BROOKHAVEN BULLETIN
Vol. 41 - No. 45 November 13, 1987
BROOKHAVEN NATIONAL LABORATORY

1987 Fermi Award Goes to Gerald Tape

For his contributions to both the advancement of nuclear power and the nonproliferation of nuclear weapons, Gerald F. Tape has been named one of this year's recipients of the Enrico Fermi Award, the U.S. Department of Energy's (DOE) highest scientific honor. Now a consultant for Associated Universities, Inc. (AUI), Tape is a past AUI President and former BNL Deputy Director.

Also receiving the award, which was announced Monday by Energy Secretary John S. Herrington, is Nobel laureate Luis W. Alvarez.

The Enrico Fermi Award recognizes exceptional and altogether outstanding scientific and technical achievement in the development, use or control of atomic energy. When Herrington formally presents the awards, at a ceremony in December, each recipient will receive a presidential citation, a gold medal and $100,000.

The presidential citation Tape will receive will read: "For a distinguished career in the administration, development and advancement of U.S. and international atomic energy, as well as contributions to the nonproliferation of nuclear weapons, with special recognition for his integrity."

Alvarez is now professor of physics emeritus at the University of California, Berkeley, and senior scientist emeritus at Lawrence Berkeley Laboratory. He will be cited: "For the importance and breadth of his pioneering contributions in the physical sciences and their application to high energy physics, nuclear accelerators, instrumentation, paleontology, archaeology and astronomy."

Enrico Fermi led the scientists who achieved the first self-sustained, controlled nuclear reaction. The award honoring his memory was first presented in 1954. Last year's recipients were BNL Senior Physicist Ernest Courant and the late M. Stanley Livingston, who led Brookhaven's first accelerator project. In 1952, along with the late Hartland Snyder, they made the discovery at BNL of alternate gradient focusing. Also known as strong focusing, this principle revolutionized accelerator development.

A Distinguished Career

AUI was founded just over 40 years ago, to establish and manage Brookhaven National Laboratory. Gerald Tape has spent well over half of his distinguished career helping to shape and guide AUI and BNL, first as BNL's Deputy Director from 1951-62, next as AUI President from 1962-63 and from 1969-80, then as Special Assistant to the AUI President from 1980-82, and today as a Consultant to AUI.

As the head of AUI, Tape fostered an atmosphere in which BNL could flourish. During his presidency, user facilities expanded: In addition to the 1978 groundbreaking for the National Synchrotron Light Source, several facilities were commissioned, including the Tandem Van de Graaff accelerator in 1970, the Scanning Transmission Electron Microscope in 1975 and PETT III in 1977.

In April 1963, shortly after Tape had assumed his first AUI Presidency, President John F. Kennedy named him Commissioner of the Atomic Energy Commission (AEC), a position he held until 1969. From 1973-77, in the midst of his second term as AUI President, he was also the U.S. Representative to the International Atomic Energy Agency (IAEA), with the rank of Ambassador.

Tape, 72, was born in Ann Arbor, Michigan. He received his B.A. degree from Eastern Michigan University in 1935 and his M.S. and Ph.D. in physics from the University of Michigan, in 1936 and 1940, respectively.

After terms at Cornell University, the Massachusetts Institute of Technology Radiation Laboratory and the University of Illinois, Tape arrived at BNL in 1950, as an Assistant to the Director, Leland J. Haworth. In the ensuing years, they served together at BNL and AUI and both served on the AEC. Because of this close association, it was fitting that Tape was the main speaker at the ceremony held during BNL's 40th celebration in September, during which the AGS Complex was dedicated to Haworth's memory.

Throughout his more than 40-year career, Tape has been associated with almost every field of nuclear energy. In the international arena, he has long been an active force, specializing in relations with Great Britain, India, France and Japan. While at the IAEA, he worked with the Soviet members and was instrumental in the implementation of the Non-Proliferation Treaty.

As a member of the President's Science Advisory Committee from 1969-73 and as science advisor to the

(Continued on page 2)

Photo by Doug Humphrey

Gerald F. Tape

Series Postponed

In order to bring our readers the good news about Gerald Tape's winning of the Fermi Award, we are postponing the second part of the four-part series on "BNL's Search for the Science of Superconductivity," which began in last week's Bulletin. The series is planned to continue next week.

BNL Lecture: Landmarks in Particle Physics at Brookhaven

Of all the important discoveries resulting from particle physics research at BNL over the past 40 years, ten stand out. Each was the kind of intellectual breakthrough that caused a great leap forward in people's understanding.

That is the assessment of Robert Adair, Associate Director for High Energy and Nuclear Physics. He will talk about BNL's big ten discoveries when he delivers the 238th Brookhaven Lecture, on Wednesday, November 18, at 4:30 p.m., in Berkner Hall. Adair's talk on "Landmarks in Particle Physics at BNL" will be the third in a series of four lectures planned this fall to commemorate the Laboratory's 40th anniversary year.

Mort Rosen

Robert Adair

Of the ten "extraordinarily significant" discoveries Adair singles out, two were made at the Cosmotron, BNL's first proton accelerator: associated production (1952) and the K_L^0 meson (1956). Four of the discoveries were made at the Cosmotron's replacement, the Alternating Gradient Synchrotron: two neutrinos (1962), CP invariance (1964), the Omega-minus (1964), and the J/psi (1974).

Two of the other contributions were theoretical: the gauge theory of particles (1954) and parity nonconservation (1956). Strong focusing (1952) is the only technical discovery on Adair's list. And one finding —neutrino helicity (1958) — was made on a tabletop in an old barrack.

