the Bulletin

BROOKHAVEN NATIONAL LABORATORY

Vol. 60 - No. 42 December 15, 2006

BNL Earns OHSAS Registration Recommendation

Joseph Rubino D1291206

Gathered together are some of the employees who led participation in Phase III of the Lab's OHSAS 18001 registration process, including Bob Selvey (second from right) and Patricia Williams (second from left).

Phase III, the final phase for BNL's Occupational Health Safety Assessment Series (OHSAS) registration process, finished on a happy note last week when external auditors ended the audit by stating they will recommend to the Registrar that the entire Laboratory be registered as an OHSAS 18001 Site. OHSAS 18001 is an internationally recognized health and safety management system of excellence. BNL will be the first Lab in the DOE complex to achieve full OHSAS 18001 registration.

To achieve this result, Bob Selvey, Safety & Health Services Division, led a team of BNL's safety and health personnel whose members explained the principles of OHSAS 18001 to the rest of the Lab and ensured site-wide understanding and compliance.

Said Assistant Lab Director for Environment, Safety, Health & Quality (ESHQ) Jim Tarpinian, BNL's Site OSH Management Representative, "The auditors conducted an in-depth review of the systems approach to safety that BNL created based on the OHSAS 18001 standard and found only minor nonconformances that we are already in the process of addressing. They recognized how hard everyone at the Lab had worked in order to meet the stringent measures to achieve OHSAS registration."

The initial success of the project began in 2004 when three major areas at the Lab — the Collider-Accelerator Department and Central Fabrication Services and Plant Engineering Divisions — achieved the first round of registration. In 2005, those achieving registration included the Basic Energy Sciences Directorate, the Environmental & Waste Management Services and Instrumentation Divisions, National Synchrotron Light Source and Physics Departments, and Staff Services and Superconducting Magnet Divisions.

The Phase III areas included the Community, Education, Government & Public Affairs; Energy, Environment & National Security; ESHQ; and Life Sciences Directorates; the Emergency Services, Finance, and Safeguards & Security Divisions; and all other support organizations reporting to the Director's Office.

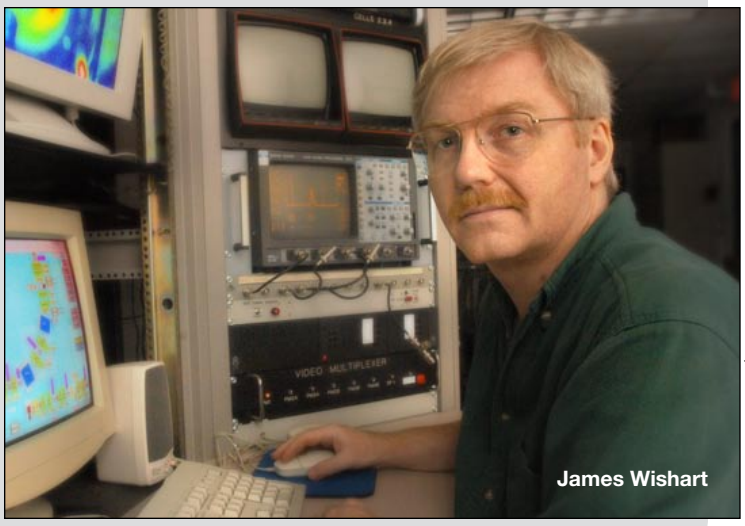
Concluded Lab Director Sam Aronson, "This outstanding achievement could not have been accomplished without the hard work and dedication of every employee in Phases I, II, and III. This is another important step to further ensure the safety of all employees, visitors and guests." — Jane Koropsak

Ionic Liquids Can Improve Nuclear Fuel Reprocessing

With the rising cost and dwindling supply of fossil fuels, nuclear power may again be considered a plausible energy option in the U.S. Safety is the public's major concern, and researchers at BNL are addressing one important aspect of that issue by investigating materials called ionic liquids. If these liquid salts were to be used in nuclear fuel reprocessing — the chemical removal of reusable nuclear material from spent nuclear reactor fuel — the risk of unintended nuclear chain reactions may be substantially reduced.

Funded by DOE's Office of Basic Energy Sciences within the Office of Science and BNL's Laboratory Directed Research & Development Program, James Wishart of the Chemistry Department and former postdoctoral researchers Tomasz Szreder and Alison Funston, with collaborators from the University of California, Riverside, study how ionic liquids containing the element boron behave under radiation. Wishart presented their research at the 232nd national meeting of the American Chemical Society, held in September in San Francisco.

