



Norman Sutin, Past BNL Chemistry Chair, **Honored for Scientific Contributions**



orman Sutin, who joined BNL's Chemistry Department in 1956 to start a long and distinguished career in electron transfer chemistry and transition-metal photo-chemistry, has been honored with a special Festschrift issue of The Journal of Physical *Chemistry B* [111 (24), 6593 -6968, 2007] on his work and its impact.

Sutin's contributions initially focused on understanding the fundamental mechanism of electron-transfer reactions between inorganic complexes but have been widely extended to include investigations of mixedvalence systems, biological electron transfer, and, recent-

ly, interfacial charge transfer. Sutin's study of fast reactions resulted in the development and improvement of experimental techniques on increasingly faster time scales, and among numerous other achievements, he pioneered the use of laser flash photolysis in the study of inorganic reactions. His studies of excited-state electron transfer reactions included his

developing the methods needed to distinguish between energy- and chargetransfer mechanisms and provided many of the basic ideas needed for solar energy conversion, and he played a leading role in developing schemes to use solar energy to split water or reduce carbon dioxide.

At BNL, Sutin was named a senior chemist in 1966 and served as Chemistry Department Chair 1988-95. He retired in 2001, and is now a Chemistry scientific consultant. His research, which was honored with the Lab's Distinguished R&D Award in 1996, had previously been recognized with several national awards and his election to both the American Academy of Arts and Sciences and the National Academy of Sciences.

— Liz Seubert

BNL Wins Awards for Pollution Prevention, **Promoting Environmental Stewardship**

BNL has won two awards for pollution prevention and promoting environmental stewardship: DOE's Pollution Prevention Star Award and the White House Closing the Circle Award. The awards were presented to the Lab in Washington, D.C., on June 7 and June 12, respectively.

"Brookhaven Lab has received accolades from our regulators, from DOE, and now from the White House for our environmental management system, which sets up rigorous performance measures to ensure environmentally responsible operations. Just as we are proud of our worldclass science, we are proud of our accomplishments in the environmental area," said Robert Lee of the Environmental & Waste Management Services Division.

The Lab has been a leader among DOE laboratories in developing and implementing a certified environmental management system. In 2001, BNL achieved ISO 14001 registration for its entire site, becoming the first national laboratory to obtain third-party registration to the International Organization for Standardization's globally recognized environmental standard. ISO 14001 requires an organization to identify potential environmental impacts and establish controls needed to minimize impacts, to monitor and communicate environmental performance, and to establish a formal process for continually improving the system. To improve its environmental stewardship, BNL has voluntarily participated in several environmental programs, including the U.S. Environmental Protection Agency's (EPA) National Performance Track Program, the National Partnership for Environmental Priorities, the Federal Electronics Reuse and Recycling Program, the EPA Mercury Challenge, and the Federal Electronics Challenge.

Brookhaven Linac Isotope Producer, which produces radiopharmaceuticals Recovery of 42 acres on-site for restoration as viable forest from building demolitions and prescribed burns, which opens up forest floor for new growth

101,400 pounds of electronics recycled (during 2006)

The Lab has a long history of pollution prevention successes and has received numerous DOE Pollution Prevention Awards. In 2004, BNL, with other laboratories managed by Battelle, received the White House Closing the Circle Award for leadership in environmental stewardship and support of environmental management systems. In addition, BNL won the 2004 Long Island Pine Barrens Environmental Stewardship Award and the 2006 National Partnership for Environmental Priorities Achievement Award.

The Lab is routinely requested to share its successes in pollution prevention and participation in voluntary environmental initiatives. For example, the EPA has asked BNL environmental experts to speak on its environmental management system as it applies to analytical laboratories in private industry, and the Lab has

New Method Invented For Improving Radiation Detectors



Three of the four inventors of a new way to improve performance of existing radiation detectors: Yong-gang Cui (seated), Ralph James, and Aleksey Bolotnikov (right), are seen at beamline X17B at the National Synchrotron Light Source, where they did their research. Fourth inventor Giuseppe Camarda is not present.

cientists at BNL, with funding from DOE's National Nuclear Security Administration, have devised ways to improve the performance of radiation detectors such as those used by law enforcement agencies to locate and identify radioactive material.

The improved sensors, for which the Lab has filed a U.S. provisional patent application, can be used at room temperature. This makes them more practical and cost-effective than existing detectors with similar performance, which must be operated at very cold temperatures using expensive liquid nitrogen. The sensors can also more accurately detect the x-rays and gamma rays emitted by radiological sources such as dirty bombs and other illicit materials.

"Improving the performance of existing radiation detectors could improve the efficiency and accuracy of cargo screening at U.S. ports," said physicist Aleksey Bolotnikov of the Nonproliferation & National Security Department (NNS), one of the inventors. Co-inventors on the patent are: Giuseppe Camarda, Yong-gang Cui, both of NNS, and Ralph James, Energy, Environment, & National Security Directorate.

Radiation detectors work by detecting electrons and "holes" - vacancies left by liberated electrons — when ionizing radiation or high-energy particles strike the detector crystal. When the free electrons and holes flow toward electrodes (an anode and a cathode) at either end of the detector, they generate a signal that can be measured and recorded

cess would arrive at the electrodes. But in reality, holes travel a very short distance before getting trapped by defects in the crystal. Also, because the electrostatic field inside the detector causes some of the electrons to drift, not all of them arrive at the anode. These losses lead to a subsequent inaccuracy in radiation measurements.

The BNL-designed sensors improve on this situation by combining methods to shield the detector and focus the electrons toward the anode. In addition, the electrodes at each end of the detector give information about how many electrons/holes get trapped. This "correction factor" can then be used to reconstruct the number of electrons/holes originally created by incident gamma rays or highenergy particles.

"Together, these techniques enhance the energy resolution and efficiency of these detectors. In practical terms it means that the improved devices will be able to detect more minute quantities of radiation, detect radioactive materials more quickly or from greater distances, better identify the source of the radiation, and distinguish illicit sources of concern from common naturally occurring radioactive materials," Bolotnikov said.

The patent application covers the improved high-energy detectors, as well as methods for making and using them. Details of the electrode design and processing methods are also included.

