

Grumman's Future Should Not Affect RHIC Magnets

In 1992, BNL contracted with the Grumman Corporation to build 805 superconducting magnets for the Relativistic Heavy Ion Collider (RHIC) — 432 cable quadrupoles and 373 dipoles. The first of the 9.7-meter-long dipole magnets is due to arrive at the Lab for testing later this spring.

The announcement earlier this month that Martin Marietta Corporation wants to take over Grumman concerned BNLers not only because of the action's potential effect on Long Island, but also because of its potential impact on the critical schedule for the RHIC project.

"Since we first learned about this development, we have been in close communication with Grumman management," said Satoshi Ozaki, RHIC Project Head, "and we do not expect that there is going to be significant impact to the RHIC magnet production program."

Martin Marietta's original takeover bid was quickly topped by the Northrop Corporation, and, at press time, it was still uncertain as to which of Grumman's suitors would prevail. But it was clear that Grumman will soon be absorbed by another firm.

"Whichever corporation that is," said Ozaki, "BNL and RHIC Project management look forward to meeting with them."

AUI Distinguished Lecture

Where Has All the Ozone Gone?

The first warning that chemicals known as chlorofluorocarbons (CFCs) deplete the earth's critical ozone layer when released into the atmosphere came in 1974, and it was sounded by chemists F. Sherwood Rowland and Mario Molina of the University of California (UC), Irvine.

Now Rowland, who spent several summers at BNL as a visiting scientist in the Chemistry Department, will address this environmental problem in the next AUI Distinguished Lecture, on Tuesday, March 29. His talk on "The Depletion of Stratospheric Ozone by CFCs" will be given at 4:30 p.m. in Berkner Hall. Coffee, tea and cookies will be served in the Berkner Hall lobby before Rowland's talk.

The thin layer of ozone high in the stratosphere is essential to life on Earth, since it absorbs the sun's harmful ultraviolet rays. But CFCs are threatening the ozone layer's existence.

CFCs are commonly used as aerosol propellants, refrigerants and electronics cleaners, as well as in the manufacture of plastic foams. They were first measured in the stratosphere in 1975, and they have been regularly mea-

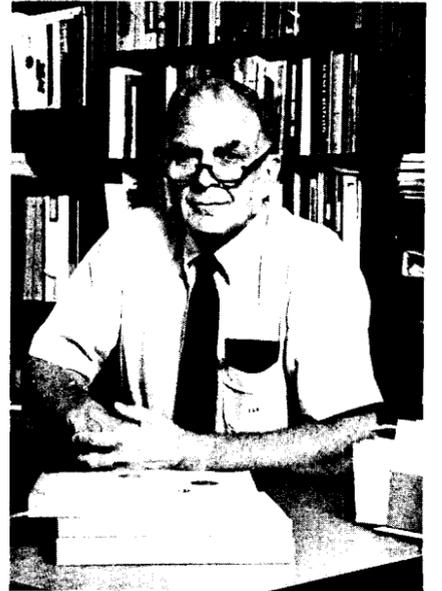
sured there ever since. The release of a million tons or more of CFCs per year, from the early 1970s until about 1991, has caused major ozone depletion over Antarctica and significant losses over North America.

After earning his Ph.D. from the University of Chicago in 1952, Rowland began his career at Princeton University, where he taught chemistry. He also began his summer visits to Brookhaven, doing research here in 1953, 1954, 1955 and 1959.

In 1956, Rowland joined the faculty of the University of Kansas, and, in 1964, he moved to UC, Irvine, where he is now the Donald Bren Professor of Chemistry, specializing in atmospheric chemistry and radiochemistry.

A member of the National Academy of Sciences since 1978, Rowland has been on the Board of Directors of the American Association for the Advancement of Science since 1991, serving as President in 1992 and Chairman of the Board in 1993.

Rowland's numerous awards have included the Tyler World Prize in Ecology and Energy, and the American Chemical Society's (ACS) Award for Creative Advances in Environmental



F. Sherwood Rowland

Science and Technology, both with Molina in 1983; the ACS's 1993 Peter Debye Award in Physical Chemistry; and, this year, the Roger Revelle Medal of the American Geophysical Union. He has received honorary degrees from six institutions throughout the U.S. and Canada.

Initiated by Associated Universities, Inc., in 1965, the AUI Distinguished Lecture program offers talks for the general public by experts in various fields.

BNL's Energy Management 'Outstanding' to DOE

For the second year in a row, the Energy Management Group (EMG) of the Plant Engineering (PE) Division has earned the highest "recognition of outstanding energy management at DOE facilities" from the U.S. Depart-

ment of Energy (DOE), by earning an In-House Energy Management Award for fiscal year (FY) 1992.

For the best energy-management program at a national laboratory, BNL shared the spotlight with Lawrence Livermore National Laboratory. Mark Toscano, BNL's Energy Manager, picked up BNL's award last October, on his own behalf and that of Walter Bay, Greg Flett, Paul Coleman, all now or formerly of the Energy Management Group, and employees of other groups within the Alternating Gradient Synchrotron (AGS) Department and PE's Operations & Maintenance organization.

With an annual energy budget of over \$15 million, Brookhaven is the largest single-site energy user on Long Island. Since the energy crisis of the 1970s, the Energy Management Group has had the charge to decrease the Lab's energy consumption and costs by increasing energy conservation and efficiency.

During FY92, two major energy conservation initiatives saved the Lab 121 gigajoules (GJ) or 115 billion British thermal units (Btus), for a total of \$610,000 for the year.

The first initiative was the replacement of controlled rectifiers, devices that turn the continuous, alternating current from a generator into the shaped pulses of direct current needed by the magnets at the AGS.

To bend and focus particle beams, the AGS uses 240 magnets, which draw 12,000 volts and 5,000 amperes at the peak of each power pulse.

By replacing the 96 mercury-vapor excitrons with eight silicon-controlled

rectifiers, the savings are \$130,000 and 26.4 GJ (25 billion Btus) annually.

The second initiative saved even more: By placing nine more buildings under the jurisdiction of the Energy Management Control System (EMCS), some \$480,000 and 95 GJ or 90 billion Btus are saved annually.

