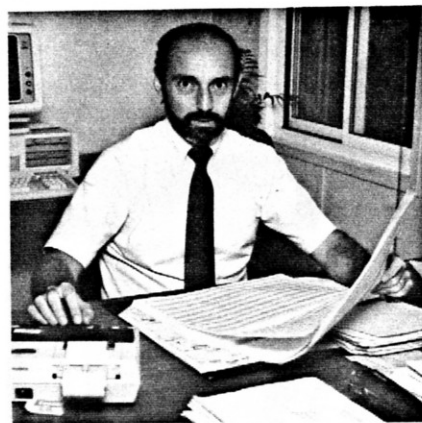
He began his career at PPPL in 1981 as a cost control analyst and had worked his way up to Manager of General Accounting before assuming his current position. Previously, he had worked in the accounting departments of Associated Lead Company in Philadelphia and Great Adventure.

He holds a B.S. Degree in Accounting from Suffolk University in Boston and an M.B.A. Degree from Monmouth College, N.J.

"I just passed the Certified Public Accountant exam and am applying for my New Jersey license," Tony said.

Originally from Lakewood, N.J., he now lives in East Windsor with his wife, Neile, who currently works in our Credit Union, and his son, Kristopher. "In my leisure time I enjoy running and spending time with my family," said Tony.

Other PPPL and/or University activities in which Tony is active include the Social Committee which is responsible for recommending to Council activities funded by the Morale Fund, the Supervi-



(Photo by John Peoples)

Tony Bleach, new Accounting and Financial Controls Division Head, oversees accounts payable, payroll, and general accounting.

sory Committee for the Credit Union, the PPPL Softball team, and the University Basketball League.

Tony said, "I'm enjoying the challenge of my new job and I feel fortunate to have such an experienced and supportive staff." *

Nurse Joins Medical Staff



(Photo by John Peoples)

Using her computer, Nurse Connie Riviera keeps her records updated.

by Phyllis Rieger

Connie Riviera, R.N., joins the PPPL Occupational Medicine Office as a full-time nurse. She transferred from the McCosh Health Center on Main Campus "where I worked as the night duty nurse at the infirmary since 1985, and handled a

number of responsibilities," she explained.

She graduated from Elizabeth General Hospital School of Nursing in Elizabeth, N.J. "I've been a nurse for 22 years," said Connie who's experienced at all kinds of nursing, including private duty and geriatrics. Her duties at PPPL include: physical assessment, surveillance, examinations, and emergency assistance.

"PPPL presents a different side of nursing. I was looking for a new challenge and I think working at PPPL is fulfilling," said Connie who's working with nurse Faith Robak and Dr. John Caruso.

In her spare time, she's working toward completion of her B.S. Degree in Nursing from Thomas Edison State College. She lives in Neshanic Station, N.J., with her teenage sons, Jeffrey and Eric. *

**Staff Day
is
October 21**

TRANSITIONS

The HOTLINE offers congratulations to the following employees:

Births

Eric Frederickson, TFTR Program Physics, and his wife, Laura, whose daughter, Rachel, was born August 22.

Anne Rosenwasser, TFTR Tokamak Operations, and her husband, Robert, whose daughter, Elizabeth Anne, was born September 29.

Retirements

John R. Clarke who retired October 1 after 14 years of service. John was a Section Head in the Electrical Engineering Division, Radio-Frequency Branch.

D. Eugene Colborn who retired October 1 after 12 years of service. Eugene was a Technical Assistant in the Engineering Department.

Thomas A. Goedert who retired October 1 after 10 years of service. Thomas was Supervisor, Process Spares in the Materiel Control Division.

Herbert F. Ogawa who retired October 1 after 13 years of service. Herbert was a Technical Assistant in Tokamak Operations.

S. Douglas Steacy who retired October 1 after 12 years of service. Douglas was a Computer Analyst in the Controller's Office. ✱



Friends and co-workers of Bob Smart gathered together recently to say good-bye and to wish him well in his new position as Director of Grounds and Buildings at Princeton University, main campus. Bob, who was PPPL Associate Head, Administration Department, and General Manager of Facilities for 11 years, expects to visit the Laboratory often in his new position, so be sure to say hello when you see him. Pictured with Bob is his wife, Betty. (Photo courtesy of Edna Kalmus, Plant Maintenance.)

Thank You

I wish to thank my friends and co-workers here at PPPL for the many kind thoughts and expressions of sympathy on the death of my mother and during my recent illness.

Carolyn Springer

News from TIAA-CREF

Teachers Insurance and Annuity Association-College Retirement Equities Fund (TIAA-CREF) announced today it will offer educational institutions and policyholders new investment funds and other options within the first quarter of 1990.

The announcement followed issuance of an order by the Securities and Exchange Commission approving an agreement reached last December between CREF and the major intervenors in CREF's request for certain relief under the Investment Company Act of 1940.

The agreement defined conditions under which CREF would offer policyholders opportunities to transfer pension accumulations to alternative funds or to receive cash on termination of employment, if approved by their employing institutions.

At the same time, CREF provides these flexibilities, it plans to introduce two new investment funds of its own to complement its current Stock and Money Market Funds. Introduction of all the new options remains subject to appropriate state regulatory approvals.