This technology is now available for licensing. For licensing information, contact: Principal Licensing Specialist In an ideal detector, all the electrons Kimberley Elcess, (631) 344-4151, elcess@bnl.gov. — Karen McNulty Walsh

From 2003 to 2006, the Lab has achieved significant benefits through participation in programs including:

- 40 percent reduction in the site-wide inventory of mercury
- 90 percent reduction in the on-site inventory of PCBs
- 35-ton reduction in ozone-depleting substances, such as refrigerants
- 34 percent reduction in atmospheric emission of radionuclides from the

the EPA in its recruitment efforts to attract new facilities to its Performance Track program, which recognizes environmental performance among U.S. participating facilities. In 2005, the Lab participated in developing the New York State Department of Environmental Conservation's **Environmental Leaders** Program. In addition to reporting routinely its environmental status

to DOE, BNL regularly

gives presentations on

its environmental man-

agement system chal-

lenges and successes to

the local community as

well as to local, county

- Diane Greenberg

and state regulators.

and holes created by the ionization pro-



BNL employees who helped the Lab to attain DOE's Pollution Prevention Star Award and the White House Closing the Circle Award are: (from left) John Taylor, Basic Energy Sciences Directorate; Ed Murphy, Plant Engineering Division; Deborah Bauer, Environmental & Waste Management Services Division (EWMS); George Goode, EWMS; John Selva, EWMS; Walter Shaffer, Collider-Accelerator Department (C-A); Peter Pohlot, EWMS; Joel Scott, C-A; Melvin Van Essendelft, EWMS; Anna Bou, Mark Davis, Leo Palumbo, Steve Ferrone, Keith Klaus, and Bob Lee, all of EWMS.

The Bulletin

CALENDAR

OF LABORATORY EVENTS

- The BERA Store in Berkner Hall is open weekdays from 9 a.m. to 3 p.m. For more information on BERA events, contact Andrea Dehler, Ext. 3347, or Christine Carter, Ext. 2873.
- Additional information for Hospitality Committee events may be found at the Lollipop House and the laundry in the apartment area
- The Recreation Building #317 (Rec. Hall) is located in the apartment area.
- Contact names are provided for most events for more information.
- Events flagged with an asterisk (*) have an accompanying story in this week's Bulletin.

- EACH WEEK -

Weekdays: Free English for Speakers **Of Other Languages Classes**

Beginner, Intermediate, Advanced classes. Various times. All are wel-come. Learn English, make friends. See www.bnl.gov/esol/schedule. html for schedule. Jen Lynch, Ext. 4894.

Mondays: BNL Social & Cultural Club Noon-1 p.m., Brookhaven Center, South Room, free beginners dance lessons. Rudy Alforque, Ext. 4733, alforque@bnl.gov.

Mondays: Pilates

Will resume in September.

Mondays: Jiu Jitsu Club

6-7:30 p.m. B'haven Center. All levels, ages 6 & up. \$10/class. Ext. 4556.

Mondays & Thursdays: Kickboxing \$5 per class. Noon-1 p.m. in the gym. Registration is required. Christine Carter, Ext. 5090.

Mon., Tue. & Thu: Ving Tsun Kung Fu Noon-1 p.m., B'haven Center, North Room. Taught by Master William Moy. Scott Bradley, Ext. 5745, bradley@bnl.gov.

Mon., Thurs., & Fri.: Tai Chi Noon-1 p.m., B'haven Center N. Rm. Adam Rusek, Ext. 5830, rusek@bnl.gov.

Tues, & Thurs: Jazzercise Will resume in September.

Tuesday & Thursday: Aerobic Fitness Will resume in September Tuesday & Thursday: Aqua Aerobics Will resume in Septembe **Tuesdays: Welcome Coffee**

Will resume in September. Tuesdays: BNL Music Club Noon, B'haven Center, North Room. Come hear live music. Joe Vignola, Ext. 3846.

Tuesdays: Toastmasters

1st and 3rd Tuesday of each month, 5:30 p.m., Bldg. 463, Room 160. Guests, visitors always welcome. www. bnl.gov/bera/activities/toastmstrs/.

Tue., Wed. & Thu: Rec Hall Activities 5:30-9:30 p.m. General activities, TV, ping pong, chess, games, socializing. Christine Carter, Ext. 5090.

Wednesdays: On-Site Play Group

10 a.m.-noon. An infant/toddler dropin event. Parents meet while children play. During July and August, the group meets informally at the playground in the apt. area.

Wednesdays: Ballroom Dance Class-Will resume in September.

Wednesdays: Weight Watchers Noon-1 p.m. Michael Thorn, Ext. 8612.

Wednesdays: Yoga

Noon-1 p.m., B'haven Center. Free. Ila Campbell, Ext. 2206, ila@bnl.gov.

Thursdays: Reiki Healing Class Noon-1 p.m., Bldg. 211 Conference Rm. Nicole Bernholc, Ext. 2027.

Fridays: Family Swim Night 5-8 p.m. BNL Pool. \$5 per family.

Fridavs: BNL Social & Cultural Club Noon-1 p.m., B'haven Center, South Room, free beginners dance lessons.

Then & Now — Bubbles and Beyond

ast week's "Then & Now" Lmini-quiz asked what four illustrations have in common? - are all state-of-the-art detector depictions of particle physics experiments. The two modern pictures are computer reconstructions of data from the STAR and PHENIX detectors at the Relativistic Heavy Ion Collider; the other two are photos from bubble chamber detectors of the past.

Using bubble chambers, researchers could "see" particles by the trails of bubbles they left behind as they disturb a chamheated just below its boiling point. In searching for a new particle, analysts examined over 250,000 photos taken in the chamber per month. From the early 1950s to the mid-1970s when bubble chambers were used, the size of the chambers grew from six inches to fourteen feet, increasing accuracy and aiding research in secondary particle interactions and high-energy neutrinos. Bubble chambers were an improvement on previous detector technology, in which "cloud chambers" of supersaturated gases were used to photograph the paths of droplets that particles left behind.

Building a bubble chamber



Integrated Safety Management Awareness

ntegrated Safety Management (ISM) is the framework used to help guide all work at BNL, and is a key requirement of BNL's contract with DOE. ISM's five core functions call for the Lab, as well as each employee, to define the scope of work; identify and analyze all hazards; develop and implement controls for those hazards; work within these controls; and provide feedback to improve safety in future work.

BNL will undergo a crucial ISM review this August. The auditors will likely interview a wide cross-section of BNL employees. Below are the second in a series of general ISM questions for managers, supervisors, and staff. The text below the questions gives examples of processes that may be appropriate as references for understand-



A display of historic experimental apparatus behind the Office of Educational **Programs includes:** the tall seven-foot bubble chamber with its base and piston beside it; the "porthole"-like 31-inch chamber; and (far right) the superconducting magnet used in the seven-foot chamber. The 1,500lb. glass window from the 80-inch bubble chamber is left of the seven-foot chamber.



Data, Then & Now (above, from left): Two bubble chamber discoveries, the photos of omega minus (1964) and the charmed baryon (1975); and two computer reconstructions of early data from detectors PHENIX and STAR at BNL's Relativistic Heavy Ion Collider, which was commissioned in 2000.

nents in common. A piston was used to expand the volume of the chamber, thereby lowering the temperature to achieve the delicate state just before the liquid hydrogen boils. Large lens-quality glass windows were used for the camera to take photographs of bubble trails. A light source was needed to prevent optical effects that might disturb the bubble trails. A magnet was used to create a

field that could deflect charged particles, providing information about their properties.