Hooked up to the first seven buildings in FY90, the EMCS uses a group of networked computers to monitor and control heating, cooling and hot water within each building. To conserve energy, the EMCS turns these utilities on and off according to scheduled use or based on immediate demand. For even greater savings, 80 more buildings will eventually be added to the system.

The EMG was also cited for five other energy-conservation initiatives: The first was its computerized electric-metering system, which was expanded from 190 to 210 meters, which can be read daily so that excess energy use can be identified quickly. Second, the EMG's membership in the energy cooperative of the Long Island Lighting Company was mentioned because it earned BNL \$416,000 in electric bill credits in FY92 for having reduced on-site electric consumption on peak-demand days.

Third, the EMG was recognized for assisting the Directorate in obtaining an additional allotment of 15 megawatts of power from the New York Power Authority; the additional allocation began in 1992 to be phased in over three years and will significantly reduce the cost of electricity as on-site demand grows with the impending start-up of the Relativistic Heavy Ion Collider. Fourth was its computerized alarm system, to notify the EMG as power demand approaches targeted monthly limits.

And, finally, commendation was given for PE's fuel-exchange program, whereby unwanted combustible liquids are exchanged for virgin No. 6 fuel oil to be burned at the Central Steam Facility.

BNLers Included in History of Women in Physics & Chemistry

Several scientists with BNL connections are featured in a new reference book on women in the physical sciences — some as authors or editors of biographical essays, and some as subjects of chapters documenting their careers.

Victoria McLane, BNL Senior Physics Associate, Department of Advanced Technology, and Women's Programs

Coordinator, contributed a chapter on the career of Fay Ajzenberg-Selove to *Women in Chemistry and Physics: A Biobibliographic Sourcebook*, published in 1993 by Greenwood Press of Westport, Connecticut, and available in the Research Library, Bldg. 477.

Ajzenberg-Selove is a nuclear physicist at the University of Pennsylvania

(continued on page 2)

BNL Guest Scientist Miriam Rafailovich (left) co-edited the volume of biographical essays on women in physics and chemistry (foreground) to which BNLers Victoria McLane and Ernest Courant contributed chapters.



Give Donald Van Slyke Your Stamp of Approval

While he may be well known in the laboratory, Donald Dexter Van Slyke (1883-1971) is not exactly a household name — especially when compared to the late Elvis Presley. This is despite the fact that Van Slyke was one of the most prominent medical researchers who has ever lived, as well as BNL's first Assistant Director for Biology and Medicine.

But, just like Elvis, the likeness of Van Slyke could be found on a stamp — if there is enough popular demand.

On Van Slyke's behalf, a public letter-writing campaign has been launched by the American Association for Clinical Chemistry (AACC) — in an attempt to persuade the U.S. Postal Service to honor his memory along with that of Otto Folin (1867-1934), who was another pioneer of clinical chemistry. As noted by the AACC's Division on the History of Clinical Chemistry, "the government could do much to stimulate interest in science . . . by honoring American scientists on postage stamps."

According to BNL Historian Robert Crease, "Van Slyke was not only one of two or three leading figures in the application of analytical chemistry to the clinical practice of medicine, a development that revolutionized medicine in the first half of this century, but he was also the individual most responsible for shaping the direction of Brookhaven's early programs in the life sciences."

Donald Van Slyke was born March 29, 1883, in Pike, New York. After receiving his Ph.D. in chemistry from the University of Michigan in 1907, Van Slyke joined the staff of the Rockefeller Institute for Medical Research, which is now Rockefeller University. For six years, he worked on the chemistry of proteins and amino acids, and, building on this early research, Van Slyke later added hydroxylysine to the list of amino acids found in proteins.

In 1913, he became responsible for establishing a department of chemistry at the newly opened Rockefeller Hospital, a unique institution where patients were treated at no cost and studied exhaustively, and where physicians' research and clinical practice were merged.

Van Slyke rose to the dual chal-

lenge of research and clinical practice "in a revolutionary new way," notes Crease, "often by circumstance rather than premeditation, transferring techniques from chemistry to clinical medicine, or inventing quantitative chemical techniques out of sheer clinical necessity."

For instance, Van Slyke developed a method for measuring the amounts of various gases dissolved in the blood. For carbon dioxide dissolved in blood, this information was used to ward off diabetic coma in the days before insulin. Van Slyke also carried out investigations of protein metabolism, kidney function, oxygen transport, acid-base balance and the clearance of urea from the blood.

Crease concludes, "At that time, medical research was still largely a matter of qualitative observation, evaluation and treatment of symptoms. In his four decades at Rockefeller, Van Slyke and his group applied quantitative chemical methods to clinical practice — thus spearheading a fundamental revolution in the way medicine was conducted. The bible of this revolution was a book Van Slyke wrote with John Peters, entitled *Quantitative Clinical Chemistry*."

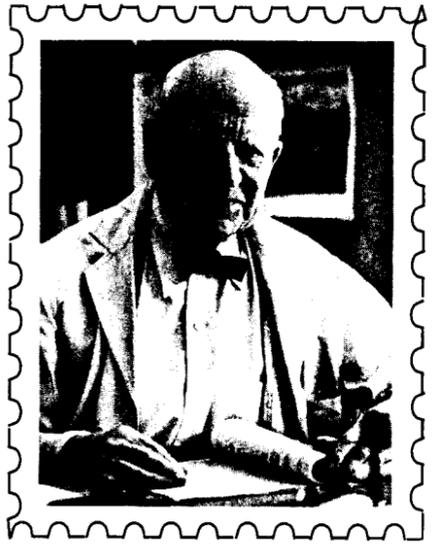
In 1948, a year after the founding of Brookhaven and about the time Van Slyke was retired from Rockefeller at the age of 65, he was recruited to

transfer the Rockefeller Hospital concept to Brookhaven. As a BNL Assistant Director until 1951, he was in charge of establishing both the Biology and Medical Departments, and the Medical Research Center under the auspices of the latter.

Comments Crease, "In certain respects, he was an anomaly among the founding figures, for he was not a young risk-taker, but a white-haired eminence past retirement age. In other respects, however, he fit right in to the Brookhaven climate, for he was skilled in forging interdisciplinary links both as a researcher and administrator."