Three of these ten — parity nonconservation, CP invariance and the J/psi — have garnered the Nobel Prize in Physics. To explain why he feels, "all ten of these could have been awarded the Nobel Prize," Adair will spend a few minutes "showing the physical basis of these ideas and why they are so interesting."

The science will be followed by the scientists: Adair plans to devote a little time to talking about the discoveries and the people who made them "in a sort of informal, anecdotal way."

He will recount, for example, how "with the J/psi, all of a sudden things came together dramatically. And it so influenced physics that *Physical Review* had to form a special committee to sift through the 50 or 60 papers that came in the next week to choose 13 or 14 for publication."

Adair will explain the impact of strong focusing: "It was inconvenient to make an accelerator bigger than the circumference of the Earth, so 50 GeV looked like the absolute limit. . . . I remember the drama of it —everybody taking their half-finished accelerators and turning them into strong focusing ones, even if they didn't understand what that was."

And he will comment on the specialness of neutrino helicity: "Some of the things were in the air, and people might have come up with them some time. But if Maurice [Goldhaber] had not come up with his unique idea for neutrino helicity, we might not have discovered it today."

Robert Adair's 38-year association with BNL puts him in a good position to offer these reflections. He first came to BNL in 1949, when he was a graduate student, working towards the Ph.D. he received from the University of Wisconsin in 1951. When he returned to BNL in 1953, as an Associate Physicist, his Cosmotron office was adjacent to the small room where the gauge theory of particles and parity nonconservation were worked out.

Though he left BNL in 1959 to teach at Yale University, Adair has been connected with the Lab almost continuously since then, through experiments at the Cosmotron and the AGS. At present, he is involved with AGS Experiment 780, a BNL/Yale collaboration looking for rare kaon decays.

Adair became a full professor at Yale in 1961 and served as chairman of Yale's Physics Department from 1967-70. Since 1972, Adair has been Yale's Eugene Higgins Professor of Physics, though he has been on leave from those duties since becoming a BNL Associate Director last January.

In addition, Adair has been: Associate Editor *Physical Review*, 1963-66; Associate Editor *Physical Review Letters*, 1974-77, Editor, 1978-83; and Chairman, Division of Particles and Fields of the American Physical Society, 1972-73.

At present, Adair chairs the Physics Section of the National Academy of Sciences and is vice chairman of Scientists and Engineers for Secure Energy. In July, he realized the dream of all baseball-loving physicists when he was designated the official physicist for baseball's National League.

All those interested in getting together after the lecture are invited to go with the lecturer to a restaurant off site. To be part of this group, call Neil Baggett, Ext. 4949.

New DOE Program Brings 7 Student Scientists and Engineers to BNL

BNL has seven new students. They are the first student collaborators in a new, Department of Energy (DOE)-sponsored semester program for science and engineering research.

The first semester of the new Science and Engineering Research Semester (SERS) Program began August 30 and will run until December 18. Similar programs are running at four other DOE labs: Argonne National Laboratory, Battelle Pacific Northwest Laboratory, Lawrence Berkeley Laboratory (LBL) and Oak Ridge National Laboratory. Academically qualified students from four-year institutions anywhere in the U.S. apply to complete a research project, train on major research instruments and enrich their general scientific background at one of the five labs.

"What's new about this program," said Donald Metz, Head of BNL's Office of Educational Programs, "is that students join a lab to profit specifically from the particular interests found there. These students are well ahead in their required work and can take time to attend specialized courses not easily found at their home campuses. Their work here, including research, is selected in keeping with, and drawing on, the expertise at the Lab."

One of the experts working with the SERS students at BNL is Seymour Katcoff, Senior Chemist in the Chemistry Department, who is giving the students a seminar on radioactivity. He explained that the first half of the course, which includes lectures and discussion, covers general material. The second part is a series of talks by different BNL staff, mainly from the Chemistry and Medical Departments, to supplement the general material.

Mort Rosen

Guest lecturer Chemist Yung Chu, Chemistry, speaks to five of the students in the new DOE Science and Engineering Research Program: (from left) Michael Thomas, University of Arkansas; Debbie McIntire, University of San Diego; Horkeen Cheng, Rensselaer Polytechnic Institute; Jane Makovitch, Rochester Institute of Technology; and Cynthia Velez, University of Turabo. Not pictured are Thomas Scimecia, University of Hawaii, and John Vanchierre, Tulane University.

"Each student prepares a term paper, which is presented in a 15-minute talk during class hours. They will be given next week, on November 16 and 18," continued Katcoff.

The students will also give a talk on their research topics at the end of the semester. All these features of the program were planned by DOE, with input from the five labs involved.

A course on inorganic chemistry is being given by John Ricci, who is from the University of Southern Maine and at BNL for a year as a Visiting Scientist in the Chemistry Department. "Although the course is optional, and only one of the two chemistry majors is taking it for credit, several of the other students are sitting in," said Ricci. "They seem very well motivated."

The students develop their individual research topics with project directors in the Applied Science, Chemistry, Medical and Physics Departments. "I'm learning a lot," said Cynthia Velez, a senior at the University of Turabo in Puerto Rico. Velez is working on nuclear medicine projects with Scientist Prantika Som, Medical. "It's such a different learning process from full-time courses, and it's also quite different from the time I spent at LBL in summer 1986 — each Lab has its own way of doing things."