Early bubble chambers

By 1959, a 31-inch bubble chamber modified from a 20-inch chamber was taking photographs for analysis. As researchers used this existing chamber, design work began on an 80-inch bubble chamber for use at the Alternating Gradient Synchrotron. Its 1,500-pound glass window is the largest piece of lens-quality glass ever cast. Using this chamber, in 1964, a team led by future Lab Director Nicholas Samios established the existence of the omega-minus particle.

Seven-foot bubble chamber

By 1974, the 80-inch bubble chamber had been decommissioned in favor of the sevenfoot bubble chamber. This new chamber was the first to use a superconducting magnet, cooled by liquid hydrogen at -415°

Fahrenheit, to deflect charged particles. The seven-foot bubble chamber was used to discover the charmed baryon, a particle composed of three quarks, one of which was the "charmed" quark, a new member of the quark family. Eventually, the seven-foot chamber was replaced by wire chambers, which used electrically sensitive wires to detect specified particles.

Where are they now?

As reminders of the evolution of detector technology, the bubble chambers are displayed behind the Office of Educational Programs building, including the light source assembly chamber and 1,500-pound glass window from the 80-inch bubble chamber. The sevenfoot bubble chamber stands in three pieces: the chamber itself, the superconducting magnet, and the piston. The earlier, 31inch bubble chamber remains intact. — Allison Bland

Nanoscience 101

n May 21, the BNL community celebrated the dedication of its new Center for Functional Nanomaterials (CFN). Science and technology based on nanoscience is expected to be revolutionary, and could lead to groundbreaking advances in the design and fabrication of a wide range of products — from automobile tires, to vaccines, to computer chips, to objects not yet even imagined.

Below is the last in a series of questions and answers to help familiarize members of the BNL community with nanoscience in general, the types of research planned at the CFN, and health and safety aspects of CFN operations.

Q: How much money is the U.S. government spending on

The bubble chambers built at BNL have several compo-

An external view of the 80-inch bubble chamber, where the omega minus particle was discovered in 1964 (see above, extreme left of the four depictions of data).

7-11:30 p.m. North Ballroom, Dance Social, workshops. Rudy Alforque, Ext. 4733, alforque@bnl.gov.

CIGNA: Tuesdays, Bldg. 400

A CIGNA Healthcare representative will be on site in Human Resources, Bldg. 400, on Tuesdays, to assist with any claims issues that you have been unable to resolve yourself. Janice Petgrave will be available for 30-minute meetings, by appointment only, 10 a.m.-1 p.m. Bring all pertinent documentation. To schedule, call the Benefits Office, Ext. 2877.

BNL Food Drive



ing the Lab's ISM program.

Questions for Managers: How do you ensure your staff works safely? How do you know and communicate the hazards that are part of the work? Where do you find the safety/environmental requirements, and hazard controls that are part of the work?

Questions for Staff: Do you know the hazards that are associated with your work? Do you know how to perform your work safely? Do you know how to protect yourself from those hazards?

Response: Hazards are identified through Industrial Hygiene and Radiological surveys and pre-job screenings/walkthroughs. Facility Use Agreements define the operating boundary and facility hazards. Pre-job planning meetings, standard operating procedure precautions, experimental safety reviews, job risk assessments, facility risk assessments, and work permits define the hazards and controls associated with the performance of work activities. Hazard controls are established through:

- Elimination/Substitution (i.e. use of a non-hazardous chemical, process change to eliminate the hazard);
- Engineering Controls (e.g. exhaust ventilation, guard • rails, key controls, glove-boxes/glove-bags);
- Administrative Controls/Work Practices (procedures, ad-• ministrative limits); and
- Personal Protective Equipment

For more information, contact Steve Coleman, Ext. 8705 or coleman@bnl.gov.

- nanotechnology?
- A: The President's 2008 budget provides \$1.45 billion for the multi-agency National Nanotechnology Initiative (NNI), bringing the total investment since the NNI was established in 2001 to over \$8.3 billion, and nearly tripling what was allocated during the first year of the initiative.
- Q: How much funding does the Lab receive for nanoscience research, and where does it come from?
- A: Starting in October 2007, the CFN's annual budget will be about \$19 million per year, almost all of it coming from the Office of Basic Energy Sciences within DOE's Office of Science. An additional \$10 to \$20 million per year will be used to fund nanoscience research in other areas across the Lab.
- Q: How does the Lab decide which nanoscience research it will support?
- A: The Lab's research is chosen according to its alignment with the basic missions of DOE and of the Lab. The research is subject to regular review by DOE and others to assure its quality and alignment with the DOE mission.

Q: Where can I find additional information about nanoscience?

A: Nanoscience research is being conducted around the world. Government and industry are spending billions of dollars on research and development. A good place to begin to learn more is www.nano.gov.

BNL Opens to Public on Summer Sundays, 7/8 - 8/19 Sunday, July 8: Life Sciences, and music special: Blues, 70's Music, More

 ${f B}^{NL}$ will again open its doors to the public this summer, every Sunday from July 8 through August 19. The Lab will feature a different tour each week, including, on July 22, a visit to its newest facility, the Center for Functional Nanomaterials. Both adults and children can enjoy a variety of entertaining activities, including the Whiz Bang Science Show and the Brain Teasers exhibit each week. Celebrate the Lab's sixtieth anniversary, and collect commemorative souvenirs while supplies last.

Summer Sundays are offered free of charge, and no reservations are needed. Visitors may arrive any time between 10 a.m. and 3 p.m. The Whiz Bang Science Show will be staged at 10:30 a.m., noon, 1:30 p.m. and 3 p.m. each Sunday. All visitors age 16 and over must bring a photo ID.

The full Summer Sundays schedule follows:

July 8 Life Sciences — Investigate the Living World

Explore the fascinating world of biological and biomedical research. See how scientists use imaging devices to study addiction and its effects on \vec{g} the brain. Learn about DNA sequencing and the Scanning Transmission Microscope, a super-powerful microscope that allows scientists to see the β intricate details of living organisms. Discover how a molecule's structure is determined with x-ray crystallography, and enjoy hands-on activities.

On this Sunday, July 8, only, from noon to 5 p.m., visitors will be able to enjoy a free cultural celebration with music and dance. In order of performance, those playing will be: BNL's Henry Diaz & Three Blind Mice, BNL's Doug Gordon & band, BNL's George Bostick & blues band, Sam Taylor's band, and That 70's Band.

July 15 Special tour of the National Synchrotron Light Source

July 22 Explore the New Center for Functional Nanomaterials

July 29 Hands-On Fun at the Lab's Science Learning Center

August 5 ... Visit the Firehouse & Learn About Safety

- August 12.. Visit the National Weather Service on the BNL site
- August 19.. Discovery at the Relativistic Heavy Ion Collider



Summer Student Talent Show, 7/24

The Office of Educational Programs invites the Lab community to attend their annual Summer Student Talent Show on Tuesday, July 24, at 5:30 p.m. in Berkner Hall.