Ionic liquids, which contain only electrically charged molecules known as ions, have several *(continued on page 2)*



James Wishart

Joseph Rubino D4910706

420th Brookhaven Lecture, 12/20

Vaska Discusses Common Ground Between Physics, Neuroscience

For many years, researchers have been working to understand the human brain, with the ultimate goal of improving treatments for a variety of disorders ranging from addiction to Alzheimer's disease to obesity. This goal is becoming ever more attainable, due in large part to innovative instrumentation based on the techniques developed for experimental physics.

At BNL, researchers have developed unique strategies to image the brain non-invasively, in human beings and in animal models of human brain function. However, anesthesia, which is used in the study of animal models, has significant, unintended consequences on brain function. To avoid such anesthesia-induced changes, the Medical Department's Paul Vaska and colleagues designed and built the smallest, fully functional brain scanner of its type in the world. It is so small that it can be used to image the brain of a rat while the animal is awake and moving (see photo at left).

To learn about the significance of this device as well as other related instruments being developed at BNL, join Vaska in Berkner Hall on Wednesday, December 20, at 4 p.m., when he will give the 420th Brookhaven Lecture, on "Physics and Neuroscience: Common Ground Between Disparate Fields." *(cont'd on page 2)*

Paul Vaska

Roger Stoutenburgh D0921206

To join the lecturer for supper at a restaurant off site after the talk, contact Maria Apelskog, Ext. 3715 or email apelskog@bnl.gov.

Modern Enzyme Converted into its Hypothesized Ancestor

Single amino acid substitution supports theory of common origin some 2.5 billion years ago — finding could help in research on producing future renewable sources of energy

By making a single substitution in the amino acid sequence of a modern enzyme, scientists at BNL and the Karolinska Institute in Stockholm, Sweden, have changed the enzyme's function into that of a theoretical distant ancestor, providing the first experimental evidence for the common origin of the two distinct enzyme types.

The research was published online the week of October 30, 2006, in the *Proceedings of the National Academy of Sciences*, by lead author John Shanklin of the Biology Department, with co-authors Isabel Abreu and Edward Whittle, both of BNL's Biology Department; and Jodie Guy, Martin Moche, and Ylva Lindqvist all of the Kalolinska Institute. The work was funded by the Office of Basic Energy Sciences within DOE's Office of Science, by the Swedish Foundation for International Cooperation in Research & Higher Education, and by the Swedish Research Council.

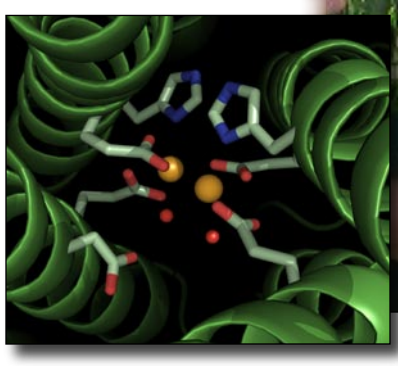
The modern enzyme investigated by the team is one that mediates oxygen chemistry. Oxygen, while essential for many life processes, can also exist in potentially toxic forms. After the first organisms that pumped oxygen into the atmosphere appeared on Earth some 2.5 billion years ago, other organisms developed enzymes capable of deactivating these potentially toxic, reactive oxygen species. By their research, the team shed more light on how these early enzymes could have evolved into the more complex biosynthetic enzymes found in multicellular organisms today.

"It's as if we turned back the clock nearly 2.5 billion years, to the time when oxygen first appeared in Earth's atmosphere, to get a snapshot of how enzymes evolved to deal with reactive oxygen species," said Shanklin.

As he explained, in addition to the intrinsic interest and value of these studies, the information gained could help in solving the world's reliance on fossilized carbon reserves.

"We have an ongoing effort at BNL to investigate the basic science underlying fatty acid modification reactions, which are some of the highest energy transformations known in nature," Shanklin said. "Knowing how these enzymes work gives us valuable insights into efforts to re-engineer them, to make renewable forms of stored carbon that are currently obtained from petrochemicals and thus move towards a more sustainable future." — Karen McNulty Walsh

For a more detailed description of this research, go to www.bnl.gov/bnlweb/pubaf/pr/PR_display.asp?prID=06-117.