An enthusiatic comment came from Michael Thomas, a senior at the University of Arkansas, whose project on a potential energy surface for fluorine and hydrogen reactions is being directed by Senior Chemist James Muckerman, Chemistry. "To say I'm learning a lot is an understatement," said Thomas. "I'm dreading the day I leave!"

For BNL, the day that this group of students leaves will be a reminder that another group of enthusiastic researchers is on its way. Said Metz, "In the near future, we will be seeking advisors for the new group arriving in the spring." — Liz Seubert

Fermi Award (cont'd)

White House's Office of Science and Technology Policy, from 1976-81, Tape has made major contributions to U.S. science policy. He also made significant contributions on national security matters as member, 1970-74, and chairman, 1970-73, of the Defense Science Board. He also served on the National Security Council from 1974-77.

Recently, Tape participated in a review for DOE on the safety of the Department's N-reactor in Hanford, Washington.

Gerald Tape is a Fellow of the American Nuclear Society, the American Physical Society, the American Association for the Advancement of Science and a member of the American Astronomical Society. He has received numerous awards for his work, including DOE's Distinguished Associate Award, the National Science Foundation Distinguished Public Service Award, the Department of Defense Distinguished Public Service Medal and the Department of State Tribute of Appreciation. The Belgian Government awarded him the Order of Leopold II in 1979.

The Chemistry Is Right At the Light Source

Last week, for the first time ever, chemists specializing in synchrotron radiation research were brought together from all over the world for a conference. Entitled: "New Opportunities in Chemistry: An International Symposium on the Uses of Synchrotron Radiation in Chemistry," the meeting was held at Berkner Hall from November 4-6.

Due to the unique facilities at BNL's National Synchrotron Light Source, much work in this field has become centered here. During the three days of the symposium, which drew about 120 attendees, specialists in chemical structure, chemical physics, electrochemistry and analysis discussed the variety of ways to use synchrotron radiation for studying gases, liquids and solids.

Pictured during a coffee break at the symposium are (from left): Åke Kvick, BNL; David Shirley, Lawrence Berkeley Laboratory (LBL); David Templeton, LBL; Jack Preses, BNL, Organizing Committee Chairman; Anthony Cheetham, Oxford University; Tomas Baer, University of North Carolina at Chapel Hill.

Mort Rosen

Dissolving Blood Clots With t-PA

Deborah L. Higgins, a scientist in cardiovascular research at Genentech, Inc., will speak on the "Molecular Basis for t-PA's Action in Dissolving Blood Clots That Cause Heart Attack," on Thursday, November 19, at 3:45 p.m., in the Biology Seminar Room, Bldg. 463. The talk is sponsored by the Brookhaven Women in Science, and it is open to the Laboratory and the public.

Higgins will present a brief history of Genentech's development of tissue-plasminogen activator (t-PA), the body's major enzyme responsible for dissolving fibrin blood clots. For unkown reasons, when clots form during a heart attack, there is not enough t-PA to dissolve them.

In 1983, scientists at Genentech were the first to isolate or clone the gene for human t-PA. They recombined the human gene into the DNA of hamster ovary cells, which were then made to secrete large quantities of human t-PA. In clinical trials, this human recombinant t-PA has been the most effective agent for dissolving blood clots. In more than 60% of 5,000 patients experiencing heart attacks, t-PA treatment has dissolved clots, restoring blood flow.

Deborah L. Higgins

At Genentech, Higgins has been studying the biochemistry of t-PA and fibrin interactions and how they regulate fibrinolysis. For this work, she devised the first method that measures, in a direct way, the quantity of t-PA bound to fibrin. Her studies of fibrinolysis have led to the construction of a mutant t-PA having a higher fibrin-binding activity than natural t-PA. She will tell us how these t-PA variants are being used to understand the regulation of fibrinolysis and to design second generation molecules with improved fibrinolytic properties.

Prior to joining Genentech in 1984, Deborah Higgins was a postdoctoral research fellow in hematology at the Mayo Clinic. She received a Ph.D. in Biological Chemistry in 1981 from the University of Michigan. There, she established the relationship between the structure of an abnormal, inherited human fibrinogen, the fibrin precursor, and the function of fibrinogen in blood clotting. That work led to the discovery of a new activity for thrombin, the enzyme that converts fibrinogen to fibrin.

Preceding the lecture, coffee will be served at 3:30 p.m. A reception and dinner for Deborah Higgins will be held at the Old Inlet Inn, Bellport, at 6 p.m. Reservations may be made through Pam Gibbs, Ext. 7950.

PSI News

"Interior Design for the Office" will be the main topic at the next monthly meeting of the Upton Chapter of Professional Secretaries International. Interior decorator Bonnie Connelly will explain how colors affect you and offer ideas for making your surroundings more pleasant. The meeting will be held on Wednesday, November 18, at 6 p.m., in Berkner Hall, Room C.

Information Desk: SUNY at Stony Brook

Representatives from the State University of New York at Stony Brook will be in Berkner Hall on Tuesday, November 17, from 11:30 a.m. until 2 p.m. At a desk located outside the cafeteria, information about Stony Brook's new evening engineering program will be available, and employees' questions about any of Stony Brook's other educational programs will also be welcomed.

Equipment Demos

A demonstration by NBI, Inc., to be held in Berkner Hall on Monday, November 16, from 11 a.m. to 3 p.m., will include the NBI Pro-Publisher Plus, an electronic workstation based on the UNIX operating system, and the Sys 64/66es Series Controllers. These controllers permit networking of personal computers, word processors, electronic publishing systems, minicomputers, etc.; allow the use of such resources as printers, mass storage and MS-DOS software; and offer shared communications — Bisync, Asyn, 3270/BSC/SNA, VT 52/100 and DISOSS.

