HOTLINE

PRINCETON PLASMA PHYSICS LABORATORY

Vol. 4, No. 3 August 23, 1982

IAEA Meeting Preview

The Department of Energy and PPL are co-hosting the Ninth International Conference on Plasma Physics and Controlled Nuclear Fusion Research, sponsored by the International Atomic Energy Agency (IAEA) and scheduled for September 1-8 in Baltimore, Maryland.

Widely acknowledged as one of the most prestigious fusion research meetings, the conference attracts scientists from around the nation and the world. Conferences are held every two years; the last U.S. - based session was held in Madison, Wisconsin in 1970. More than 50 PPL staff members will be attending the conference.

According to organizing committee member Dr. John Johnson, invited papers will be presented in a continuous plenary session throughout the conference. An optional discussion period will follow each paper, and informal sessions have been scheduled for further discussion of specific topics. Proceedings of the conference will be published at its conclusion.

Following the conference, PPL will hold an open house for conference participants Sept. 9. Tours of the facility have been scheduled throughout the day, and laboratory employees are asked to use the C-Site cafeteria only between 11 a.m. and 12:30 p.m. on that day.

The IAEA was established by the United Nations in 1957. Headquartered in Vienna, its goal is to promote the peaceful uses of atomic energy.

Now Available

"The First Princeton Tokamaks," written by former PPL assistant director Dr. Earl Tanner, is now available from Information Services. The book, which details the laboratory's history from 1970 through 1980, is the companion volume to Dr. Tanner's two other books, "The Model C Decade" and "Project Matterhorn."

Anyone interested in obtaining a copy of "The First Princeton Tokamaks" should contact Pat Stephens, Information Services at ext. 2750. Limited quantities of both "The Model C Decade" and "Project Matterhorn" are also available from Pat on a first come, first served basis.

Workers Compensation Reminder

Prompt submission of accident reports is an essential and necessary part of filing Workers' Compensation claims with our insurance carrier. Any questions or correspondence relating to a workers' compensation claim (or even a possible claim) should be directed to Mary Bersch, Personnel Office, Sayre Hall, ext. 2043.

Please do your part so we can do ours!

Bloodmobile

The Bloodmobile will again visit the laboratory on September 8 from 10 a.m. to 3 p.m. at the Sayre Hall auditorium. Those wishing to donate blood should contact Meg Gilbert at ext. 2036 to set up an appointment. Donors will be scheduled every 15 minutes, and refreshments will be served.

Although employees are covered for blood needs under a group plan, the university must meet its yearly quota of blood donations to continue to offer this benefit.

Patent Program

PPL now has a Patent Awareness Program, as well as a Committee on Inventions, to increase the patent awareness of laboratory staff. Six invention disclosures have been filed with the committee since April:

- Converging Collimated Fast Neutron Beams, By D. Jassby
- Tunable Energy Intense Fast Neutron Beams, By D. Jassby
- Use of He_3^{++} ICRF Minority Heating to Simulate Alpha Particle Heating, by D. Post, D. Hwang and J. Hovey
- Neutron Flux Control in Fusion Reactors by Variable Albedo, by D. Jassby and B. Micklich
- Optimized Fueling Method for Transient Tokamak Discharges, by C. Singer, D. Post and D. Heifetz
- E B Change Exchanger Analyzer, by S. Medley, R. Kaita and A. Roquemore

For further information about the committee or the program, contact committee secretary Nancy Jones on ext. 2659.

Faces and Places ...

Thomasina Abrams (foreground) and Sue Wilkinson

Job movement continued at PPL during June and July, as four employees received promotions and three obtained transfers.