John Shanklin (at right) and a view of the axis of the four helix bundle common to diiron proteins showing the castor desaturase T199D active site.

Roger Stoutenburgh D0550604

Calendar of Laboratory Events

- *The BERA Store is located in Berkner Hall and 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.*
- *Calendar 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 welcome. 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/Yoga
12:15 p.m., Rec. Hall. Ext. 5090.

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., Brookhaven Center, North Room. Taught by Master William Moy. Tuition. Scott Bradley, Ext. 5745 or bradley@bnl.gov.

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

Tues. & Thurs: Jazzercise
Noon, Rec. Hall. Ext. 5090.

Tuesday & Thursday: Aerobic Fitness
5:15 p.m., Rec. Hall. 10 classes for $40 or $5 per class. Pat Flood, Ext. 7866, flood@bnl.gov.

Tuesday & Thursday: Aqua Aerobics
5:15 p.m., Pool. Ext. 5090.

Tuesdays: Welcome Coffee
10 a.m-noon, apartment area gazebo. First Tuesday of every month is special for Lab newcomers and leaving guests. Lisa Yang, 979-3937.

Tuesdays: BNL Music Club
Noon, North Room, Brookhaven Center. Come hear live music. Joe Vignola, Ext. 3846.

Tuesdays: Jiu Jitsu Club
6:30-7:30 p.m. Gym. All levels, ages 6 and above. $10/class. Tom, Ext. 4556.

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.

Wed. & Fri: On-Site Play Group
10 a.m.-noon, Recreation Bldg. An infant/toddler drop-in event. Parents meet while children play. Petra Adams, 821-9238.

Wednesdays: Ballroom Dance Class
Brookhaven Center, N. Ballroom. Instructor: Giny Rae. Arup Ghosh, Ext. 3974; Donna Grabowski, Ext. 2720; or Vinita Ghosh, Ext. 6226.

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.

Wednesdays: Pilates/Yoga
5:15 p.m., Rec Hall. Ext. 5090.

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.

Fridays: BNL Social & Cultural Club
Noon-1 p.m., Brookhaven Center, South Room, free beginners dance lessons. 7-11:30 p.m. North Ballroom, Dance Social, workshops. Rudy Alforque, Ext. 4733, alforque@bnl.gov.

CIGNA at BNL, Mondays

On Mondays, 10 a.m.-1:30 p.m., Janice Petgrave, CIGNA, will be available by appointment only to assist CIGNA participants with claims issues that they have been unable to resolve themselves. To schedule a 30-minute appointment in Bldg. 185, call Linda Rundlett, Ext. 5126. Bring all pertinent documentation to the meeting.

Condensed Matter Science Distinguished Lecture held 11/22

Nobel Laureate Leggett on Quantum Mechanics

About 100 physicists and other interested BNLers filled the Hamilton Seminar Room on November 22 to hear Anthony Leggett, a physics professor at the University of Illinois at Urbana-Champaign and 2003 Nobel Prize winner in physics, give a Condensed Matter Science Distinguished Lecture, titled "Is Quantum Mechanics the Whole Truth?" In the afternoon, Leggett attracted another large audience for a Condensed Matter Physics Seminar, titled "Cuprate Superconductivity: The Current State of Play."

Ivan Bozovic, a senior materials scientist and chair of the lecture committee in the Condensed Matter Physics and Materials Science Department (CMP&MSD), said, "We organize these lectures to let younger scientists learn from and have a dialogue with someone who sets the highest standards for scientific research. It is a testimony to his great dedication to science that Tony agreed to give two major talks at BNL during his one-day visit."

Roger Stoutenburgh D1541106

Nobel laureate Anthony Leggett (left) receives a certificate of appreciation from Peter Johnson, CMP&MSD Deputy Department Chair, for giving the Condensed Matter Science Distinguished Lecture.

Anthony Leggett shared the Nobel Prize with Alexei Abrikosov of DOE's Argonne National Laboratory and Vitaly Ginzburg of the P.N. Lebedev Physical Institute in Moscow for pioneering contributions to the theory of superconductors and superfluids.

In his lecture on quantum mechanics — a physical theory established at the beginning of the twentieth century that describes atoms and subatomic particles – Leggett discussed what has been accomplished so far in terms of proving the theory and speculated about the future, posing the possibility that new physics may be in the offing.