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IBM will hold a PS/2 Fair in the lobby of Berkner Hall on Tuesday, November 17, from 9:30 a.m. to 4 p.m. During this time, the latest products in the Personal System/2 series of personal computers will be demonstrated, and representatives will be on hand to answer questions.

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Sun Microsystems, Inc., will host a demonstration of their workstation product line on Wednesday, November 18, from 10 a.m. to 3 p.m. in Berkner Hall. Included will be demonstrations of CAD, artificial intelligence, networking, computer-aided publishing and other applications. The Sun Microsystem product line includes workstations based on the SPARC chip that has been adopted by AT&T and Xerox.

Service Award

The following employee received a ten-year service award during the month of October, but was inadvertently omitted from last week's listing:

Thomas M. Cannizzo..... Physics

Make No Bones About It – This Is a Success Story

Last year, during the Great American Smokeout, Lewis Jacobson shared his office with a skeleton crew. His guest was placed there, along with a few other reminders of the negative aspects of smoking, by the people with whom he works in Plant Engineering, where he is Safety Coordinator.

How effective was it? Well, Jacobson hasn't smoked since. In fact, he recalls, "I had been thinking about stopping for a while. My second grandchild had been born, and my daughter's family was going to be living with us, and it didn't seem fair to the baby to keep smoking. So I had actually stopped the week before."

A pipe smoker who started the habit about 35 years ago, Jacobson admits, "There were times when it was tempting to go back. But with a pipe, it's not that easy because you have to buy tobacco and find the pipe. I didn't throw mine out, but I haven't the foggiest idea where I put them. That, and an exercise program, has helped keep me on the straight and narrow."

Jacobson says he finds he can do his exercises "with a little more vigor now." He also notices that his throat does not dry up as it did when he smoked.

So Jacobson is glad he quit and feels that his office visitor helped firm up any flagging resolve after that first difficult week. How else did he feel when he found his office occupied? "I was amused," he said, "and flattered that my coworkers took that much of an interest in me to go through all that trouble to get me to stop."

Mort Rosen

Lewis Jacobson and friend

TAKE A BREATHER...THURSDAY, NOVEMBER 19

This year's Great American Smokeout will be next week — on Thursday, November 19. The Health Promotion Program of the Occupational Medicine Clinic is sponsoring two events that day:

- If you want to quit or help a friend to quit, stop in the lobby of Berkner Hall between 11 a.m. and 2 p.m. There, at the American Cancer Society's information booth, cigarettes can be traded for lifesavers or gum.
- People who have quit smoking through a Lab-sponsored program — either the hypnosis sessions or the Freedom From Smoking workshops — have been invited to attend a reception from 5 to 6 p.m., in Room A, Berkner Hall.

GREAT AMERICAN SMOKEOUT
AMERICAN CANCER SOCIETY

BNL's Fabulous Forty

Photos by Peter Horton

If life begins at forty, then BNL and several of its employees born in 1947 are only just beginning to live. However, as Lab history shows, its forty years of "pre-life" have provided interesting work for many people. Four employees who celebrate their 40th birthdays in the Lab's 40th anniversary year have been asked to comment on life at BNL.

On May 16, 1947, **William Morse** was born in Maine. At that time, BNL's first director, Philip Morse, was staffing and equipping the new Lab before returning to the Massachusetts Institute of Technology in 1948. William Morse grew up, finished his Ph.D. at Purdue University in January 1976 and was offered a postdoctoral position in the BNL Physics Department. "I was delighted and accepted right away," he said. "In fact, when another prospective employer inquired what my salary would be, I realized I'd never asked!"

Years later, Morse discovered an interesting coincidence. In 1985, when Philip Morse died, William wrote to the Morse Society, a group of North Americans all related in some way to an English family called Morse, traceable back to 1500. Research showed that Philip Morse was a descendant of Englishman Samuel Morse, who settled in Massachusetts in about 1625. In 1635, Samuel's cousin, Anthony, had crossed the Atlantic to live in another part of Massachusetts — and had been an ancestor of physicist William Morse, who now is researching rare kaon decay on Long Island.

Four years ago, **Peter Siddons**, born in Yorkshire on May 17, 1947, decided to leave England and emigrate to Canada. He and his family of wife and three children settled in Toronto, which they found a very pleasant city. "But my research interest is in x-ray optics," said Siddons. "That makes the NSLS the best place in the world to work. The facilities here are unique, and a huge variety of work can be done."

Siddons had the opportunity to join the NSLS as an Associate Physicist in July 1985, and he didn't hesitate. "The whole family has settled down to life in the States, and we're very happy," he said.

Fern Coyle, a Senior Programming Assistant in Physics, was born in Brooklyn on June 12, when the Lab was almost five months old. Coyle signed on here 20 years ago on October 9, 1967, for her first major job, as a scanner in Physics.

Scanners diligently searched the film produced in bubble chambers for particle "events" that high energy physicists had designated as crucial to experimental results. Today, bubble chambers have been replaced by computerized detection systems, and scanners are no longer needed. So Coyle has changed along with the Lab, moving from scanning to computing and learning the skills needed to continue to help physicists with their experiments.

Aside the opportunity to expand her horizons, what Coyle enjoys most about life at BNL is the chance to meet so many people, with such varied backgrounds and jobs. "Of course, there's a drawback," she said. "Some of them go! Still, more people come to fill the gaps."