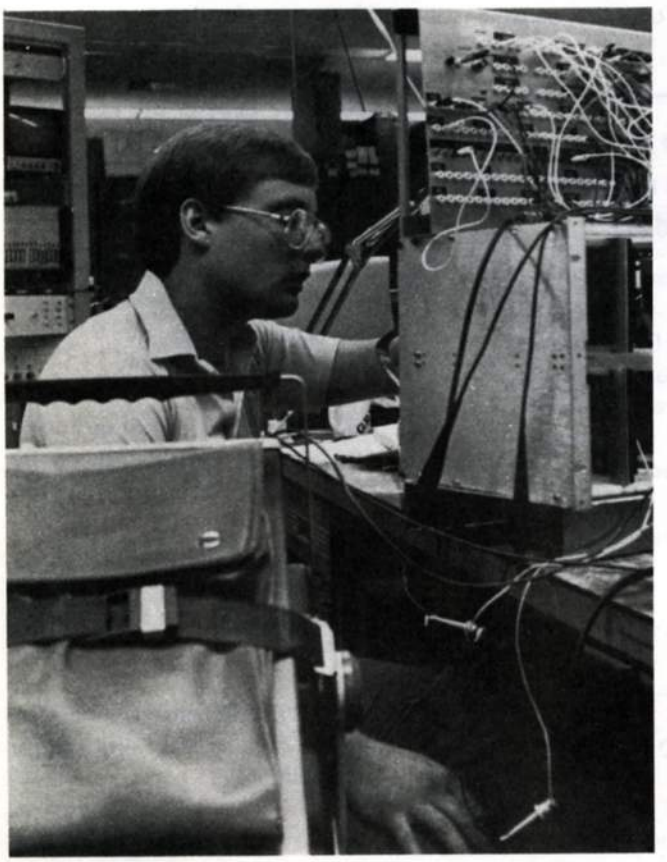
Among those promoted were Thomasina Abrams, now staff assistant with Purchasing; Eugene Hrycak, now DAS operator with M.I.S.; L. Sue Wilkinson, now data processing assistant in Procurement; and Gregory Lemunyan, now technician with Technical Electro-Optics, Engineering.

All three transfers took place in June. Carol Sherbert transferred from APDAD to administrator, TFTR Operations; Elsie Ferraras transferred from the Theoretical Division to staff assistant with TFTR/CICADA; and Ernst deHaas transferred from AC Power to the engineering and scientific staff of TFTR Operations.

Twelve new employees have joined the PPL ranks so far this summer. New faces in July included Jean Coutant, staff assistant, FOM Division office, David Miller, technician, Engineering (FOM Branch); Doris Thomas, technical secretary, Theoretical Division, George Peterson, technical assistant, Engineering Services, John Wertenbaker, technician, Computer Section; and Frank Polom, janitor, PM&O.

New to the lab in June were Gary Giblisco, technician, Experimental Division; J.L. Schwob, research visitor, Experimental Division; Stefan Weicberger, administrator, Administrative Division; Shawn McFadden, graphic artist, Administrative Division; and Carol Strohl, engineer, TFTR.

Congratulations to all!



Gregory Lemunyan

Eugene Hrycak

Cooling It

When the mercury climbs under the sun's burning rays, you may be burning extra energy dollars by inefficient use of available cooling power. As the summer continues to sizzle, keep the following cooling credos in mind:

- Use your air conditioner only when you really need it. In many cases, a window fan can provide all the cooling you need.

- Keep your cooling system cleaned and properly tuned. Filters should be changed or cleaned every other month or as often as necessary. Condensers, evaporator coils and fans should be cleaned before storing the unit at the beginning of the cooling season.

- When buying a new air conditioner, compare energy efficiency ratios (EER's). The higher the rating, the more efficient the unit -- and the less it costs to run.

- Place your air conditioner condenser on the north or shady side of the house, or in an area where it will be shaded by a tree or a fence. Avoid using bushes to shade the condenser, since they may block the flow of air around the cooling unit. When your house is completely shaded by trees, you can save 50 percent on your air conditioning bills.

- Keep your thermostat set at 78^{o} or higher; when outside temperatures drop below 78^{o}, turn your air conditioner off. Each degree you raise the thermostat above 75^{o} saves three percent in cooling costs. If you raise your thermostat and are extremely uncomfortable, you may need to weatherize your home. Hints on weatherizing and insulating are available from the Energy Library at the Transportation Office, C-Site.

Use natural ventilation and wear light clothing to minimize the need for air conditioning, expecially at night.

Keep draperies closed during hot, sunny days. Solar heat is great in the winter, but who needs it in August?

Turn off all lights not in use. Burning lights unnecessarily wastes electricity and forces your air conditioner to remove the heat produced by the lighting.

If you're using your oven, open the door to peek only when you must. Every time you open the oven door, you lose a great deal of heat. Not only are you using more energy to heat the oven back to the proper temperature, but you've also got to cool the hot air you've released into the room. Heat producing units (such as ovens, dryers, ect.) should be used during cooler hours of the day whenever possible.

Use bath and kitchen fans sparingly; they can blow away an entire houseful of cooled air in an hour.

Consider having an "energy audit" done on your home. They are available through most electric companies, and can provide suggestions for energy savings projects.

Fighting Fatigue

Many doctors now feel that fatigue has a psychological origin, rather than a purely physical cause. Frustration, tension and depression can team up to create feelings of exhaustion.

Several simple solutions can get your "get up and go" back again. They include:

- Thinking only positive thoughts when you wake up each morning.

- Doing simple breathing exercises. Deep breathing supplies fresh oxygen to the body, stimulating energy and relaxation.