With that accomplished, Van Slyke became a counselor for research grants at Eli Lilly Company, 1951-56, while remaining a guest investigator at BNL doing carbon-14 and collagen research. When he returned to the Lab full-time, Van Slyke came back as a senior scientist emeritus and, according to Crease, "continued to have an imposing presence at the Lab" until his death of cancer in May 1971, two months after his 88th birthday.

Since he has been deceased for nearly 23 years, Van Slyke passes one of the litmus tests to be pictured on a stamp: ". . . No postal item will be issued sooner than ten years after the individual's death. The only exception to the ten-year rule is the issuance of stamps honoring deceased U.S. presi-



Donald Van Slyke

dents . . ." explains Upton Postmaster Jeanine Fornsel, reading from the Citizens' Stamp Advisory Committee (CSAC) criteria.

Most stamp subjects are proposed to the U.S. Postal Service through letters written by the general public — and about 30,000 letters are received annually recommending stamp subjects and designs. As the letters come in, they are reviewed six times a year by the CSAC, which was established in 1957 to select subjects that are interesting and educational to recommend to the Postmaster General. Using 12 criteria to guide the committee's selection, they recommend about 25 to 30 new subjects for commemorative stamps each year.

It takes about three years after its suggestion for a new stamp to be issued. At that time, a U.S. Post Office in the country is usually selected to hold a first-day-of-issue ceremony. "So, if Van Slyke is selected to be the subject of a stamp, then perhaps the Upton Post Office could be the branch that first issues it," says Fornsel. Only time will tell — so keep sending those cards and letters.

Letters in support of a Van Slyke stamp or any other may be sent to: Citizens' Stamp Advisory Committee, Stamp Market Development Branch, U.S. Postal Service, 475 L'Enfant Plaza SW, Room 4474-E, Washington, D.C. 20260-6756. In deciding upon nominations, the Post Office counts number of letters, not their length or, in this case, scientific content.

— Marsha Belford

Remember: Precertify Hospital Stays

All active employees and those who retired after January 1992 and who have Connecticut General Medical Insurance coverage are reminded to obtain hospital precertification from Intracorp. This precertification is mandatory for a one-or-more-night's stay in the hospital, but not for ambulatory surgery, procedures for which patients are admitted to and released from the hospital in one day.

If an employee, retiree or family member fails to notify Intracorp regarding precertification or emergency hospital admission, medical insurance benefits will be reduced to cover only 50 percent of hospital expenses, with a maximum penalty of \$500.

For hospital preadmission certification, call Intracorp at (800) 772-3261 before admission to the hospital or within 48 hours of an emergency admission.

Expectant mothers must call Intracorp before the end of their first trimester to precertify their maternity hospital admission. They or a family member must also call within 48 hours following admission into the hospital for the delivery.

For a medical insurance ID card listing the Intracorp telephone number, or for more information, call Personnel Services, Ext. 2877.

time she continued her life's work of using photographic emulsions to track particle collisions and paths.

Unfortunately, the biographies of all BNL women physical scientists of note were not able to be included in the collection. The manuscript for a chapter on retired BNL Senior Physicist Gertrude Scharff-Goldhaber was not completed in time for the production deadline. However, her biography will be included in *Notable Twentieth-Century Scientists*, to be published by Gale Research in the fall.

Also in the collection is a profile of Isabella Karle, a renowned crystallographer at the Naval Research Laboratory in Washington, D.C., whose eldest daughter, Louise Hanson, is a chemist in BNL's Department of Applied Science. Among other honors, Karle recently received the Franklin Institute's 1993 Bower Award in Science, a highly prestigious award.

The reference book is edited by Louise Grinstein, Rose K. Rose and Miriam Rafailovich, currently a guest scientist at BNL and a professor at the State University of New York at Stony Brook. It contains the biographies of 75 women of science of the past three centuries.

In the forward, chemist Lilli Hornig writes: "These essays illustrate not only the outstanding qualities of mind and character displayed by these

women scientists but the great variety of the backgrounds and educational milieus that produced them, the human strengths and weaknesses they developed, and the scope of the researches they undertook. Women such as these enlarge our understanding of ourselves and give us reason to take pride in the heritage they leave to us."

In addition, Hornig notes, the book "opens to general view not only the life stories of these women but also the significant contributions to their disciplines that made them noteworthy. In particular, it should help disabuse the public, and especially students, of the popular notion that women scientists are a rare breed, that they are somehow different from women who achieve distinction in the arts or humanities or even in business."

—Kara Villamil

Amateur Radio

The next meeting of the Amateur Radio Club will take place in Room D, Berkner Hall, on Thursday, March 31, at noon. All Lab employees, guests and licensed amateur-radio operators are invited to attend. For more information, call Chris Neuberger, Ext. 4160, or Nick Franco, Ext. 5467.

In Memoriam

The following retirees passed away recently:

Agnes A. Romard, who retired from the Medical Department on August 6, 1971, as a research services assistant, died on January 26. She was 85 years old. Her almost 18-year career at BNL began on June 15, 1953, when she joined Medical as a laboratory assistant.

Salvatore Saule Jr., who was with the Lab for 35 years before retiring on December 31, 1982, died of heart failure on February 13, at the age of 76. He started on April 10, 1947, as a firefighter with the Architectural Planning & Plant Maintenance Department. At the time of his retirement, he was a scientific computer operator/shift supervisor with the Applied Mathematics Department.

Anthony LoCastro, who was a physician in the Occupational Medicine Clinic when he retired in January 1988, died on March 4, at the age of 72. He had started in the Medical Department on September 1, 1981, as an industrial physician.

John N. Brown, who spent almost 27 years with the Alternating Gradient Synchrotron (AGS) Department, died on March 7, at the age of 60. He started at the AGS on January 18, 1965, as an intermediate technician, and he was a technical associate II when he left the Lab on September 6, 1992.

History of Women (cont'd)

who is well known for her work in the field of nuclear structure. During the 1960s, she collaborated with BNL scientists as a guest physicist.

In the same volume appears a chapter saluting the career of Renate Chasman, a BNL physicist who died in 1977. Chasman was recognized worldwide during her career as an innovative designer of particle accelerators, and her works included a design used in the building of BNL's National Synchrotron Light Source.