Slobodan Pjerov was born in Yugoslavia on March 8, 1947. He came to New York in 1968, able to speak some English, but not much. After several years of taking courses at different schools, in 1979 he came out to Long Island. Hearing of a job opportunity at the National Synchrotron Light Source (NSLS), he applied and was taken on as a Design Engineer.

Pjerov is working on designs for x-ray lithography source development and enjoys his job. "I am living at Mount Sinai," he said, "and I like it here so much, I hope I'll be able to stay until retirement age." It is particularly satisfying, Pjerov said, "that when we accomplish something big at BNL, it is known in the major news papers. Working at the Lab makes you feel that you contribute something worthwhile." — Liz Seubert

BROOKHAVEN BULLETIN
Published weekly
by the Public Affairs Office
for the employees of
BROOKHAVEN NATIONAL LABORATORY

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Cooking Exchange

The next meeting of the International Cooking Exchange will be held on Wednesday, November 18, at 12:30 p.m., in the Recreation Building. Thanksgiving recipes will be demonstrated by Louise Bunicci, Loretta DeGregory, Arlene Heil, Sharon Hall and Sarah Morse. In addition to the traditional turkey, some unusual recipes for cranberries and vegetables will be shared.

Korea also celebrates a Thanksgiving feast, which originated about 1,500 years ago to give thanks for the new rice and fruits that are harvested in the autumn. All Korean families gather for this holiday and eat special rice cakes steamed with pine needles. Myung Soon Kim will demonstrate how these delicate rice cakes are prepared.

All employees and family members are welcome at Cooking Exchange meetings. There is a charge of $2 to cover the cost of ingredients and a sample of the food prepared. Babysitting is provided at 50¢ per child.

Theater Group

The BERA Theater group will hold a regular meeting on Tuesday, November 17, at 7:30 p.m. in the lobby of Berkner Hall. The program will feature the work of the brilliant, middle-aged writer of comedy, Karl Swyler. All interested are invited, especially those with talent and energy who would like suggest future productions for the group.

Arrivals & Departures

Arrivals

Susan Dobzeniecki ..... Plant Eng.
Louise M. Jackson ..... Plant Eng.
Abdel Hamid Moudden ..... Physics
Zuriel Rowan ..... Plant Eng.

Departures

This list includes all employees who have terminated from the Laboratory, including retirees:

Sheldon J. Kanfer ..... Chemistry
Carmen R. Williams ..... DAS

In Stormy Weather

The following radio stations have agreed to carry announcements regarding emergency closings and delayed openings at BNL:

Station	Area	AM	FM
WALK	Patchogue	1370	97.5
WBAB	Babylon	1440	102.3
WBLI	Patchogue		106.1
WCTO/ WGSM	Smithtown	74	94.3
WHLI	Hempstead	1100	98.3
WLIM	Patchogue	1580	
WLIX	Islip	540	
WLNG	Sag Harbor	1600	92.1
WRCN	Riverhead	1570	103.9
WRIV	Riverhead	1390	
WSBH	Southampton		95.3

Hockey Tickets Still Available

A number of Islanders hockey tickets are still available for sale at the BERA Sales Office. These would make great holiday gifts, and you can take your pick from the list below:

Date	# Available	Team
Tues., Nov. 17	8	Los Angeles
Tues., Nov. 24	4	Toronto
Tues., Dec. 8	4	Montreal
Tues., Dec. 15	8	St. Louis
Sat., Dec. 19	4	Philadelphia
Sat., Dec. 26	2	Boston
Tues., Jan. 5	4	Minnesota
Thurs., Jan. 14	8	Quebec
Sat., Jan. 16	2	N.J. Devils
Tues., Jan. 19	6	Pittsburgh
Tues., Feb. 16	6	Calgary
Tues., Feb. 23	6	Vancouver
Thurs.,Feb. 25	8	Chicago
Tues., March 1	8	St. Louis
Tues., March 8	8	Vancouver
Thurs., March 10	8	Quebec
Tues., March 29	2	Philadelphia
Thurs., March 31	2	Washington

Call Louisa Barone at the BERA Sales Office, Ext. 3347, for further details and price information.

Volleyball

Standings — Week of November 2

	W-L
League I	
Upfagrabs	8-1
Dinkers	6-3
Phoubars	5-4
X-rayted	4-5
Cannonballs	3-6
Bumpers	1-8
League II	
Chunga's Revenge	7-2
Fossils	6-3
Set-Ups	5-1
Nuts & Bolts	5-4
Slammers	4-5
Photons	0-6
Upton Ups	0-6
League III	
Printouts	8-1
Renegades	7-2
Sourcerers	6-3
Screwballs	5-4
Misfits	5-4
Spikes	3-6
Airheads	2-7
Good Times	0-9
Open League	
Serendipity	7-2
Phoenix	7-2
Dakota	6-0
Not Too Bad	4-5
Duituits	2-7
Leftovers	1-5
Rowdy Radicals	0-6

Bowling

Red/Green League

C. Bohnenblusch rolled a 221, F. Griswold 219, R. Mulderig 214, J.Roesler 213, C. Scarlett 208, K. Asselta 206, M. Kelly 200, J. Mayeski 200.

Purple League

High games were bowled by Sharon Smith 226/185, Ed Meier 214, Caryl McDougall 203/190, Karen Jacobs 198, Mary Grace Meier 188, Sharon Moore 183, Mary Addessi 180.

White League

Ken Asselta had a 214, Kurt Jellett 210, Joe Ferrante 202, Elaine Zukowski 200, Kay Conkling 192, Ted Erickson converted the 1/2/10 split.