Copper-oxide compounds known as cuprates are of interest to scientists and industry because they show superconducting properties — the lack of electrical resistance — at the relatively high temperature of minus 220 degrees F. In his afternoon talk, Leggett reviewed the major proposed theories of superconductivity as they apply to cuprates, trying to pinpoint what scientists can accept as true with some certainty, and he discussed his own ideas on how to crack this major puzzle.

— Diane Greenberg

Ionic Liquids *(cont'd)*

properties that make them attractive as an alternative medium for nuclear fuel reprocessing. These include low volatility, low combustibility, and resistance to being electrochemically oxidized or reduced. In 2001, researchers at DOE's Los Alamos National Laboratory calculated that reprocessing plutonium in boron-containing ionic liquids could substantially reduce the risk of nuclear accidents that involve unintended chain reactions. A particular isotope of boron (10B) can "poison" a chain reaction by strongly absorbing the neutrons that propagate the chain.

Wishart and his team investigated the radiation chemistry of ionic liquids prepared from carborane and another boron-containing anion. They found that electrons ejected from molecules by radiation react with and decompose the carborane. To prevent this decomposition, the researchers propose including certain positively charged ions, like pyridinium, that can intercept the electrons before they react with the carborane. The reactions could be made reversible so the materials can be used over and over again.

"In U.S. nuclear power reactors, the fuel is only used once-through and a lot of energy remains in the spent fuel that is destined for disposal," Wishart said. "In the future, we may instead reprocess fuel to use in current reactors and in a new type of reactor now under development. We would extract more energy from the same amount of natural resources and produce less nuclear waste. Advanced reprocessing would also reduce long-lived radioactive waste. The ionic liquids that we study could be a better medium for reprocessing nuclear fuel and nuclear waste than the currently used media."

— Diane Greenberg

For more details on this research, see www.bnl.gov/bnlweb/pubaf/pr/PR_display.asp?prID=06-91.

Vaska Presents 420th B'haven Lecture *(cont'd)*

Vaska will be introduced by Medical Chair Gene-Jack Wang. All are welcome to attend the lecture, which is free and open to the public. Visitors to the Lab of 16 or older must carry a photo ID.

Vaska earned a B.S. in physics from Clarkson University in 1989, and, from Stony Brook University (SBU), an M.A. in physics and a Ph.D. in nuclear physics in 1994 and 1997 respectively. In 2000, he was appointed assistant scientist at BNL, was promoted to associate scientist in 2003, and in 2004, he became head of PET physics at Brookhaven's Center for Translational Neuroimaging. He now serves as a principal investigator on research grants from DOE's Office of Biological and Environmental Research and the National Institutes of Health Institute of Biomedical Imaging and Bioengineering. Since 2001, Vaska also has been an adjunct professor in the Department of Biomedical Engineering at SBU, and serves as the thesis advisor for two doctoral graduate students.

In 2004, Vaska received the Concorde Microsystems Novel Applications of the Year Award for making improvements in imaging accuracy in certain positron emission tomography, or PET, scanners, and he also won a 2004 Presidential Early Career Award for Scientists & Engineers.

— Liz Seubert

Attn: IBEW Union Participants

Medical Provider Directories

New 2007 medical provider directories are available in the Benefits Office, Building 185. Members who are moving from CIGNA PPO to CIGNA OAP will need a listing of the new network of outpatient radiology facilities and participating doctors. Members who are moving from the Vytra HMO to Vytra PPO, are encouraged to pick up a new listing of participating doctors as well.

Next IBEW Union Meeting

The next IBEW Union meeting will be in January, 2007, date to be announced. There will be no meeting in December.

Reimbursement Account Deadline

According to the Internal Revenue Service, contributions to health care or dependent day care accounts not used by the end of the calendar year will be forfeited. So, do not forget to use up balances within all 2006 reimbursement accounts by claiming expenses incurred in 2006. To do so, submit claim forms by March 31, 2007.

Employees: Renew ID Badges Expiring 12/31/06

New badges have been issued to about 90 percent of BNL employees, but the rest have not yet renewed their badges. BNL employees whose ID badges expire on 12/31/06 must go to the Badging Office in Bldg. 30 to get a new badge. The hours are Monday and Wednesday, 8:30 a.m.-5 p.m., and Tuesday, Thursday, and Friday, 8:30 a.m. - 1 p.m. If you have any questions, call Ext. 4656, 2596, or 5149. Failure to obtain your new badge will result in confiscation of the expired one.