Her daughter, Deborah Chasman, and AUI Distinguished Scientist emeritus Ernest Courant co-wrote the essay that details her experiences as one of the few women at the high levels of high energy physics in the 1960s and '70s. Every year, Brookhaven Women in Science honors Chasman's memory by awarding a scholarship to a reentry woman in her junior or senior year of a degree program in the natural sciences, engineering or mathematics.

Also featured in biographical profiles are: Leona Marshall Libby, a summer visiting physicist, at the Lab 1958-62, and a guest physicist, 1962-71, and Marietta Blau, an associate physicist at BNL, 1950-55, during which

ALARA Center to Co-Host Workshop

Although radiation exposures to workers at nuclear power plants, both in the U.S. and many other countries, have decreased over the last several years, even more needs to be done to keep exposures "as low as reasonably achievable" — a goal known as ALARA.

That is why the U.S. Nuclear Regulatory Commission and the ALARA Center of BNL's Department of Advanced Technology will jointly sponsor the Third International Workshop on "Implementation of ALARA at Nuclear Power Plants." To be held May 8-11 at the Radisson Hotel in Islandia, the workshop will address topics ranging from controlling radiation fields to robotics and remote handling. Some of the world's top scientists, engineers and managers in this field will participate.

The registration fee will be waived for BNL participants, but there will be a charge for meals. To register or for more information, contact Maria Beckman, Bldg. 703M, Ext. 3228.

Toastmasters Focus on Listening

The BNL Toastmasters will present a program on "How to Listen Effectively," on Tuesday, March 29, at 5:20 p.m., in the large conference room, Bldg. 475. All are invited.

To understand and be understood is a basic human need, requiring listening skills. This interactive workshop will focus on the techniques and dynamics of effective listening.

Ronnie Evans will lead this workshop, so, for more information, call her, Ext. 2851.

UNIX Training

Last chance to sign up for the next round of UNIX training: basic and advanced programming in the C language, to be given by Dave Kelly of Kelly Lloyd Associates.

The two courses will be held April 11-22, in the CCD seminar room, Bldg. 515, with the basic class from 8:30 a.m. to noon and the advanced class 1-4 p.m. The training fee is \$300 per person; registration is being accepted by Maria Gatz, Ext. 5196, Bldg. 515.

Note to Employees:

Attendance at lectures, meetings and other special programs held during normal working hours is subject to supervisory concurrence.

Equipment Demos

Radiation Electronics will present a tabletop display in Berkner Hall on Monday, March 28, from 10:30 a.m. to 2 p.m. Among the scheduled vendors will be Bancom, demonstrating GPS receivers, frequency and timing boards; Elma, with enclosures/backplanes, including VME, VXI, Sun, PC, Futurebus; Force, with VME SPARC, I/O, Development Systems; SKY, showing application accelerators and array processors; and VMIC, with VME analog and digital I/O, intelligent I/O controllers, reflective memory and host-computer interfaces.

On Wednesday, March 30, at 10 a.m. Hewlett-Packard (HP) will present its "Technology Roadmap and New Product Introduction." This includes announcements of low-cost RISC workstations and X-terminals, multimedia-ready workstations, PC/Mac software for HP systems and flat-panel displays. Technical representatives will discuss new technologies for computational growth, mass storage, graphics and middleware. The seminar will be held in the 2nd floor seminar room, Bldg. 515. For more details, call Ted Daniels, Ext. 5555.

BROOKHAVEN BULLETIN

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Country-Western Line Dance

Learn to line dance the country-western way, then join in the fun . . .



Date: Friday, April 8, 1994

Place: North Room,
Brookhaven Center
Brookhaven National Laboratory

Times:
• 7:00 to 8:00 p.m. —
Dance Instruction
by Country Kate

• 8:00 to midnight — Country-Western Line Dancing to the music of Swingin' Easy. Snacks provided; cash bar available.

Tickets: \$10 each; available in advance from:

Name	Bldg.	Phone
Patricia Durcan	460	282-5406
Sharon Jones	30	282-2493
Terri Lacker	750	282-2112
Harriet Martin	477	282-3484
Sue Monteleone	130	282-7235
Flo O'Brien	475B	282-4962

Sponsored by Brookhaven Women in Science and the

Upton Chapter of Professional Secretaries International

UNIX vs. Windows

An analytical comparison of UNIX system V release 4 and Windows NT will be given by Rinaldo DiGiorgio of SUN Microsystems at the next meeting of the UNIX committee of the Long Island Association for Computing Machinery, on Tuesday, March 29, at 6:30 p.m. in the Green Study Lounge in the student center at the Selden campus of Suffolk Community College. The speaker will be introduced by Bruce Martin of BNL's Relativistic Heavy Ion Collider Project. For more information, call Martin, Ext. 5647.

Daffodil Days

Again this year, BERA is selling daffodils at \$5 per bouquet to benefit the American Cancer Society. If you didn't pick up a bouquet yesterday, whether or not you made a reservation, stop by the BERA Sales Office 11:30 a.m.-1:30 p.m., today, Friday, March 25, while supplies last. For more information, call Andrea Dehler, Ext. 3347.

IBEW Meeting

Local 2230, I.B.E.W., will hold its regular monthly meeting on Monday, March 28, at 6 p.m., in the Knights of Columbus Hall, Railroad Avenue, Patchogue. The agenda includes regular business, committee reports and the president's report.

Service Awards

The following employees celebrated their BNL service anniversaries during the month of March:

40 Years	
James B. Cumming	Chemistry
35 Years	
Nicholas P. Samios	Dir. Off.
30 Years	
Pierre Stillman	AGS
Ignatius N. Tang	App. Science
John C. Walker	AGS
Wen-Shi Yu	Adv. Tech.
20 Years	
Ruby W. Fajer	App. Science
Laurence S. Littenberg	Physics
Yasuko Sanborn	Adv. Tech.
Peter R. Stolz	Plant Eng.
10 Years	
Linda E. Greves	SEP
Ramesh C. Gupta	RHIC
Harold J. Heffert	Plant Eng.
Barbara A. Kponou	Adv. Tech.
Richard Lagattolla	SEP
Michael J. O'Brien	SEP
Stephen M. Perlstein	AGS
Thomas Russo	AGS
Thomas E. Ward	Adv. Tech.
Christopher Watts	AGS

1994 Mets Tickets — Lottery Coming Up

BERA has again purchased a limited number of Mets tickets for weekend home-games, which will be offered to BNL employees by lottery. Two or four seats are available per game, and no single seats will be sold.