Pink League

High games were bowled by Maria Apelskog 178, Sandy Asselta 171, Ann Parrinello 171, Renie Rosati 167, Kathy Folkers 166, Louise Chinn 162.

AACC Fall Fling

As a scholarship fund-raising event, the Afro-American Culture Club will host a "Fall Fling" dance on Saturday, November 14, at the Recreation Building, from 9 p.m. until 2 a.m. Music will be by E.T., and snacks and food will be available.

Tickets are $3 if bought in advance and $4 at the door. For ticket information, call Bruce Penn, Ext. 7213; Frances Ligon, Ext. 3709; or April Donegain, Ext. 2459.

Cafeteria Menu

Week of November 16

Monday, November 16

Beef barley soup	(cup)	.75
	(bowl)	.95
Baked ham w/fruit sauce & 1 veg.		2.95
Beef Stroganoff over noodles		2.95
Chef salad cold plate (lite-weight)		2.25
Hot deli: Chicken patty sandwich		2.85

Tuesday, November 17

Old-fashioned Dutch split pea soup	(cup)	.75
	(bowl)	.95
Salisbury steak w/gravy & 1 veg.		2.95
Veal parmigiana w/garlic toast		2.85
Special fruit & cottage cheese plate (lite-weight)		2.25
Hot deli: Roast beef	(bread)	2.65
	(roll)	2.75
	(hero)	2.85

Wednesday, November 18

Special Thanksgiving Luncheon

Cup of soup of the day
Roast turkey w/savory stuffing & cranberry sauce
or
Virginia baked ham
Mashed potatoes, sweet potatoes or candied yams
Green beans almandine, peas w/pearl onions or broccoli
Bread or roll and butter
Pudding or jello
$3.35

Thursday, November 19

U.S. Senate bean soup	(cup)	.75
	(bowl)	.95
Calves' liver w/1 veg. & onions		2.95
Italian lasagna w/garlic toast		2.85
Hot deli: Sloppy Joes		2.65

Friday, November 19

Manhattan clam chowder	(cup)	.75
	(bowl)	.95
Baked macaroni & cheese w/1 veg.		2.75
Baked fresh fish filet w/lemon butter & 1 veg.		2.95
Super sausage pizza	(slice)	1.15
Hot Deli: Pastrami	(bread)	2.65
	(roll)	2.75
	(hero)	2.85

Holiday Hams

Let the Cafeteria prepare your holiday ham. At $2.15 per pound, plus tax, these smoked, bone-in hams average 14 pounds each. The hams are fully cooked and ready to eat. To reserve your holiday ham for Thanskgiving or Christmas, call the Cafeteria at Ext. 3541.

Classified Advertisements

Placement Notices

The Laboratory's placement policy is to select the best-qualified candidate for an available position, with consideration given to candidates in the following order of priority: (1) present employees within the department and/or appropriate bargaining unit, with preference to those within the immediate work group; (2) present employees within the Laboratory as a whole; and (3) outside applicants. In keeping with the Affirmative Action plan, selection decisions are made without regard to age, race, color, religion, national origin, sex, handicap or veteran status.

Each week, the Personnel Office lists new personnel placement requisitions. The purpose of these listings is, first, to provide open placement information on all non-scientific staff positions; second, to give employees an opportunity to request consideration for themselves through Personnel; and, finally, for general recruiting purposes. Because of the priority preference policy stated above, each listing does not necessarily represent an opportunity for all candidates. As a guide to readers, the listings are grouped according to the anticipated area of recruitment.

Except when operational needs require otherwise, positions will remain open for one week following publication date.

For further information regarding a placement listing, contact the Employment Manager, Ext. 2882.

LABORATORY RECRUITMENT - Opportunities for Laboratory employees only.

2724. MATERIAL HANDLER - Supply & Material Division.

2725. LAMP CLEANER (2 openings) - Plant Engineering Division.

2726. TOOL & INSTRUMENT MAKER, GROUP LEADER - Central Shops Division.

2727. QUALITY ASSURANCE POSITION (part-time) - Requires strong QA background including preparing QA plans and conducting audits. Good writing skills and experience in training employees in quality assurance and safety are essential. Must have Certificate of Achievement in Auditing. Responsibilities will include upgrading and maintaining QA activities in the department. Department of Applied Science.

OPEN RECRUITMENT - Opportunities for Laboratory employees and outside applicants.

2728. TECHNICAL POSITION - Requires a BS degree in chemistry, engineering, or in related field; or the equivalent experience. Will perform wide variety of duties with regard to operations conducted at the hazardous waste management site. These includes the on-site transport, handling, and packaging of chemicals and radioactive materials, operation of light and intermediate range machinery, maintenance of selected personnel protective equipment, and assistance in regulatory record keeping requirements. Safety and Environmental Protection Division.

2729. TECHNICAL POSITION - Requires AAS in electronic technology or equivalent experience with a solid background in analog circuits and digital controls. Should be skilled in troubleshooting at both circuit and system levels. Job will involve fabrication and testing of circuits from electronic schematics, verbal instruction, and sketches. Alternating Gradient Synchrotron Department.

2730. CABINETMAKER A - Under minimum supervision lays out, constructs, modifies and maintains furniture, laboratory equipment and buildings, and component parts. Works with wood, wood substitutes and combination materials and flooring, roofing and wall materials. Uses hand, portable, and fixed tools common to building construction and cabinetmaking trade. Plant Engineering Division.