- Eating a good breakfast. Skipping breakfast can lead to a mid-morning slump.

- Taking short exercise breaks during the day. Breaks as brief as three minutes each will give your mind a chance to shut off its stress cycle.

- Setting priorities for your tasks. Don't think about the entire job; take each piece one at a time.

- Avoiding drinks containing large amounts of caffeine, and eat sugars and carbohydrates sparingly. These substances can cause the blood sugar levels to drop, sapping your energy.

New Address ?

All changes of address or name are now being processed through the Employment Section of the PPL Personnel office. If you need the proper form, please call Glenda Fendrick at ext. 2039, or stop by the Personnel office.

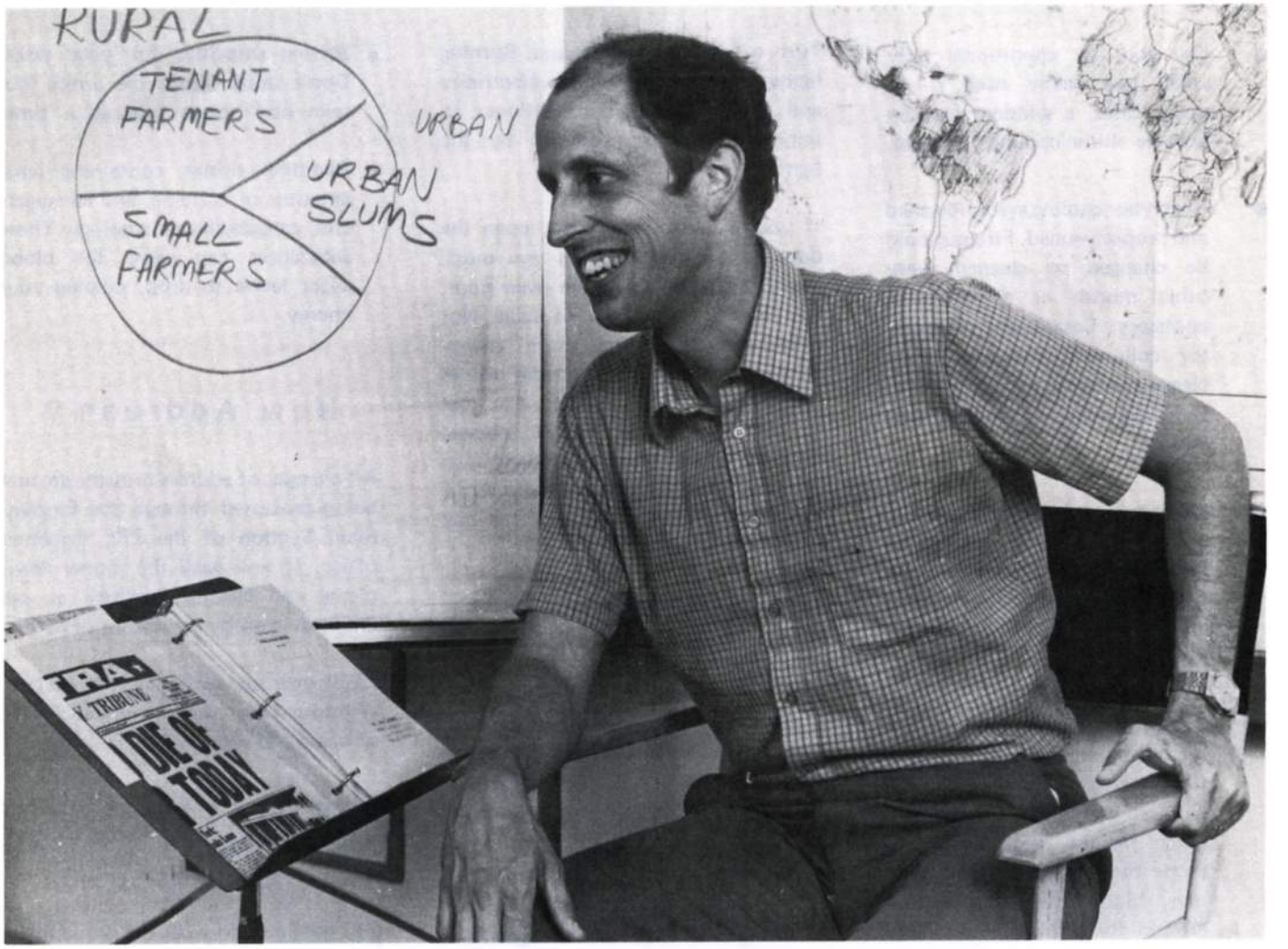
Employees are reminded that a revised W-4 form must accompany all changes of name and address.