Anyone who would like to perform in this summer's Talent Show should contact Tabatha Wyche, Ext. 4503.





Arrivals & Departures - Arrivals

Andrei Dolocan Chemisry Jody Hamilton..... Medical John McCaffrey, Jr.....Magnet Div. Anthony MennonaNSLS-II Ildiko Csehely Orlando... Dir's Offc. Susan Pankowski CA-D Ming-Kang Tsai.....Chemistry Weiping ZhouChemistry

- Departures -Rae Greenberg Dir's Offc. Tadas Krupovnickas Physics Nancy Manning.....Biology Daniel Ottaviol CA-D Jacopo Saccheri..... ES&T Richard Thorp.....SSD

Hispanic Heritage Club Awards Three 2007 Scholarships

n May 11, the BNL Hispanic Heritage Club (HHC) hosted an award ceremony for three students, Kenneth Baumann, Diandra Drago and Stephanie Yanes, who had won the club's three academic scholarships, granted for the first time this year. The \$500 · scholarships are offered to high school seniors interested in $\vec{\sigma}$ pursuing a science or engineering college degree.

The event was attended by BNL Director Sam Aronson and other BNL and HHC members, as well as the three winners and their families, who are all residents of Shirley. Baumann, who attends Longwood High School, has been accepted by the Rochester Institute of Technology where he plans to major in engineering. Drago also at-



With BNL Director Sam Aronson (second from left) and - holding their certificates - winners: (from left) Diandra Drago, Kenneth Baumann, and Stephanie Yanes, are Hispanic Heritage Club members: (from left) Annabelle Petway, Omar Gould, Alejandro Sonzogni, Carmen Narvaez, Carmen Alvarado, and Yvette Malavet-Blum.

accepted by the Massachusetts Institute of Technology and will major in mechanical engineering and Spanish. Yanes, who attends William Floyd High School, has been accepted

will study anthropology and hopes eventually to become a medical doctor.

The HHC was founded at BNL in 2001 as part of BERA, and currently has about 30 memtends Longwood. She has been by St. John's University. She bers. Scholarships are funded

by proceeds from ticket sales of past events sponsored by the HHC and reflect the club's commitment to supporting Hispanic students' educational achievements. Current HHC board members are: Carmen Alvarado, president, Alejandro Sonzogni, vice president, Carmen Narvaez, treasurer, Anabelle Petway, recording secretary, and Yvette Malavet-Blum, corresponding secretary.

Future HHC events are the family Salsa Picnic at the end of July and a music concert in October. Work for the 2008 HHC scholarship will start in January 2008. Volunteers to help with the organization of these activities are always needed. More information about the HHC can be found in its web page, www.bnl.gov/bera/activities/hispanic.

CALENDAR - TODAY -

Friday, 6/29

*Nanoscience Round Table

1:30-2:30 p.m. Research Sup-port Bldg., Bldg. 400, Conference Room, ground floor. All are wel-come. The purpose of the event is to get feedback from employ-or intersected in papacetore. ees interested in nanoscience so that Lab communications and involvement activities regarding nanoscience may be further de-veloped. To register or for more information, contact Jeanne Marie Petschauer, Community Relations Office, Ext. 2397 or jmpets@ bnl.gov.



Wednesday, 7/4

Independence Day Holiday The Lab will be closed to celebrate the Independence Day holiday. No Bulletin will appear this week.

Friday, 7/6

See BNL Science Learning Center

Noon-1:30 p.m. Science Learning Center open to Lab com-munity and their families. Also, buy science-related toys. An adult must accompany children under 14 years old.

Sunday, 7/8

*Sunday Tours: Life Sciences, Music 10 a.m.-3 p.m. BNL open to the public for tours on Sundays. See notice at left.

– WEEK OF 7/9 –

Wednesday, 7/11

BSA Noon Recital

Noon. Berkner Hall. Pianist Michelle Cann, now in her second year at "Pianofest," the annual summer workshop held in East Hampton for talented young pianists, will give a solo performance of works by Schubert, Ginastera, Debussy, Chopin, and Scarletti. Noon recitals are free and open to the public. Visitors to the Lab of 16 and over must carry a photo ID.

- WEEK OF 7/16 -

Tuesday, 7/17

Sambamurti Lecture: Top Quarks

3:30 p.m. Physics Department Large Seminar Room. Dugan O'Neil of Simon Fraser University will talk on "Seeking Single Top Quarks in D0." All are welcome. Refreshments are at 3 p.m. before the talk.

BERA Trips, Events More at: www.bnl.gov/bera

Buy tickets at the BERA Store, Berkner Hall, Ext. 3347

Fri. 7/13 - Dorney Amusement Park. \$30

Sat. 7/28 - King Tut at Franklin Institute, Philadelphia \$38

Fri, 8/10 Gateway Playhouse, Bellport - Gentleman Prefer Blondes! Wine & Cheese Reception. \$56 (no bus) Sat. 8/11 - Coney Island, amusement park & Brooklyn Cyclone Baseball! \$20 Sat. 9/8~Tony Bennett live at Radio Citv \$60

Veterans Association (BVA) is much occupied with helping others. The members' support of the recent BNL Blood Drive was much appreciated by the Lab Blood Drive organizers and will be priceless to all Long Islanders who receive life by this effort.

"he newly founded BNL

Now, the BVA is helping in another way. The AdoptaPlatoon ਤੂ program started in November 2006 by Lorraine Barry and Ralph 🛓 Rinello, both of the Human Re- ਲੈਂ sources & Occupational Medicine Division, will now be taken over by the BVA. AdoptaPlatoon is a national non-profit organization, founded in 1998, and is managed by volunteer mothers who want to ensure that deployed soldiers receive packages from "home." Packages typically contain items such as toiletries, snacks, puzzles, books, socks, and other general supplies.

Said Don Farnam, elected BVA Commander, "We thought



BNL Veterans Association Will Run AdoptaPlatoon Program

With some of the items to be shipped to the Lab's assigned Platoon are AdoptaPlatoon committee members: (from left) Joyce Fortunato,* Janet Sikora, Maria Beckman, Denise Rodgers, Joanne Rula, and Kenneth Erickson. *Added to photo.

it made good sense to transfer AdoptaPlatoon program responsibilities to the BVA. Lorraine Barry and Ralph Rinello did a great job getting the program off the ground and the BVA will work hard to see that the program continues to grow.

We are delighted that Ken Erickson has volunteered to chair the AdoptaPlatoon Committee. We'll support him and the committee in every way possible."