To enter the ticket lottery, leave your name, life or guest number, number of tickets requested and phone number with Andrea Dehler in the BERA Sales Office, Ext. 3347, by Friday, April 1. The BERA Executive Board will hold the drawing at 2 p.m. the same day.

On Friday, April 8, at 11:30 a.m., tickets will be distributed in the order determined by the lottery. You must be present when your name and number are called to have your choice of games, dates, etc. If you cannot be at the ticket claim, you must designate someone else to be there for you, or your request will not be honored.

Tickets will be \$15 each, and the list of available tickets and dates is at the BERA Sales Office. If you have questions, call Dehler, Ext. 3347.

WalkAmerica Team to Walk Again

Celebrate the 24th March of Dimes WalkAmerica for Healthier Babies by joining the BNL-BERA team of walkers on Sunday, April 24. Funds raised by WalkAmerica will help support efforts to reduce infant mortality.

To join the team, pick up a WalkAmerica sponsor sheet at the BERA Sales Office in Berkner Hall, weekdays from 9 a.m. to 1:30 p.m., or at the Recreation Office, Bldg. 185. If you have walked in the past and received a sponsor sheet directly from the March of Dimes, call Recreation Supervisor M. Kay Dellimore, Ext. 2873, for additional BNL information. If you have any other questions, call Dellimore or Andrea Dehler, Ext. 3347.

Healthline: Update on Osteoporosis

Most common in women, osteoporosis is a disease that accelerates the natural loss of bone mass that accompanies aging. As a result of the disease, bones can become so porous and fragile that they may fracture spontaneously or break from minor trauma.

While at present there is no way to restore demineralized bone, the loss of bone can be slowed in post-menopausal women and prevented in premenopausal females, especially those under 35 years of age.

Physician Ashok Vaswani will present the latest information on the prevention and management of this condition when he talks on "Osteoporosis — A Medical Update." Sponsored by the Health Promotion Program (HPP) of the Occupational Medicine Clinic, the talk will take place on Monday, March 28, from noon to 1 p.m. in Berkner Hall.

A BNL research collaborator in the Medical Department doing research on osteoporosis, Ashok Vaswani, M.D., is the Director of Medical Research and Associate Director of the Division of Endocrinology & Metabolism at Winthrop-University Hospital in Mineola. A consulting editor for the *Journal of the American College of Nutrition*, he has published widely in the fields of nutrition, obesity, body composition and osteoporosis.

To register, return the bottom portion of the Healthline flyer recently sent to all employees to Health Promotion Specialist Mary Wood, Bldg. 490, by the end of the day today. For more information, call Ext. 5923.

New Pool Season

The new three-month season at the BNL swimming pool is Friday, April 1, to Thursday, June 30. Purchase tickets at the pool during open hours:

Open Hours*

• **Monday through Friday**
11 a.m. - 1:30 p.m. employees only
1:30 - 2 p.m. reserved for speed swimming and training
5 - 9 p.m. employees, families & guests**

• **Saturday and Sunday**
1 - 5 p.m. employees, families & guests**
*The pool is closed on all Lab holidays, and it will be closed on Easter Sunday, April 3.

Fee Schedule

• **Daily Admission**
Employee or family member \$2.00
Guest** \$3.00
• **Season ticket (fees not prorated)**
Individual \$40.00
Family \$50.00

**Guest ruling for all recreation facilities: One guest per employee permitted. Advance arrangements for additional guests, up to a maximum of five at one time, must be made at the Recreation Office, Personnel Division, Bldg. 185. Guests must be accompanied by the sponsoring employee.

Winners' Circle

Employees with ideas for enhancing Lab safety or saving BNL money in areas outside their own job responsibilities should consider submitting their suggestions to the Employee Suggestion Program (ESP). ESP forms are available in department and division offices and through Personnel, Bldg. 185. An original idea could win 10 percent of the estimated savings, up to a maximum of \$10,000.

Congratulations to the following BNLer who has entered the ESP winners' circle:

Stephen Musolino, assistant to the RHIC Project Head, suggested that BNL travelers who opt to park their cars at LaGuardia Airport would find parking at National Car Rental a safe, less expensive alternative to airport parking, since National charges \$12.09 per day, compared to the airport fee of \$18 per day. Though most BNL travelers prefer to use limousine service to and from LaGuardia, this suggestion could represent a savings for those who prefer their own vehicles, so Musolino was awarded \$25.

Arrivals & Departures

Arrivals

Sahlu Ayalew Biology
Steven K. Sprengel SEP

Departures

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

Ernst P. Lindevald Cen. Shops
Iliia Vassiliev App. Science

Basketball

Games of March 17

Scram 70		Deep Six 50	
Al Boerner	21	Brian Hobson	14
Steve Nappi	18	Charles Kirkland	14
Steve Coleman	10	Neil Tyler	12
Tim Powers	6	Dwayne Eleazer	5
John Skonieczny	6	Ulysses Tapley	5
Ken Johnson	4		
John Duggan	3		
Alan Jones	2		

Three-point shots: Hobson (3)

Runaways 68		Knicks 58	
Wayne Cummings	15	Greg Mack	26
Pete Ratzke	14	Rich Domenech	10
Lars Furenlid	10	Ed Gregory	10
Ed Meier	10	Dan Delgado	7
Gerry Shepherd	9	Al Langhorn	5
Jim Desmond	4		
Jerry Gaeta	3		
Bob Wells	3		

Three-point shots: Domenech (2), Gaeta, Gregory, Shepherd.