Cafeteria Hours Changed

In conjunction with the September 9 open house planned for participants in the IAEA meeting, the C-Site cafeteria will be open to PPL staff from 11 a.m. to 12:30 p.m. on that day. Laboratory employees are asked to arrange earlier lunch hours in accordance with this change.

The PPL Hotline is issued by the Princeton University Plasma Physics Laboratory, a research facility supported by the U. S. Department of Energy. Correspondence should be directed to PPL Information Services, Module 2, C-Site, James Forrestal Campus, ext. 2754.

ppl people



Spreading Hope for a Hungry World

What snuffs out as many lives as the entire Holocaust in a mere six months? What causes more deaths each five years than 150 years of wars, murders and violence have? It's not cancer or heart disease; it's the worldwide blight of hunger.

John Coonrod is striving to change those grim statistics. John, a physicist involved in the TFTR diagnostic program, belongs to The Hunger Project. The international group has dedicated itself to the eradication of world hunger by the turn of the century.

John, who joined the laboratory staff three and a half years ago, has had a longstanding involvement with world hunger. "It's a subject we've all been bombarded with," he maintains. "World hunger and its victims are always presented as a hopeless, sad or pitiful situation; as if we can do our parts, but solving the hunger problem itself is basically hopeless. And that image is constantly reinforced, until everyone believes it."

The image wavered for the first time at the New York World's Fair, when John visited the General Electric pavillion. "At the end of their presentation," he recalled, "they had a little thing about fusion. They said it was an energy source that could be easily distributed, and that could be used to desalinate water. The display said the Sahara Desert could be irrigated, and could become a fertile valley."

That revelation was stunning to John. "That was the first time I had a vision of the world actually working," he remembered. "Instead of making gestures at a hopeless situation, we could actually do something about it. That's basically why I decided to work on fusion research -- at the age of 13!"

From that point through his mid-graduate school years, however, John "became caught in the turbulence of the Vietnam Era. I completely lost touch with my optimistic vision, " he said. "Then I heard the announcement about the formation of The Hunger Project, whose goal was to eliminate death by starvation throughout the world by the year 1997. That hit me like a ton of bricks; suddenly everything came together, and the reasons I was working on fusion all made sense."

He contacted the project leaders, asking what he could do in New Jersey. "I was told I could be in charge of the New Jersey branch," he laughed, "so I accepted. " He is also chairman of the state advisory board for CROP/ Church World Service.

John explained that there are 700 private volunteer organizations in the United States devoted to combatting hunger, each with its own specialty. "CROP is excellent at dealing with people-to-people problems," he said, "such as village development. They're up on the front lines of relief and development services. The Hunger Project feeds no one."

What, then does the organization do? "None of the other groups were doing anything wrong, "John emphasized, "but we looked around, and saw that there seemed to be no global commitment to eliminate hunger. We felt it would be ended if there was the political will to do so, and that became the Hunger Project's specific 'thing': to mobilize the will and the commitment to get the job done."

The first step, according to John, is to start with each individual taking a stand on ending world hunger. We have enrollments, where people learn that hunger persists, but it doesn't have to; they can make the difference. People sign up as an expression of their personal commitment." John has personally enrolled 10,000 individuals.

Enrollment doesn't obligate anyone to specific actions. John emphasized that the Hunger Project is "a non-pressure pressure group. We provide information on world hunger, but we don't tell you what to do. Each person can do what he or she is best at. "For some people, that's donating to a hunger organization; for others, collecting food, working directly with the hungry, or spreading the word to others might be their contribution. The project enrolled over two million people in its first three years of existence.

The group has had some notable successes working with other groups. "We gathered world hunger leaders together for a planning symposium," John said,"the first time something like that was done. Then, when the Cambodian famine occurred, we advertised it in the media, asking people to contribute to the relief agency of their choice. We did that, working with all the hunger groups in a coordinated fashion through the U.N., each doing what it is best at." The world successfully met the challenge of that famine, as well as the Somalian famine following it.

The Hunger Project takes a larger view of its mission, however. "Famines account for only 10 percent of hunger deaths," John pointed out. "They're the stuff that gets into the news, but they're just the tip of the iceberg. The rest of the hunger problem is simply business as usual: the grinding poverty that exists throughout the world. The long-term cure for hunger is developing self-sufficiency. You can't end hunger with handouts."

The Project is attempting to stop hunger with education. "In 1981, the project shifted from strictly enrollment drives to a commitment to educating North America about the world hunger situation," John explained. "We as a nation are really illiterate about the conditions of much of the rest of the world, and what solutions are avaible."