Since 2006, BNLers have donated money and other necessities to their assigned

Jnit, Charlie Company, 25th Infantry Division. This platoon, currently serving in Iraq, comprises 15 soldiers: 14 men and one woman. Donations may also be sent to family members of employees who are on active duty in the military. To date, BNLers have donated close to a thousand pounds of supplies to troops in Iraq and Afghanistan.

platoon, which is The Warrior

Donations may be dropped off at a box in Berkner Hall, and in Bldgs, 120, 400, 490, 725, 902C, and 1005. Checks are welcome, payable to BVA. Cash donations help pay for shipping and to buy unique items such as parachute cord, tactical flashlights, and 3V lithium batteries. A list of items to donate is at: http://www.bnl.gov/bera/ activities/va/Adopt_A_Platoon. asp. For more information, contact Ken Erickson, Ext. 4935, or erickson@bnl.gov. — Jane Koropsak Sat. 9/22 - Drowsy Chaperone. \$76.

One-on-One Retirement Counseling

A TIAA-CREF consultant will visit BNL on Wednesday and Thursday, July 18 & 19, and Wednesday, July 25, to answer employees' questions about financial matters, such as understanding the importance of protecting assets against inflation, finding the right allocation mix, learning about TIAA-CREF retirement income flexibility, comparing lifetime income vs. cash withdrawal options. For an appointment, call Suzanne Leone, (866) 842-2053, ext. 4601.

Classified Advertisements

LABORATORY RECRUITMENT - Opportunities for Laboratory Employees

INSULATION WORKER (One-month term) · Under general supervision, performs installation and removal of insulation and protective coverings about piping, ductwork, fixtures, and devices as required. Performs limited removal, cleanup and disposal of asbestos insulation in accordance with applicable environmental control standards pursuant to lays and regulations governing BNL. Will be trained and must be certified as asbestos abatement worker to standards as adopted for such work by NY State. Plant Engineering Division. Send CV to tbuck@ bnl.gov, referring to Position No. TB 7778. REFRIGERATION AND AIR CONDITIONING SUPERVISOR (T-5) - Requires a minimum of ten years' experience and knowledge within the Refrigeration and Air Conditioning (RAC) trade pertaining to industrial, experimental, and residential facilities. Must have a Universal EPA Certification. Previous supervisory experience desirable; experience and knowledge of MS Word, Excel, Outlook and MP2 programs is preferred; as is OSHA construction safety training. Will be responsible for supervision of RAC and multi-trade work effort in the Operations & Maintenance Division, including work assignments, scheduling, employee training, obtaining material, tools, and supplies, performance evaluation, attendance monitoring, grievance handling and technical direction. Will maintain records, coordinate work with other supervisors and provide technical assistance and information to customers as required. Reports to the General Supervisor of Mechanical Shops, Plant Engineering Division. Send CV to tbuck@bnl.gov , referring to Position No. TB 4445.

OPEN RECRUITMENT – Opportunities for Lab employees and outside candidates.

SCIENTIST (S-3) - Requires Ph.D. in nuclear physics and at least 10 years' experience in experimental nuclear reaction physics research including neutron cross-section measurements, knowledge of the CSISRS/EX-FOR database of experimental reaction data, strong interest in compilation of these data, solid background in low energy nuclear reaction theory, strong computer skills, and capabilities to do neutron cross-section cova-, riance evaluations using experimental data. Will be involved in research and development of the evaluated nuclear reaction data file ENDF; responsible for compilation of experimental nuclear reaction data to CSISRS/EX-FOR database including management of this database; developing methods for neutron cross-section covariance evaluations using experimental data and performing such evaluations. Under the direction of P. Oblozinsky, Energy Sciences & Technology Department. Send CV to oblozinsky@bnl.gov , referring to Position No. KH 3413.

PHYSICIST (S-3) - Hard X-Ray Coherent Scattering Beamline. Requires a Ph.D. in physics and at least 5 years of relevant postdoctoral experience. Experience in hard x-ray coherent scattering and/or acceleration spectroscopy is required and prior experience in managing the construction and operation of a beamline is preferred. Candidates must have excellent written and oral communications skills and be able to interact effectively with a diverse group of scientists, technical staff, and users. The selected candidate will be responsible for working with the user community to define the scientific mission and technical requirements for a coherent scattering beamline and for its design, construction, and commissioning. The candidate will also be responsible for developing the user community for the beamline and for developing and managing a scientific research program based on the beamline. National Synchrotron Light Source-II. Send CV to peterespo@bnl.gov , referring to Position No. PE 4678.

PHYSICIST (S-3) - Powder Diffraction Beamline. Requires a Ph.D. in physics and at least 5 years of relevant postdoctoral experience. Experience in powder diffraction is required and prior experience in managing the construction and operation of a beamline is preferred. Candidates must have excellent written and oral communications skills and be able to interact effectively with a diverse group of scientists, technical staff, and users. The selected candidate will be responsible for working with the user community to define the scientific mission and technical requirements for a state-of-the-art x-ray wiggler-based powder diffraction beamline and for its design, construction, and commissioning. The candidate will also be responsible for developing the user community for the beamline and for developing and managing a scientific research program based on the beamline. National Synchrotron Light Source-II. Send CV to peterespo@bnl.gov , referring to Position No. PE 4680.

sponsible for working with the user community to define the scientific mission and technical requirements for a soft x-ray undulator beamline and for its design, construction, and commissioning. The candidate will also be responsible for developing the user community for the beamline and for developing and managing a scientific research program based on the beamline. National Synchrotron Light Source-II. Send CV to peterespo@ bnl.gov, referring to Position No. PE 4679.

and users. The selected candidate will be re-

PHYSICIST (S-3) - EXAFS Beamline. Requires a Ph.D. in physics and at least 5 years of relevant postdoctoral experience. Experience in EXAFS is required and prior experience in managing the construction and operation of a beamline is preferred. Candidates must have excellent written and oral communications skills and be able to interact effectively with a diverse group of scientists, technical staff, and users. The selected candidate will be responsible for working with the user community to define the scientific mission and technical requirements for a state-of-the-art wiggler-based EXAFS beamline and for its design, construction, and commissioning. The candidate will also be responsible for developing the user community for the beamline and for developing and managing a scientific research program based on the beamline. National Synchrotron Light Source-II. Send CV to peterespo@ bnl.gov, referring to Position No. PE 4682.

POSTDOCTOBAL RESEARCH ASSOCI-ATE - Requires a Ph.D. in physics, physical chemistry, or materials science and at least 10 years' research experience beyond a Ph.D. degree. Excellent written and oral communication skills desired, as well as having demonstrated the ability to work effectively with a diverse group of scientists. Experience in managing a synchrotron beamline program or equivalent management experience is preferred. Candidate will be responsible for managing the scientific staff involved in the operation of materials and chemical sciences facility beamlines as well as overseeing the productivity of externally operated beamlines with a scientific focus in these areas. Candidate will also be expected to establish a forefront research program in materials or chemical sciences, participant in developing proposals for funding initiatives, and oversee the upgrade of NSLS beamlines for transition to NSLS-II. Under the direction of R. Pindak, National Synchrotron Light Source Department. Send CV to felica@bnl.gov, referring to Position No. FH 3265.