Cafeteria Menu

Monday, March 28

Soup: Beef barley	.80/1.10
A la Carte: Cod & beurre blanc	3.55
Fitness: Ratatouille calzone	2.75
Deli: Pastrami	2.95
Grill: Reuben platter	2.95

Tuesday, March 29

Soup: Chicken & rice	.80/1.10
A la Carte: Veal Parmesan	3.75
Fitness: Grilled veggie tart	3.35
Deli: Hot Virginia ham	2.95
Grill: Lamb kabobs	2.95

Wednesday, March 30

Soup: Cream of broccoli	.80/1.10
A la Carte: Veggie au gratin	2.95
Fitness: Fruit-stuffed pork loin	4.25
Deli: Hot roast beef au jus	2.95
Grill: Monte Cristo	2.95

Thursday, March 31

Soup: Black bean	.80/1.10
A la Carte: Braised short ribs	4.25
Fitness: Southwest-style grilled chicken	3.50
Deli: Turkey w/giblet gravy	2.95
Grill: Philly cheesesteak	2.95

Friday, April 1

Soup: Mussel stew	.80/1.10
A la carte: Display cooking of pasta	
Fitness: Flounder Juliane	3.55
Deli: Hot corned beef	2.95
Grill: Tuna Melt	2.95

Deli, burger and other specials daily.

Phys Rev Opening

The American Physical Society (APS) is seeking a Ph.D. scientist with a broad interest in physics for an immediate, permanent editorial position with *Physical Review D*. Will assist in all phases of selection of manuscripts for publication. Excellent written and verbal communications skills are essential, as is a basic understanding of the working scientist's expectation of the editorial process. Postdoctoral research experience is desirable. APS is primarily seeking candidates with backgrounds in high energy physics or gravitation and cosmology. Send cover letter and resume, including references, current salary and requirements, to Joseph Ignacio, Personnel Manager, APS, 1 Research Road, Box 1000, Ridge, NY 11961, or E-mail, personnl@aps.org. APS is an equal opportunity employer.

Classified Advertisements

Placement Notices

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

Each week, the Personnel Division lists new placement notices. The purpose of these listings is, first, to give employees an opportunity to request consideration for themselves through Personnel, and second, for general recruiting under open recruitment. Because of the priority policy stated above, each listing does not necessarily represent an opportunity for all people.

Except when operational needs require otherwise, positions will be open for one week after publication.

For more information, contact the Employment Manager, Ext. 2882, or call the JOBLINE, Ext. 7744 (282-7744), for a complete listing of all openings.

SCIENTIFIC RECRUITMENT - Doctorate normally required. Candidates may apply directly to the department representative named.

POSTDOCTORAL RESEARCH ASSOCIATE - Trained in physics, in particular IR, VIS and UV spectroscopies including Raman, resonance Raman and fluorescence, and low-level signal-detection techniques. Responsibilities will include the development of on-

site and remote-sensing optical techniques for proliferation detection and environmental monitoring. Contact: Carl Chen, Department of Advanced Technology.

LABORATORY RECRUITMENT - Opportunities for Laboratory employees.

NS 2388. RESIDENCE CUSTODIANS - (temporary o/a 5/2/94 to 9/30/94) Staff Services Division.

MK 2389. MAIL CLERK - (temporary o/a 5/9/94 to 9/9/94) Must have valid NYS drivers license. Staff Services Division.

OPEN RECRUITMENT - Opportunities for Laboratory employees and outside candidates.

LS 5542. PROGRAMMING/ANALYST POSITION - Requires a BS or BE in computer engineering, computer science or equivalent, with several years' experience in networks based on TCP/IP, DECnet, OSI, Novell and AppleTalk. Experience in UNIX, VMS, operating systems, C programming language, and FDDI is highly desirable. Responsibilities include supporting computer networking throughout the Laboratory. Computing & Communications Division.

LS 2563. ENGINEERING POSITION - Requires a bachelor's degree in engineering or business or equivalent, with several years' experience in cost-and-schedule control for major programs. Excellent oral and written communication skills, knowledge of personal computers, project management software (Primavera, Time Line, etc.) and spreadsheet software is also required. Experience in CERCLA/RCRA environmental programs is highly desirable. Office of Environmental Restoration.

NS 2752. GENERAL SUPERVISOR, OPERATIONS - Requires a bachelor's degree in mechanical engineering or equivalent and significant supervisory experience. Responsibilities include control and operation of the Laboratory's mechanical utilities (water, sewage, steam generation, chilled water), environmental oversight, engineering support and technical assistance to first-line supervisors. A strong environmental background with knowledge of RCRA, TOSCA, SPEDES is highly desirable. Must have or be able to obtain a NYS IA Water Treatment Plant and a III-B Sewage Treatment Plant operating certificate. Plant Engineering Division.

Motor Vehicles & Supplies

92 CAVALIER - 16k mi., a/t, ac, anti-lock brakes, am/fm cass., transferrable warr. John, 821-6587.

91 ACURA INTEGRA LS - a/t, ac, p/w, p/m, p/moon-roof, am/fm cass., alarm, warr., 28k m., excel. cond., asking \$11,500. Mike M., Ext. 4987.

90 FORD MUSTANG 5.0 LX - 26k mi., 6/60k warr., alarm, leather int., new tires, \$8,400 neg. 696-6320.

90 FORD MUSTANG GT - red, a/t, 46k mi., good cond., \$8,500. Jim, 878-6747 after 6 p.m.

90 NISSAN SENTRA XE - 2-dr., am/fm cass., ac, good cond., \$5,000. Akiba, Ext. 3891.

88 FORD ESCORT - 2-dr., ac, 63k mi., v.g. cond., must sell, asking \$2,000. Ramesh, Ext. 3267.

88 VW FOX WAGON - 2-dr., ac, 4-spd. m/t, am/fm cass., 68k mi., excel. cond., \$3,200. Vic, Ext. 7016 or 543-7674.

88 NISSAN MAXIMA - 4-dr., all power, ac, am/fm cass., excel. cond., \$5,200. Steve, Ext. 7936.

87 HONDA CIVIC - 2-dr., 4-spd., new battery & muffler, runs well, \$1,200 neg. Tomo, Ext. 4357.

87 HYUNDAI EXCEL - 2-dr. h/b, blue, 4-spd., m/t, 60k mi., \$1,100. Zoltan, Ext. 5341 or 341-1021 eves.

87 SUBARU WAGON - 4wd, new a/t, ac, 107k mi., good cond., maint. records, \$2,500 firm. Doug, Ext. 3680 or 744-1760.

86 FORD F250 TRUCK - heavy-duty, utility body, p/s, p/b, a/t, 32k mi., excel. cond., \$6,500. Pam, Ext. 7286 or 581-7656.