Dr. Clifton R. Wharton, Jr., TIAA-CREF chairman and chief executive officer, said the SEC action signaled major advances in the company's 71-year history.

"We now have the opportunity to offer institutions and policyholders new choices to consider for their retirement plans," Dr. Wharton said. "These choices will round out TIAA-CREF's full-service capabilities."

He said exact descriptions of the new CREF funds would be announced at a later date, but that both would give policyholders broader options to diversify their pension savings during the accumulation stage. Availability of the new CREF funds will be subject to employer approval.

Materials notifying employers of the details and the steps they must take to elect the options are being prepared and will be distributed at least 90 days prior to implementation. Employers will have the following elections to consider:

- Permit eligible employees to transfer current and future CREF accumulations to alternative investment vehicles approved by the employer.
- Permit eligible employees to receive up to 100% of their CREF accumulations in cash at termination of em-

ployment, if permitted by the employer.

- Permit former employees to transfer or cash out CREF funds accumulated while employed at the institution.
- Adopt either or both of the two new CREF investment options for employees.

While employers will be asked to make their elections on forms that will be supplied, John McCormack, TIAA-CREF executive vice president for pension and annuity services, emphasized they will not be foreclosed from changing their options at any time in the future.

Individual employees will be provided with a rider to their CREF certificates authorizing them to use the options elected by their employers. Full details describing the options will be provided at the same time.

McCormack also noted that the new options apply to CREF policyholders only. Additional flexibilities for TIAA policyholders are planned for introduction within two years. However, many individuals in TIAA also now participate in CREF. They also are eligible to direct future premiums to CREF accounts. ✱

Choosing the Right Fire Extinguisher

Several types of small fires can be contained and extinguished if the right fire extinguisher is used. Learn the four types of fires so that you'll know which extinguisher to use if you find yourself in a fire emergency.

Types of Fires

- Type A: Wood, paper, cloth, rubbish
- Type B: Flammable gas/liquids
- Type C: Electrical fires
- Type D: Combustible metals

Fire Extinguisher Codes

Fire extinguishers are coded by letter and label color to reflect the type of fire they can put out: Type A, green label; Type B, red label; Type C, blue label; and Type D, yellow label. Some multipurpose extinguishers can be used on more than one type of fire. ✱

Safety Sponsors Contest

Winning Slogans Posted at Entrance

"We're trying to get everyone involved in thinking about safety both at work and at home and to have a little fun too," said Head of Safety Training and Publications, Mary Ann McBride, as she described the Safety Slogan Contest being sponsored by the PPPL Safety Office. "Attending safety meetings and classes are already important parts of our Laboratory safety program, so we wanted to do something different, something that would be fun, wouldn't take up too much time, and that would tap into the creativeness here at PPPL," she continued.

The contest, which was first announced in the August **PPPL Safety Bulletin**, is open to all employees. Two slogans are chosen each month to be displayed on the safety sign at the entrance to the Laboratory — one for on-the-job safety and one for off-the-job safety. Winners receive five, one-dollar coupons redeemable at the C-Site cafeteria. Slogans must be sent to Mary Ann McBride, Safety Office Trailer D41-15, D-Site by the end of each month. Non-winning entries are carried forward to the next month's contest.

Mitch Dorum, Marshall Lewis, and Robert Vant were the winners for September and October. Mitch, who won both in September and October, likes to write slogans and firmly believes safety should be everyone's concern. He said, "Safety slogans are a definite help in our safety program, but they're not the bottom-line answer, individuals are."

Next time you enter or leave the Laboratory take a look at the winning slogans. Then, put on your thinking cap and create your own slogan. Most importantly, remember to make safety a part of your life — because you're worth it.

Safety Training

The Safety Office has scheduled the following safety training courses for November:

<u>Course</u>	<u>Date/Time/Location</u>
Confined-Space Entry	9 November, 10:00-11:30 a.m. Safety Conference Room Safety Trailer D41-16
Basic Electrical Safety	14 November, 8:30-10:30 a.m. Safety Training Trailer D41-5
ASC Training	15 November, 9:00-10:00 a.m. Theory Conference Room or 29 November, 3:00-4:00 p.m. Theory Conference Room
*Basic Safety (Special Sessions)	13 November 7:00 a.m. 1:30 p.m. 4:00 p.m. Safety Conference Room Safety Trailer D41-16

Employees must obtain permission from their immediate supervisor to attend these classes. Supervisors should call Mary Ann McBride at ext. 3468 to enroll their employees.

*Basic Safety is also offered every Monday at 1:30 p.m. Call Mary Ann McBride at ext. 3468 for location.



Staff Day 89 Set for October 21

Princeton University Staff Day is Saturday, October 21. Refreshments and luncheon will be served at Jadwin Gym beginning at 10:45 a.m. The football game starts at 1:00 p.m. in Palmer Stadium. Free parking is available to all cars with University stickers in all lots except 4, 15, and 21.

Admission is by ticket only. PPPL bi-weekly employees at C-Site can pick up their tickets at the Reception Desk in the LOB Lobby. Staff at 305 and 307 College Road can pick up their tickets at the Reception Desk in 307.