POSTDOCTORAL RESEARCH ASSOCIATE Requires a Ph.D. in chemistry, biochemistry or a related field. Experience using infrared and/or x-ray spectroscopy is required. Experience at a synchrotron is highly desirable. Some experience with the handling of small animals and conventional histochemistry methods is necessary. Research will involve the study of protein misfolding and metal accumulation in a mouse model of Alzheimer's disease using synchrotron-based infrared and x-ray microspectroscopic techniques in conjunction with classical biochemical methods. Under the direction of L. Miller, National Synchrotron Light Source Department. Send CV to felicia@bnl. gov, referring to Position No. FH 3268.

POSTDOCTORAL RESEARCH ASSOCIATE - Requires a Ph.D. in molecular biology, microbiology, or related fields. Must be familiar with genetic annotation software such as Artemis or GenDB, phylogenetic packages such as ARB or PHYLO, and must be able to work in a UNIX environment. Candidate to annotate the genomes of endophytic bacteria and to identify functions for host plant interactions. By exploring recently sequenced genomes, the candidate will further the project's primary aim of identifying and exploiting pathways used by endophytic bacteria to interact in symbiosis with their host plant hybrid poplar. The project also involves microarray studies, RT-PCR, microbial mutagenesis and plant physiology. Under the direction of D. van der I elie. Biology Department. Send CV to felicia@ bnl.gov, referring to Position No. FH 3852.

APPLICATIONS ENGINEER (I-6) - Requires a bachelor's degree in computer science or a related field, or six years of directly applicable experience, or a combination of education and experience. A minimum of three years' recent programming work experience designing and building data centric applications (client-server and web-based) using ASP, Visual Basic, .NET, Visual Studio 2005, and Crystal Reports in an enterprise environment required. Must demonstrate a thorough understanding of object-oriented design concepts and relational databases, and the fundamentals of requirement specification, design, coding and testing of information systems. Must have proficiency in most, if not all of the following: .NET, IIS, Oracle, SQL Server, MS Access, HTML, JavaScript and Crystal Reports. Familiarity with Compliance Suite is a plus. Excellent oral and written communication skills are essential, as is the ability to handle multiple priorities and meet deadlines. Responsibilities will include development and maintenance of new and existing applications including forms and reports for data entry, querying, and reporting for enterprise databases; design and development of Web-based user interfaces for safety professionals; and technical and end user documentation. Will regularly work on projects with safety professionals to develop specifications based on their requirements and resolve all project

programming issues. Safety & Health Services Division. Send CV to morales@bnl.gov , referring to Position No. RM4627.

PRINCIPAL TECHNICIAN/ENVIRONMEN-TAL SAMPLING (TW-4) - Requires an AAS degree in a scientific discipline plus at least 2-4 years' experience in the collection of environmental field samples. Must be familiar with sample collection techniques for all environmental media including air, surface water, groundwater, soil, flora and fauna samples. Must have strong communication skills (oral and written), computer skills, mechanical aptitude and strong organizational skills. Knowledge of EPA sampling methods and quality assurance procedures as applied to the collection, transport and preliminary processing of environmental samples is desired, as is knowledge and experience in the operation of GeoProbe equipment, automated sample collection systems, field investigation techniques and field test methods. Environmental & Waste Management Services Division. Send CV to tbuck@bnl.gov , referring to Position No. TB 4625.

ASSISTANT STAFF SPECIALIST (A-4, temp) Requires a bachelor's degree in business, management or related field, and a minimum of four years' related administrative experience, including proficiency in webbased tools and Microsoft Office applications (Outlook, Word, Excel and Power-Point). Requires strong organizational and scheduling skills that include meticulous attention to detail. Must have the ability to operate independently as well as function as a member of a team, regularly exercise a high degree of discretion and judgment and perform multiple tasks in a fast-paced office environment with changing priorities. Knowledge of BNL's procedures, processes, and tools, including PeopleSoft is desired. Responsible for providing complex administrative functions for Safety Energy Group Manager and staff. Safety & Health Services Division. Send CV to tbuck@bnl. gov, referring to Position No. TB 4268.

ADMINISTRATIVE SECRETARY (A-2) - Requires formal secretarial training plus at least 4 years of relevant work experience. and the ability to perform in a fast-paced, multi-task office environment. Proficiency with MS Word and Outlook required; experience with PeopleSoft Financials and Credit Card System desirable. Excellent internersonal, oral and written communication skills necessary. Candidate will assist the Department Chair's office and must exercise initiative and good judgment. Responsibilities include, but are not limited to, all phases of travel, domestic and foreign, for department staff; on site and outside orders; handling arrangements for dept. guests/visitors and providing excellent office file maintenance. Condensed Matter Physics & Materials Science Department. Send CV to morales@bnl. gov, referring to Position No. RM 4594.

TOWERLINE PERSON - Under minimum supervision, installs, repairs, and maintains overhead and underground electrical distribution lines, systems, equipment, controls and related devices, ordinarily of 2,300 volts and over. Duties include rigging, electrical and mechanical work incidental to the installation, maintenance, and repair of equipment, wires, lines, instruments, and fabricated metal on structures such as meteorology towers, pile stack and water tower. Will otherwise perform duties of Electrician A. Plant Engineering Division. Send CV to tbuck@bnl. gov, referring to Position No. TB 4439.

CUSTODIAN - Temporary/on call position under general supervision, performs general cleaning and housekeeping duties in all Laboratory buildings. Plant Engineering Division. Send CV to tbuck@bnl.gov, referring to Position No. TB 6666.

Motor Vehicles & Supplies

05 HARLEY DVD/SON 883 SPORTSTER CUSTOM - excel., w/shield, saddle bags, hiway lights, eng. guards, frwrd foot ctrls. 3700 mi. \$6,900/neg. Ext. 3505 or 929-6467.

04 AMERICAN IRON HORSE SLAMMER - Motorcycle, S&S 111 Cl, 6 spd., 240 rear tire, mint. 2600 mi. \$21,000/neg. Ext. 2599. 03 HYUNDAI TIBURON - 6-spd manual

transm., sports pkg., fully equipped, excel. 30K mi. \$11,000. Ext. 5149 or 929-0961. 03 HYUNDAI ACCENT - 4 cyl., 5 spd.

stdrd 2 dr bbk a/a am/fm/aass v

91 FORD EXPLORER - runs well, gd. cond. 177K mi. \$600. Walter, 567-9025. TIRES - Light truck 3, General Brand, Grabber model, AW225-70R15. gd. cond., \$25 each. Joe, 286-8356.

TIRES & RIMS - Set of 4 Sumitomo Tires & Chrome Alloy Rims; 4 lugs, 205/402R17 80W. \$500. Bill, Ext. 7961 or 929-3082.