New Passport Requirements for Foriegn Nationals From Visa-Waiver-Program Countries

Recently, a foreign national from a Visa-Waiver-Program country was denied boarding an aircraft to New York from Europe because his passport did not include a digital photograph. The Department of Homeland Security (DHS) now has specific rules as to what passport is acceptable from Visa Waiver Program Countries. All are asked to review these passport requirements at the DHS website when inviting guests from these countries. Pertinent information is found at www.dhs.gov/xtrv lsec/programs/content_multi_image_0021.shtm .

TIAA-CREF One-on-One Retirement Counseling

A TIAA-CREF consultant will visit BNL on Monday and Wednesday, December 18 and 20, to answer employees' questions about financial matters. The consultant will help you to: understand the importance of protecting your assets against inflation; find the right allocation mix for you, learn about TIAA-CREF retirement income flexibility, and compare lifetime income vs. cash withdrawal options. For an appointment, call Arlene Lyons, (866) 842-2053, Ext. 4629.

Arrivals & Departures

— Arrivals —

Vasily Dzhordzhadze ..... Physics
Daniel Fedele ..... ITD

— Departures —

Ahmed Sidi Yekhelf ..... C-A

Defensive Drive Class Tomorrow, 12/16

Places remain for the next six-hour Defensive Driving (Point & Insurance Reduction) course, to be held tomorrow, Saturday, December 16, in Room B, Berkner Hall, 9 a.m. -3:30 p.m. Organized by the ESH&Q Directorate, sponsored by USA Training Inc., and delivered by EAS Associates, the course is open to BNL, BSA, and DOE employees, facility-users, and their families. The cost is $30 per person. Pre-registration is required. To register, call Edward Sierra, 821-1013, and leave a message with your phone number. For more information, call Sarah Wiley, Ext. 4207.

Change a Light, Save Energy — and Bucks!

Roger Stoutenburgh D1011106

Changing the cafeteria lights to compact fluorescent bulbs are the Plant Engineering Division's Robert Klotz, on the ladder, and Jim Stefanidis.

DOE, in partnership with the U.S. Environmental Protection Agency, recently held a "Change a Light Campaign," that was announced by Assistant Lab Director for Facilities & Operations Andy McNerney in the Monday Memo of October 23. The campaign organizers hoped to inspire individuals to use ENERGY Star lighting at home. ENERGY Star fluorescent bulbs only use about one-third the energy of traditional incandescent bulbs.

Secretary of Energy Samuel L. Bodman, Under Secretary for Science Ray Orbach, and Lab Director Sam Aronson fully support the initiative and hope all employees and contractors will change at least one bulb in their home. Naturally, replacing high wattage lamps will yield the most savings.

As John Read, Electrical Shop Supervisor of the Plant Engineering Division explained, for the past ten years, the Lab has been installing energy-saving bulbs throughout the site, including lights in the lobbies of many buildings, in conference rooms, and dorm areas. Some whole buildings, such as 902 and 555, have been completely upgraded.

Said Read, "We have replaced 90-watt bulbs with energy-saving 22-watt bulbs which are brighter and last longer. Estimated savings just for the new bulbs in the cafeteria is about 6000 watts, which is enough to light an average-size house. We use energy-efficient lighting on site wherever possible.

An extra advantage of the upgraded lighting is that each bulb last longer, which saves in replacement labor cost. Most notably, the special LED bulb recently installed at the guard booth will last 25 years.

Read is enthusiastic about the new Research Support Building, Bldg. 400. "This building is state-of-the-art energy-efficient and eco-friendly," he said. "The new T5 fluorescent lights are very efficient, last long, and when they burn out, have practically no residue, which saves on waste disposal costs."

McNerney joins Read and the Electric Shop team members in recommending that all employees and contractors consider changing lights in their homes. "Look for compact fluorescent lights that are labeled low wattage and eco-friendly. They are readily available and the price is coming down. You get better vision at less cost, not only in the dollar sense, but also in the environmental sense," he said.

— Jane Koropsak

Note: As an example, each Sylvania 14-watt compact fluorescent bulb the Lab uses gives about seven years of 60-watt lighting.