The education effort centers around 'briefings', six-hour sessions designed as a concentrated crash course in population, food production, inter—national finance, foreign aid, and other factors with a direct bearing on world hunger."Literacy is a catalyst to ending hunger,"John asserts."We have to educate North America, turn people on to their own ability to make a difference. Since 1979." he continued," famine can never be viewed or treated in quite the same way. We know now that we can handle it; we have the machinery in place. All over the world, successful solutions to the hunger problem have been developed. Hunger is ending, but slowly; we need an intense, grass-roots push to end it now."

Approximately 116 Hunger Project volunteers (including John) received six weeks of training in leading briefings. The Project's goal is to brief 25,000 people this year.

Working for an end to world hunger demands much of John's time, and yet he sees definite compensations for the long hours he devotes to the Project.

"There are a lot of people out there,"he contends, "who are cynical about the world. But under that cynicism, they're really much more commited than they look. Working with the Project has shown me the compassion that's in people, ready to be mobilized to change life. I get to deal with exciting epople, meeting real challenges. Some people waterski, others climb rocks --why not work for an end to world hunger?I find it an ongoing, extremely satisfying challenge."

John transmits his sense of excitement about the Project to others by pointing up the worldwide benefits of ending hunger once and for all. "It would be an economic boost for the world," he maintains. "Most violence-prone, unstable areas of the world have severe problems with hunger. Eliminating hunger helps ensure our mutual survival. And when we look at the world we want to leave for our children, hunger is inappropriate and inconsistent in that world."

"Morally, spiritually, economically and from a purely survivalist point of view," John concluded, "ending hunger is simply the thing we MUST do."

Princeton University: Department

To Benefits Section, Personnel Office

Date

Subject ☐ Leave of Absence

☐ Termination ☐ Retirement

From

INTER-OFFICE CORRESPONDENCE

PLEASE PLACE THE FOLLOWING EMPLOYEE ON LEAVE OF ABSENCE:

Name: First Day Out: Return Date (if known):

Comments (if applicable): _____.

Reason:

☐ Temporary Disability: ☐ Medical

☐ Maternity

☐ Leave Without Pay (5 or more days/30 day max. for bi-weekly employees)

☐ Childrearing (1 year max.)

☐ Leave for Research

☐ Temporary Military Leave (15 calender days/year) ☐ Long-term Military Leave

☐ Jury Duty

APPROVED _____ _____
supervisor's signature date

TERMINATION/RETIREMENT

The following employee(s) will be ☐ terminating

☐ retiring

on _____, 19___.

_____ _____
supervisor's signature date

New Proceedure

Leave of Absence and Termination Policy/Procedure --

The present procedure for initiating the processing of leaves of absence and terminations is a phone call to Eleanor Schmitt in the Benefits Section. This process is no longer effective or accurate.

The PPL Personnel Policy Manual (Section 20.3.8: Temporary Disability Leave) states:

> "Employees must notify their supervisor as soon as they know that the illness or disability will cause them to be absent. If the illness will cause the employee to be absent for more than eight calendar days, *the supervisor must notify their Division Head and Personnel in writing."*

A form will be sent to all supervisors, and should be used in compliance with the stated policy. Please feel free to Xerox this form, or, if you misplace it, call the Benefits Section at ext. 2046.

Please use the form for any employee planning to retire, to terminate, or to be placed on leave for reasons other than disability *as far in advance as possible.* Completed forms should be sent to the Benefits Section.

Tennis Tourney

The sixth annual Melvin B. Gottlieb tennis tournament has been scheduled for September 11 beginning at 10 a.m. The rain date is September 12.

The tournament is open to all PPL employees and members of their families. A single draw will determine pairings, with first round matches starting at 10 a.m. and noon. Second round play has been scheduled at 2 and 4 p.m., and will run parallel to the first consolation round matches.

Each match will consist of three sets with a 12-point tiebreaker to decide even matches. The tournament winner will have his name entered on the tennis winners' plaque, to be displayed at C-Site.

To enter the tournament, contact Marilee Thompson at ext. 3422 or John Edwards at ext. 3305 by Sept. 8. Each entrant must bring a can of new yellow tennis balls and four dollars on tournament day.

Spectators are welcome to come cheer their favorites on. A sumptuous picnic lunch will also be available between rounds Saturday.

Car Pool Sought

Leon Suster of the Electronic Diagnostics Branch is seeking a car pool in the Englishtown, Marlboro, Freehold or Manalapan areas. He would like to arrive at PPL at approximately 8 a.m. and leave at about 4:30 p.m. daily. Anyone interested should contact Leon at ext. 3373.