Boats & Marine Supplies

16' 1984 BAYLINER BOWRIDER - hull is ok, needs new floor, 85 force eng. needs overhual, trailer ok. \$250/neg. 584-7172.

17' STARCRAFT FIBREGLASS - 88 H.P. Evinrude motor, brand new bilge pump, anchor etc., \$995. See in Mattituck, Dennis, Ext. 4028 or 375-8519.

18' SEA PRO - '99, 180cc, 90 hp Johnson, excel. cond., trailer & extras, low hrs. \$8,999. 878-6007.

Furnishings & Appliances

AIR CONDITIONER - 28,000 Btu, window or wall mounted, Friedrich, 4 yrs young/used 2 yrs, \$700/neg. Ext. 3085 or 744-4535.

BUREAUS - 2-5 drawer, gd/fair; 1 sm. desk w/3drawers, must pk up, all for \$70 but will sell separately. Susan, Ext. 7647. DAYBED - twin mattress, folds up, gd.

cond. w/cloth cover, \$20, full size metal bed frame, \$10; must p/up. Ext. 7647. DEHUMIDIFIER - South Bay, 5 yrs. old,

\$40. Eli, Ext. 7179.

DINING SET - wood, some carving on 6 tall-back chairs, tble w/leaf, br/front w/ glassed-in shelves. \$95 neg. 255-8445. DISHWASHER - GE, under the counter;

Sharp microwave, over the range; Whirlpool gas range, \$50/ea. Bob, 312-6451. FUTON - full size, oak frame, navy-blue

matting, ask. \$250. Denise, Ext. 5873. HOT TUB COVER - 6 person, needs pump and control panel, Wading River,

pump and control panel, Wading River, \$250. Karen, Ext. 4432.

KITCHEN TABLE - pine, used, 6 chairs, in gd. cond., ask. \$400. John, Ext. 7939 or 433-3104.

PIANO - upright, gd. cond., needs tuning, you move, \$600. 286-1018.

ROCKER - Vintage Bentwood, cane seat & back, excel. cond., \$50. 744-4237.

Audio, Video & Computers

APPLE IPOD - unopened, nano, 4 gb, silver, 1,000 songs, earphones, USB 2.0 cble, dock adptr guide, \$175. 516-527-3525.

CAR STEREO - Duraband in dash, cd/MP3/ cdrrw playback w/MP3 display, 45wx4, slide down/det. panel w/rem., \$100. 434-5824.

CAR STEREO - Pioneer, 50W/ch, CDRRW/MP3/WMA playback, sat/ipod compat, blue OEL display/scr/saver, like new, \$180. Laura, Ext. 7842.

MONITOR, DRIVES - Dell 20" mon., \$20; Sony DVD/Rom dr., \$20; IBM 41 GB HD, \$15; Zip dr. & discs, \$5; \$50/all. Ext. 7505. STEREO EQUIPMENT - Pioneer 7-channel reverb amplifier Mod-SR202W or Onkyo Preamp Mod-P306R. orig pd \$2000. ask \$75ea. Kim, Ext. 7465 or 399-3098.

Sports, Hobbies & Pets

BIKE - men's Ross, 27", 10 spd., gd. cond., \$40. Walter, 567-9025.

COMIC BOOKS - orig. X-Men, silver age, #39-49, great cond., not graded, cover photos avail. \$200/neg. Ext. 4538.

DOG HOUSE - Rubbermaid, for med.-lg. dog, excel., new \$85, \$50/obo. 929-4753.

FLUTE - Student model. Gemeinhardt Model #2SPL08034. Excel, used 3 yrs. \$300. Donna, Ext. 2716 or 878-2425.

TICKETS - 4, Yankees v. Oakland, Sat. 6/30, 1:05 p.m., Tier 12, Row P, \$20/ea. Andrea, Ext. 4656.

Tools, House & Garden

GENERATOR - portable, Generac Niagara 4 KW, 120v & 240v outlets, <10 hrs. use, new cond. w/custom muffler, tuned, \$300. Thomas, Ext. 4507 or 878-1060. PERENNIALS - hosta, shasta daisies, iris,

etc. Beth, 905-8222. SAW - Dewalt Radial Arm, \$100 or b/o

SAW - Dewalt Radial Arm, \$100 or b/c Frank, 839-6327.

excel./move-in cond., c/a, f/p, attic

PRINTER - hp deskjet 520, needs print cartridge & parallel cable. Chris, Ext. 2593. SLIDE RULES - Lafayette Vector Log, many, new in box, others, incl. K&E. Ext. 2425. SOFA - 7', light color, gd. cond. Ext. 4354. WASHER - Sears Kenmore, Heavy Duty 70 series, Ig.cap., abt 15 yrs. works well, u pick up, Cutchogue. Ext. 3492 or 734-2593.

Miscellaneous

GLASS BLOCKS - 8 x 8 x 4, approx. 60-70 used blocks, \$1/ea. Joe, 286-8356.

SOFA - 8'x5' loveseat, white on cream, opt'l, rocker recliner, all gd. cond. b/o; upright freezer, \$50, u pick up. 395-9610.

Wanted

MEMOIRS - desperately searching for an inexpensive copy of "Memoirs of Elise", by David Gurnee. Judy, Ext. 4538.

Lost & Found

FOUND - Motorola pager in Biology Seminar Rm. on Tues., 6/19, identify markings on pager to claim. Biology Admin. Office, Bldg. 463, Ext. 3415.

FOUND - eye glasses in black nylon bag "Genuine Software" nr ballfield. Judith, Ext. 7430.

FOUND - eyeglasses, pick up in bldg. 400 @ Credit Union Teller's counter, Ext. 2790.

For Rent

CENTER MORICHES - 1 bdrm. apt., full bath, Ig. cl, eik & living area quiet st., close to Lab, small pet ok. \$800/mo. George, Ext. 3868.

MASTIC BEACH - Room for rent. Female pref., brand new house, Includes all. \$800/ mo./neg. Sally, 772-5674, 917-251-0345.

MEDFORD - bright 1 bdrm. bsmt. apt., eik, //r, full tile bath, all util. elec, heat, hi-spd i/ net, TV incl. 15 min to BNL, no smkg/pets. \$850/mo. Ext. 3562 or 758-2653.

MEDFORD - 3 bdrm., 2.5 bth, I/r, eik, fdr, gtrm & off/4th bdrm., LWSDist., pref. single fam., 15 min to Lab, quiet area; 1 mo sec., no util \$1,950/mo. Carol, 398-8746.

MIDDLE ISLAND 4 bdrm., 2 bath, Ir & fam. rm., eik w/dr. to cover patio & great fenced yd., mins. from Lab, move-in cond., avail. Aug. \$1,975/mo./neg. 473-7496.