Gift-Wrapper Volunteers, Paper, Gift Tags Needed at Lunchtime, 12/19-21

Volunteer gift-wrappers are needed for an hour or so between 11-2 p.m. on Tuesday, Wednesday, and Thursday, December 19, 20, and 21, at Berkner Hall Lobby. The effort is part of the BNL United Way Fund Drive: for a small fee, holiday presents are wrapped for gift-givers and the proceeds given to the United Way. Volunteers, please contact Joanne Rula, Ext. 8481.

United Way Fund Update: BNL Cares

Roger Stoutenburgh D1071206

The December 6 and 7 Holiday Auction, Yard, & Book Sale held for the United Way was a huge success, raising a grand total of $17,480.

Co-chairs Bill Hempfling and Terrence Buck "can't begin to express their gratitude" to all the volunteers who helped in this cause, as well as to the many members of the BNL community who supported the event. They especially thank Lois Caligiuri, Joanna Rula, and Linda Sinatra, who organized the holiday auction; Chris Johnson, who coordinated the yard sale; and Madeline Windsor, who ran the book sale.

The goal for the campaign is to raise $120,000, and, in the words of this year's United Way theme, to "Show that BNL Cares." There is still time to donate: a payroll form can be downloaded from http://intranet.bnl.gov/unitedway/linkable_files/pdf/2006PledgeForm.pdf . Another drawing will be held at the end of December for two American Express Gift Certificates in the amount of $250. Everyone who signs up for payroll deduction between the kick-off of the campaign on November 6 and its conclusion will be eligible for that drawing.

Santa Claus Is Coming Your Way, 12/22

For the 24th consecutive year, Santa Claus (who, this year, doubles as Firefighter Mike Hickey when he is not out on his sleigh delivering presents) and his Elf (Firefighter Danielle Golden) will be coming to Upton town — to wish everyone happy holidays and to distribute candy canes and good cheer, complements of the Fire/Rescue Group of the Emergency Services Division.

On Friday, December 22, using Fire Engine #1 as their sleigh, Santa and his elf will make their rounds of BNL's offices, labs, and shops from 9 a.m. to noon.

Michael Herbert CN1-11-00

To make your reservation to have Santa and his merry crew visit your workplace at a specified time, call the North Pole, Ext. 2351.

Lab Holidays, Upcoming and Future

— 2006 Holidays —

Christmas Eve (1/2 day) ..... Friday, December 22
Christmas Day .....Monday, December 25

— 2007 Holidays —

New Year's Day..... Monday, January 1
Floating Holiday
(Martin Luther King Jr. Day)..... Monday, January 15
President's Day.....Monday, February 19
Memorial Day .....Monday, May 28
Independence Day.....Wednesday, July 4
Labor Day.....Monday, September 3
Floating Holiday ..... Tuesday, September 4
Veterans Day .....Monday, November 12
Thanksgiving Day..... Thursday, November 22
Day After Thanksgiving..... Friday, November 23
Christmas Eve (1/2 day) .....Monday, December 24
Christmas Day ..... Tuesday, December 25

CALENDAR

— THIS WEEKEND —

Today, Friday, 12/15

Buy Science-Based Gifts on Site
Noon-2 p.m. Science Learning Center, Bldg. 935. Last day to buy new science toys, gifts, available to buy.

BERA Holiday Party
5:30 p.m. Brookhaven Center.

Saturday, 12/16

Defensive Driving Course
9 a.m.-3:30 p.m. Berkner Hall Room B. Pre-registration is required. Call Edward Sierra, 821-1013, leave message with your phone number. For more information, call Sarah Wiley, Ext. 4207. See notice, page 2.

Bus Trip to Manhattan
9 a.m. Recreation Bldg. Contact Hanna Herman, haniherman@yahoo.com or 849-2249.

Sunday, 12/17

Potluck Dinner & Santa Visit
5 p.m. Recreation Hall. The Hospitality Committee and the Asian Pacific American Association invites all to a holiday potluck dinner and Santa's visit. Santa will arrive at 5:30 p.m. with presents for good children! Several entrees, desserts & drinks will be provided. Bring a dish to share for six people. For more information, contact Becky Job at Ext. 1059 or becky_job2001@yahoo.com, or Neetu at 805-7119 or m_neetu@yahoo.com.