2731. TECHNICAL POSITION - Requires an AAS degree in electronic technology or equivalent experience and background in complex electronic and electromechanical equipment, including vacuum systems. Will construct, repair, modify and operate equipment and facilities at the Tandem Van de Graaff Accelerator. Must be willing to work shifts. Physics Department.

Motor Vehicles & Supplies

TIRES - 4, Pirrelli, 205VR60x14, $20 for all. 751-8240 eves.

79 FORD FAIRMONT - 2 dr., am/fm, 4 cyl., very good cond., asking $1,500. Nestor, Ext. 3073.

81 BRONCO XLT - loaded, red & white, 31" Goodyears, air horns, excel. cond., asking $7,500. Dan, Ext. 4987 or 698-7322 eves.

77 CADILLAC - 4 dr. sedan DeVille, leather int., white/wine vinyl roof, new road-handler tires, good cond., $2,800. Jim, Ext. 4040 or 289-0876.

78 CHEVY MONZA - 3 speed, hatchback, $400. 874-3796.

84 CUSTOM DELUXE 30 - 12' enclosed box, hydraulic lift gate, a/c, p/s, p/b, 64k mi., $5,200. 363-6940.

86 SUZUKI SCOOTER - FA50, excel. cond., $300. 821-0250.

301 ENGINE - 1980 Pontiac, 50k mi., $400. 473-0341.

77 CHEVY CAPRICE - a/c, p/w. runs well, $1,200 neg. Ext. 7915 or 744-0722.

67 FORD PICKUP - 6 cyl., 3 speed, $325. 475-6797.

79 CHEVY C-60 - cab & chassis, new paint, rebuilt engine, $3,950. 475-2509.

79 CHRYSLER LeBARON - 83k mi., clean, runs well, $1,495; 75 Plymouth Valiant, 225, 4 dr. sedan, p/s, a/t, runs well, $495. 277-4091.

84 DODGE - convertible, p/s, p/b, p/w, a/t, new tires & brakes, $7,500 neg. Tallon, Ext. 4847 or 473-3987.

SUZUKI MOTORCYCLE/ATV - 90cc, blue/white, wide tires, licensed for road, good cond., $249.95. Tony, Ext. 4095.

75 DATSUN 710 - 4 speed. 289-8212 eves.

81 VOLKS - diesel, 4 dr., a/c, 45-50 mpg, 72k mi., 2 new tires, belts, good cond., asking $1,350. Voytek, Ext. 5125 or 3220.

66 LINCOLN CONTINENTAL - classic, 41k orig. mi., full power, 4 dr., excel. cond., $5,000. M. Kinney, 924-3783 or 924-3431.

77 AMC HORNET - 4 dr., a/t, p/s, 6 cyl., a/c, 64k mi., $600 neg. 928-6791 eves.

79 PONTIAC LeMANS - a/t, p/s, am/fm, 94k mi., very reliable. Ext. 3780 or 331-4538.

79 FORD FAIRMONT WAGON - 6 cyl., a/t, p/s, a/c, high mi., $550. Sang, Ext. 2014 or 3193 eves.

77 MUSTANG - low mi., no rust, runs well, 4 speed, new clutch, muffler, best offer. Gary, 758-5592 eves.

BATTERY - 12 volt, like new. Frank, Ext. 2314.

83 TURISMO - black, sunroof, louvers, 4 speed, red velour int., new brakes, 70k mi., very good cond., $2,600. 929-3473.

TIRES - 1000x15", Goodrich, sport radials, excel. cond., $200 or best offer. Joe, Ext. 3499 or 758-7035.

Boats & Marine Supplies

KAWASAKI 440 JET-SKI - 1987, good cond. 475-3792 after 6 p.m.

REVEL-CRAFT - 1972, fg hull, fly bridge, single, 318 Chrysler, $8,500. 732-8768.

19' BAYLINER CAPRI - 1984, Volvo I/O, trailer, must see, mint, $7,000. Ext. 2981 or 473-7809 eves.

20' O'DAY SAILBOAT - 1974, 3 sails, furler/reefer, VHF, 7½ Merc, compl. mooring, new trailer, extras, $5,500. Gene, 265-4376.

Miscellaneous

MOVING SALE - sofa, arm chairs, lawn mower, garden tools, dehumidifier, bikes, electric train, toys. Ext. 7740 or 928-6389.

TICKETS - BB King & Greg Allman, Westbury, Nov. 22, $40/pair. Nick, Ext. 3884.

FUR JACKET - Mouton lamb, size 14-16, excel. cond., $65. 475-1826 after 6 p.m.

IBM TYPEWRITER — $150; 5 rolls of wallpaper, new, $20; electric alarm clock, $3. Susan, Ext. 4267.

UNICEF XMAS CARDS - & gifts. Ann, Ext. 2022 around noon, or 744-8386.

XMAS TREE - 7' artificial, $5; Gem tumbler, new, $30; crib, $20; 22" high cast-iron stove, $40. 878-6637.

PING PONG TABLE - w/net & paddles, $25; lawn mower, 4 cycle, $20; Scott spreader, $10; Cyclone spreader, $10. Gene, 265-4376.

RED POINSETTIAS - several sizes, florist quality, low prices, delivery in Dec. 727-6818 after 3:15 p.m.

DRAPES - pale green, lined, 108"x72", $25. 744-6292.

HUMIDIFIER - Edison, wood grain console, 4 gallon, $40. Tony, 698-9274.

SWEATERS - & vests, hand knitted, very reasonable, beautiful. Kae, 473-4319 eves.