86 MITSUBISHI MIRAGE L - 5-spd. h/b, am/fm cass., eng. needs work, \$300 neg.; '82 Mazda GLC, h/b, 98k mi., a/t, \$1,000 neg. Ajit, Ext. 5427 or 331-9849.

86 CHEVY MONTE CARLO - Super Sport, red, T-top, new brakes, tires, \$5,500. Pete, Ext. 5105 or John, 737-9614 after 6 p.m.

86 OLDS FIRENZA - 2-dr., two-tone blue, \$1,195 or best offer. Linda, Ext. 7187 or 722-3938.

86 SABLE WAGON - 125k mi., V-6, all power, v.g. cond. Joe, Ext. 3034.

85 OLDSMOBILE CUTLASS SUPREME - 2-dr., ac, p/s, p/b, new tires, 70k mi., good cond., \$2,800. 929-4734.

85 PLYMOUTH RELIANT WAGON - a/t, 92k mi., good cond., \$1,000. Serban, Ext. 3721.

84 VW VAN - 130k mi., new tires & windshield, seats 7, m/t, good instrumentation, \$1,450. Chu, Ext. 2389 or 751-1224.

84 DODGE COLT - new tires, battery, 81k mi., good station car, \$450. Carl, Ext. 4986 or 929-5781.

84 NISSAN 300ZX - T-top, vibrating seats, p/s, good cond., engine needs some work. Jackie, Ext. 3671.

84 OLDS CUTLASS SUPREME - 4-dr., 3.8L, V-6, p/s, p/b, blue w/blue int., \$1,700. Anthony, 821-6976 after 6 p.m.

84 NISSAN 300ZX - white, turbo, wiring problems, motor runs well, needs body work, \$700; '81 BMW 318i, white, m/t, 80k mi., \$2,700. Malry, Ext. 4100.

83 CADILLAC ELDORADO BIARRITZ - good cond., needs engine work, best offer. Jerry, Ext. 2907.

83 DODGE ARIES - fm stereo, ac. \$275. Art, Ext. 4924.

83 NOMAD CAMPER - 21', sleeps 6, self-cont., awning, ac, mint, \$4,500. Bill, Ext. 4140.

82 MAXIMA WAGON - all power, runs well, \$450. Johnson, 874-8826.

80 CHEVY STEP VAN - all alum., 12' body, a/t, \$4,000. 929-5872 after 6 p.m.

73 VW bug - no rust, new eng., & trans., needs seat covers, \$1,500. Johnson, 874-8826.

69 MUSTANG CONVERTIBLE - 302c.i., a/t, p/s, p/b, ac, runs, needs work, asking \$900. Steve, Ext. 4627 or 928-6469.

VIKING PICKUP TRUCK CAMPER - small, loaded, sleeps 4, fully self-cont., Falkner awning, excel. cond., asking \$2,900 neg. 924-0629.

PARTS - Nissan 5-spd., transaxle, \$200; Chrysler 318 Edelbrock Streetperformer intake, \$75; Holly 600 c.f.m. carb. \$65. Pam, 698-0596.

The Brookhaven Bulletin is printed on paper containing at least 50 percent recycled materials, with 10 percent post-consumer waste.



CAP - for small pickup, alum., \$50. Joe, Ext. 4986.

HOLLY CARBURETOR - 4-bbl, 750 double pumper w/chrome pipe, asking \$125. Bill, Ext. 2214.

INTAKE MANIFOLD - 2, 4-bbl carb. from 302 Ford, \$40; 2 carbs. from 318 Dodge, 2/\$10; Dodge P.S. pump, \$5. Steve, Ext. 4627.

ROOF RACKS - for van, heavy-duty for comm. use, gutter-clamp mtgs., \$40 neg. Bill, 821-6498.

TIRES - 2, brand-new, B.F. Goodrich radial all-terrain T/A LT235/75R15, 2/\$150. Richard, Ext. 4030.

TIRE RIMS - for Volkswagen Rabbit, 13", 4 lugs, 4 rims, \$100. Anthony, 821-6976 after 6 p.m.

TIRES - 4, Firestone 721, w/w, 75-215-14, 10k left on tread, excel. cond., good spares, \$7.50 ea. or \$25/all. 475-8678 after 6 p.m.

Boats & Marine Supplies

23' 4 WINNS - 1986, 230-h.p. Merc i/o, extras, excel. cond., trailer optional, \$8,900. Charlie, Ext. 2407.

16 1/2' CANOE - fg, \$250; 17' McGregor Venture sailboat, free. Bob, Ext. 4630 or 874-4184.

OUTBOARD - 1990, 25-h.p. Mariner, new prop., long shaft, low hrs., excel. cond., 821-1525.

Furnishings & Appliances

BED - queen-size, platform w/drawer underneath, mattress, \$100 or best offer. 929-4886 after 5 p.m.

BEDROOM SET - girl's, white wood, desk, w/hutch, chair, dresser w/mirror, headboard, \$150; walnut china closet, w/4 chairs, \$75. Doug, Ext. 4661.

CARD TABLE - folding, wooden, \$20; playpen, \$25; vacuum, \$50; car seat, \$20; antique rocker, \$200. Kathy, 744-2203.

COUCH & LOVE SEAT - neutral color, velour, excel. cond., \$350. 472-2581.

COUCH - pull-out, excel. cond., high back, colonial, dark brown. 289-8105.

COUCH - green, 42"L, mint, 2 yrs. old, \$300. 584-7672.

DRESSER - 6 drawers, medium wood finish, \$20. Judy, 924-7077 eves or weekends.

ROCKING CHAIR - natural wood finish, excel. cond., \$200. Donna, Ext. 2716.

FREEZER - Sears Cold Spot, 4' chest, works well, white, \$50. Jerry, Ext. 2907.