MILLER PLACE - beautiful Colonial, 5 bdrm., 2 full baths, 1 car gar., bsmt. strge., oil ht., 20 min. to BNL, semi furn., util., no smkg/pets, max. 4/share, \$3,200/mo. 455-2908.

ROCKY POINT - cust. house, 2300 sq. ft., 2.5 br., 2 bth., hrdwd. firs., vited ceilings, all amens, acre, yd., views, porch, wlk to bch., \$2,800/mo. Dimitri, Ext. 5096 or 891-9430.

ROCKY POINT - 1-bdrm. apt., kit., l/r, bath, pvt. dr.way/ent., no smkg./pets, 1 mo. sec., util. not incl. \$850/mo. 821-3287.

ROCKY POINT - immac. 2 bdrm., 1 bath house, new windows, drs., paint, & carpets, w/d, d/washer, \$1,500/mo. John, Ext. 4028. SELDEN - spacious 1 bdrm. apt. Ir/kit.

combo, w/d, walk in closet, d/w, sep. ent., cable & internet incl., no smkg/pets, quiet n'hood. \$1,150/mo. 516-987-4359. SHOREHAM - 1 bdrm. furn. apt., l/r, d/r, full

kit, bath; a/c, util. incl., no smkg/pets, pvt. ent/drwy, sing. or couple only, 1 mo. sec., 5 min. to Lab. \$1,100/mo. 375-7959.

SHOREHAM - studio apt. w/in the house, sm. well behaved pet for addit'l. sec., elec., cable & heat incl., no smkg., 8 mi. to BNL, + 1 mo. sec. \$825/mo. 849-2593.

SOUND BEACH - 3 bdrm., 1.5 bath, single fam. house, eik, l/r, rec. paint & carpet; dw, w/d, fnced yd., lg. deck, MPSD, no smkg/ cats, plus util/sec \$1,600/mo. 744-8673.

For Sale

BELLPORT - 4-BR. ranch, 2 bth, I/r, d/r, den, eik, screend deck on priv. part of yd, laundry rm, fin. bsmt: w/4th BR, bar, full bth, 2 rms; gar., 2 sheds, gt. cond. \$449,000; 949-7797. CENTER MORICHES - 6 3/4 acres, sub

divison of 4 or 6 lots, old house on property \$1,000,000/neg. George, 878-1178. FARMINGVILLE - custom ranch, 2,500 sf.,

3 br., 2 bth, eik, l/r, d/r, den, wood flrs., 2.5 GG, igs, igp, alarm, many upgrades, dead end st., \$519,900/neg. 516-906-3348. HOLBROOK - 2 bdrm. condo. 1.5 baths.

PHYSICIST (S-3) - Soft X-Ray Coherent Scattering Beamline. Requires a Ph.D. in physics and at least 5 years of relevant postdoctoral experience. Experience in soft x-ray coherent scattering and/or imaging is required and prior experience in managing the construction and operation of a beamline is preferred. Candidates must have excellent written and oral communications skills and be able to interact effectively with a diverse group of scientists, technical staff, cond., must sell. 49K mi. \$5,500/neg. Brigitte, Ext. 3114.

03 HYUNDAI ACCENT - 4 cyl. 5 spd. a/t, am/fm/cass., 2dr. hbk., v. gd. cond., ext. fact. warr., ori. owner. 65K mi. \$6,500/neg. Brigitte, Ext. 3114.

02 CHRYSLER PT CRUISER - Ltd., leathr htd seats, ac, a/t, c/c, abs, am/fm/cd/cass, p/s, p/l, orig. onr. 130K mi. \$4,500. 2912.

00 FORD EXPEDITION XLT - dk. blue, 5.4 L, awd/4wd, trailer pkg, leather, 6cd, 3rd seat, rear a/c, remote start. 133K mi. \$8,000/neg. David, Ext. 7277.

99 KAWASAKI VULCAN CLASSIC -800cc, Cobra drag pipes, jetted carb, looks great, runs well, lots of chrome 3200 mi. \$5,500. Billy, 834-6637.

92 FORD BOX TRUCK - 116K mi. \$4,500/ neg. John, 849-4705.

92 FORD LARGE BOX TRUCK - Excel. cond., new brakes, a/c, int. shelving, roof & ladder rack, sac., must sell. 116K mi. \$4,500/neg. John, 849-4705. SKYLIGHT - 30x30, in box, \$40. 751-4539. TABLE SAW - tradesman 10", used once, perf. cond., must sell, ask. \$175, leave msg. 289-3267.

WINDOW FANS - 1-Holmes Elite Streamline; 2-Holmes Air, 2 & 3 spds. \$10/ea. Ext. 3217.

Yard & Garage Sales

RONKONKOMA - moving sale, 120 Juniper Ave. 6/23 & 6/24, 9–5, something for everyone, list avail. for pre-sale. 981-3709.

Car Pool

MINEOLA AREA/BNL - Want a ride? I may be able to give you/trade rides to /from work. Julian, 814-282-0873.

Free

BEIGE LANDSCAPE EDGING - light, 45 16" pieces, 60 linear ft. Travis, 987-7754. PHOTOGRAPHY EQUIPMENT - old darkroom supplies, lights, developing tanks, etc., fair to gd. cond. Loralie, Ext. 2425. near pool, playgrd., low taxes, Sachem dist, 20 mins to Lab, \$325,000, 766-1492.

MIDDLE ISLAND - quality home on .5 acre shy property near Pine Lake, 4 bdrm., 2 bath, oak flrs., new windows, spacious kit., fam. & I/r, Ig patio. \$319,000/neg. 473-7496.

On-Site Services

ENTERPRISE RENT-A-CAR - Stop by the on-site office at Bldg. 355, 50 Brookhaven Ave., to check weekend specials, daily rates. Or call Ext. 4888 or see www.enterprise.com.

ON-SITE SERVICE STATION - As well as gas, we supply all vehicle services: NYS inspections, new batteries, tires, timing belts, etc., we also service starter motors for boat engines. Done while you are at work. Ext. 4034.

NAYYARSONS DINING at BROOKHAVEN CENTER - full menu dinners 5-8 p.m.; specials 5-6:30 p.m. 3-course, wine/soda, coffee, \$10.95 or \$9.95 (no take out); Weds. ribeye steak, veg., Bud. \$11:95, all plus tax.

Bulletin

Published weekly by the Media & Communications Office for the employees, facility users, and retirees of Brookhaven National Laboratory.

Liz Seubert, editor John Galvin, reporter Roger Stoutenburgh, photographer On the Web, the Bulletinis located at www. bnl.gov/bnlweb/pubaf/bulletin.html. A calendar listing scientific and technical seminars and lectures is found at www. bnl.gov/bnlweb/pubaf/calendar.html. Bldg. 134, P.O. Box 5000 Upton, NY 11973-5000 phone: (631) 344-2345 fax: (631) 344-3368 e-mail: bulletin@bnl.gov