COUCH/LOVESEAT - velvet, w/wood trim, $100; table, $20; coffee table, $35; wooden étagère, $10; Oriental rug, 9x12, $25. 689-7259 after 6 p.m.

COLOR TV - RCA, 25", console, rotary, good cond., $130. Kim, Ext. 3096.

ORGAN - Wurlitzer Funmaker, #360, good cond., $650; antique Hoosier kitchen cabinet, $75. Dick, Ext. 3499 or 589-9103.

DRESSER - cherry, 60" wide, 7-drawer, $200. Ext. 4207 or 286-0466.

FREE-STANDING SAW - 10" carbide tip metal, 5x5 cap., 2 speed, flood coolant, w/recovery, excel., $300. Bob, Ext. 5222 or 744-3289.

IBM COMPUTER - W/20MBHD, 2-360kfd, 8087, 2.25 MBRAM, monitor, printer, 135WP/S, extras, software, asking $1,950. Ext. 2521 or 924-2134.

Free

FIREWOOD - damaged framing lumber, 2x4, 2x6, 2x10, etc., various lengths. Brian, Ext. 4939 or 234-9487.

FREEZER - upright, 14 cu. ft., Sears Coldspot, needs freon. 368-1133.

PIGEONS - John, Ext. 3675 or 924-3528.

MINI-LOP RABBIT - brown. Ext. 7661.

Lost & Found

LOST - antique silver pin, set w/rhinestones, sentimental value, reward. Anne, Ext. 5055.

Real Estate

Real Estate advertised for sale or rent is available without regard for the race, color, creed, sex or national origin of the applicant.

For Sale

MIDDLE ISLAND - co-op apt., quiet, upstairs, 1 bdrm., new w/w, cent. a/c, low monthly maintenance includes heat, taxes, pool, tennis, more, excel. cond., $66,900. Ext. 3396 or 924-7283.

STONY BROOK - Long Hill, cape, 4 bdrm., 2 baths, d/r, den, l/r, f/p, full basement, $204,000. 751-8240 eves.

MONTAUK - Gurney's Inn spa timeshare, sleeps 4, lifetime vacation, 15th week Easter/Passover, $12,500. Ext. 3144 or 698-5046.

HILTON HEAD, SC - 3 bdrm. condo, sleeps 8, 2 baths, washer/dryer, wet bar, 6 tennis courts, 3 pools, whirlpool, golf, ocean view, asking $89,000, will rent. 929-8912.

MILLER PLACE - North of 25A, 3 bdrm. custom ranch, entertainment area, l/r, family rm., custom f/p, 24' x 26', 2-car garage, finished basement, and much more. Ext. 3353 or 473-5786.

RIDGE - 3 bdrm. L-ranch, garage, basement, 1/3 acre, fenced, sewers, city water, 4 miles north of Lab, $126,900. Marie, Ext. 7716.

For Rent

MIDDLE ISLAND - 3 bdrm., 2 baths, eik, f/p, 2 story on wooded 2 acres, carport, avail. Nov. 15, $900/mo. Ext. 3675 or 924-3528.

HAMPTON BAYS - 2 bdrm. house, furn., w/w, waterfront, avail. Nov. to May 15, 1987, $440/mo. + util. 728-2104 eves.

HILTON HEAD, SC - 2 bdrm. condo, sleeps 6, beach, pool, tennis, golf, winter rates, $300/wk. 585-9149.

STONY BROOK - 3 bdrms., large eik, d/r, lounge, no pets, non-smokers, $1,200 mo. + util. 862-7998

SOUND BEACH - cozy 4 bdrm. cape/cottage, 1½ baths, 1 block to L.I. Sound, $750/mo. + util. 744-5930.

SHIRLEY - immaculate 3 bdrm. ranch, l/r, d/r, eik, w/w, appliances, fenced yard, city water, quiet street, 1 mile to Smith Point, $800/mo. + util. 744-5448.

EAST PATCHOGUE - 2 bdrm. house, l/r, d/r, den, kitchen, bath, f/p, garage, 1 acre, $800. Andy, Ext. 2907 or 289-1755.

MILLER PLACE - barn/apt., 5 rooms, semi-furn., f/p, deck, view, very private, no pets, $750/mo. + util. 473-3777.

SHOREHAM - large 1 bdrm. apt., full kitchen, bath, l/r, furn. or unfurn., avail. Dec. 1, $550/mo. incl. util. & cable. 744-8659.

Wanted

HOUSE OR APT. - to rent, Port Jefferson, Dec. 1 to July '88, 2 bdrms., excel. references. Ext. 7740 or 928-6389.

TRAINS - Lionel, American Flyer, accessories, any cond. brings good price. Carole, Ext. 7100 or 924-4097 eves.

TRUCK BEDLINER - plastic, for Toyota pickup. 878-1640, please leave message.

BABY FURNITURE - crib, dresser, changing table, good cond. 928-6791 eves.

ZOOM LENS - for Kodak Carousel projector. John, Ext. 3675.

BUYER - someone to purchase old tube testers. 878-6637.

DRIVE SOCKETS - ⅜", 15mm. Ext. 4095.

BABYSITTER - experienced, for 4 month old, our house, occasional weekends. Janice, 732-9724.

In Appreciation

I wish to thank my friends and co-workers, and those of my husband Lowell, for the many expressions of sympathy, support and comfort shown to us at our time of sorrow. They were greatly appreciated, and you will always be fondly remembered.

— Ella B. McLean & Family

Ads left out of this issue due to lack of space need not be re-submitted to appear in the next issue.