GAS RANGE - 30", green, bottled gas, good cond., \$50. 924-6751.

KITCHEN TABLE - almond w/leaf, 6 cloth rolling chairs, excel. cond., orig. \$700, sell for \$325. Tammy, 924-2035.

Tools, House & Garden

POOL PUMP - 3/4 h.p., w/25 gal. s/s tank, v.g. cond., \$30. Bill, 281-6498.

TORQUE WRENCH - Craftsman, brand-new, \$15. Pam, 698-0596.

Sports, Hobbies & Pets

AQUARIUM - 30-gal., complete w/fish, \$70. Sue, 878-5917.

BIKE - men's, Lotus Exclla, 12-spd., 27", ultra light-weight, rare, \$500. Ron, Ext. 2214.

BIRD CAGE - matching stand, for large birds, new, \$100. Joe, Ext. 4567.

DOG KENNEL - w/house, 8'x16'x6'H, w/gate, \$150. Bill, Ext. 4140.

DRUMS - 5-piece, CB700, Blue HiHat cymbal, w/ chrome snare, v.g. cond., \$325. Donna, Ext. 2818 or 929-0613.

EXERCYCLE - like new, dual action, \$50. Steve, Ext. 4627 or 928-6469.

EXERCYCLE - excel. cond., \$60. Sally, Ext. 3854.

FLUTE - Yamaha, silver tip, open-hole keys, b-foot, \$250. Judy, 929-5781.

GOLF CLUBS - Wilson Pro staff, 3-9 irons, pitching wedge, \$100. Charlie, Ext. 2407.

INSTRUMENTS - five 2-valve soprano horns, 2 baritone for drum corp. use. 472-1302.

LACROSSE STICK - STX Dominator, 1 yr. old, hardly used, great cond., asking \$60. Alex, 929-5945.

Audio, Video & Computer

COMPUTER - IBM, 386 turbo card, 2 FDD HD, 1 meg RAM, color mon., software, \$200. Chris, Ext. 2326.

COMPUTER - Commodore 128, Sanyo color mon., Brother thermo printer, some disks, \$300. Bill, Ext. 4140.

NINTENDO SUPER NES - 2 control pads, 3 game cartridges, stereo hookup, hardly used, \$150/all. Emil, Ext. 4289.

SEGA SYSTEM - plus 4 game cartridges, \$100. Chris, 399-1995.

STEREO - small, \$50; end table, \$25; slipcovered chair, \$50. 584-7672.

VCR - Toshiba, \$50. Ramesh, 3267.

Miscellaneous

CASH REGISTER - National, mechanical, model 21, excel. cond., \$50. Tom, Ext. 4507 or 878-1060.

PLAYPEN - Century, \$45; Fisher Price bathtub, \$5; Sesame Street play gym, \$5; Quartz heater, \$25. Chris, 744-6874.

TICKETS - before 5/31, NYC to Beijing, \$1,150, Shanghai via Moscow, \$1,100, one-year round trip. K. Zhao, Ext. 3983 or 744-2122.

Free

TURTLES - 1 red-eared Slider and 1 Mississippi map. Maria, 924-3756.

Car Pools

BOHEMIA/E. ISLIP/OAKDALE - looking for 1 or 2 drivers for existing car pool. Frank, Ext. 2314.

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 Rent

BROOKHAVEN HAMLET - room with complete use of large house, 10 min. from Lab, cable, w/d, on 1 acre, \$350/mo. includes all. Sidney, 286-4028.

CENTER MORICHES S. - 3-bdrm. older home, 1 1/2 baths, huge l/r, fd/r, eik, gar., full bsmt., porches, all appl., fenced yard, walk to shops, water, \$1,000/mo. Anna, 878-6760, or Nick, Ext. 4979.

RIDGE - 3-bdrm. townhouse, 1 1/2 baths, all appl., fenced, patio, 5 min. to Lab, \$900/mo. + 1 mo. sec. Ray, 331-9700.

RIDGE - 4 bdrm., l/r, d/r, bsmt., deck, 2-car gar., big yard, 12 min. to Lab, 5 min. walk to Lake Panomoka, \$900/mo. Bob, 929-4777.

RIDGE - 2-bdrm. condo, appl., \$675/mo. + util. 474-0503 eves.

SHIRLEY - 1 bdrm., waterfront property, eik, l/r, full bath, fp, priv. ent., parking, furn., 1 mo. sec., \$650/mo. Matthew, 399-2989.

SHIRLEY - 3 bdrm., l/r, d/r, eik, laundry, new w/w, oil/hot water, fenced-in yard, 1 mi. to Smith Point Bridge, \$850/mo. + util. 744-5448.

SHOREHAM - studio apt., priv. ent., single non-smoker, no pets, ref. req., \$525/mo. incl. all util. & cable. 744-2095 after 6:30.

SOUND BEACH - 2-bdrm. apt., bath, l/r, eik, near all, \$650/mo. + elec., sec.; also large l/r-bdrm. combo, eik, full bath, \$600/mo. + elec. & sec. 744-3284.

WADING RIVER - 2 rooms in a 4-bdrm., 3-bath contemp., on private cul-de-sac, 10 min. to Lab, no smoking or pets, \$400/mo. incl. all except phone & laundry. Bob, 929-3409.

HILTON HEAD, SC - 2-bdrm. condo, sleeps 6, 2 baths, beach, tennis, golf nearby, \$300 Jan.-March. Guy, Ext. 3147 or 689-5378.

For Sale

CALVERTON - 3-bdrm. ranch, 1 bath, 60'x130' fenced yard, new well, new shed, new roof, 1-car gar., 5 mi. from BNL, \$105,000. Ken, Ext. 2012.

CENTER MORICHES - 4-bdrm. Colonial, l/r w/tp, d/r, eik, full bsmt., TV/laundry, 1.5 baths, oil heat, att. gar., town water, near all, 10 mi. to Lab, \$165,000. Marilyn, Ext. 2259 or 878-0939.

EAST MORICHES - 3-bdrm. ranch, att. gar., fenced yard, skylight, newly landscaped, \$129,000 neg. Johnson, 878-9352.

HOLTSVILLE - 2-bdrm. ranch, l/r, fp,