— WEEK OF 12/18 —

Tues. -Thurs., 12/19-21

***Holiday Gift Wrapping**
11 a.m.-2 p.m. Berkner Hall lobby. Love to give, hate to wrap? For a small fee have your holiday gifts wrapped, all proceeds to benefit the BNL United Way Fund Drive.

Wednesday, 12/20

***Brookhaven Lecture**
4 p.m. Berkner Hall. Paul Vaska, Medical Department, will talk on "Physics and Neuroscience: Common Ground Between Disparate Fields." All are welcome to this free talk, open to the public. Visitors to the Lab of 16 and older must carry a photo ID. See story, page 1.

Friday, 12/22

Santa Claus in Town
9 a.m. -noon. Firefighters doubling as Santa Claus will visit your office, by appointment. See notice at left.

Lab Closes Half-Day
12:30 p.m. Half-holiday, Lab closed.

— WEEK OF 12/25 —

Monday, 12/25

Christmas Day — Lab Holiday
Lab closed today. Happy holidays to all. No Bulletin will be printed this week.

— WEEK OF 1/07 —

Monday, 1/1

New Year's Day — Lab Holiday
Lab closed today. Happy New Year to all. No Bulletin will be printed this week.

— WEEK OF 1/8 —

Wednesday, 1/10

***BSA Noon Recital**
Noon. Berkner Hall. The Euclid Quartet will perform Beethoven and Ginastera. Sponsored by BSA, the concert is free and open to the public. Visitors to the Lab of age 16 and over must carry photo ID. See notice, page 4.

Note: This calendar is updated continuously and will appear in the Bulletin whenever space permits. Submissions must be received by the preceding Friday at noon to appear in the following week's Bulletin. Enter information for each event in the order listed above (date, event name, description, and cost) and send it to bulletin@bnl.gov. Write "Bulletin Calendar" in the subject line.

Classified Advertisements

Placement Notices

The Lab's placement policy is to select the best-qualified candidate for an available position. Candidates are considered in the following order: (1) present benefits-eligible employees within the department/division and/or appropriate bargaining unit, with preference for those within the immediate work group; (2) present benefits-eligible 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, disability or veteran status. Each week, the Human Resources Division lists new placement notices, first, so employees may request consideration for themselves, and, second, for 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. Access current job openings on the World Wide Web at www.bnl.gov/HR/jobs/.

NS3255. NSLS ENVIRONMENT, SAFETY, AND HEALTH MANAGER (M-2) - Requires an advanced degree, 15+ years of relevant technical and managerial experience. Comprehensive knowledge, skills and experience within the discipline of ES&H is required, as well as knowledge of DOE safety standards. Excellent communication (oral and written) and interpersonal skills are required. Substantial experience in an accelerator background and certification in a safety specialty is highly desirable. Will be responsible for the ESH/Quality/Training programs to ensure that the NSLS is operated in accordance with applicable BNL and DOE requirements to protect the worker and the environment. Will oversee the Integrated Safety Management Program and the related ISO 14001 and OHSAS 18001 programs. Will provide guidance to department staff to integrate ESH/Quality/Training factors into work activities. Will supervise other ESH/Quality/Training staff. Candidate will report directly to the NSLS Chair. National Synchrotron Light Source Department.

TB4099. ADMINISTRATIVE ASSISTANT (A-4) – Requires an AAS in secretarial science or equivalent, and at least eight years' related experience which includes at least five years' experience at BNL in a role which provided broad exposure to the Laboratory. Proficiency in the use of Microsoft Page and Adobe Acrobat; thorough knowledge of Laboratory policies and procedures; PS HR, Financials, web requisitions and travel system are also required. Excellent verbal and written skills are essential. Must have the ability to work under pressure, balance priorities and perform multiple tasks; exercising good initiative and judgment, working as a member of a team. Will provide administrative support to the ALD for Policy and Strategic Planning by performing a range of complex administrative practices, policies and procedures. Duties will also include arranging retreats and meetings, preparing correspondence, maintaining project files, tracking expenses, data entry, preparing foreign and domestic travel authorizations and expense reports. Director's Office.

OPEN RECRUITMENT – Opportunities for Lab employees and outside candidates

TB4260. PROJECT ENGINEER I (P-9) – Requires a bachelor's degree in electrical engineering and 10 years' work experience as an electrical safety engineer in an industrial or laboratory setting, a demonstrated ability to initiate and lead projects or programs effectively, and expertise in electrical safety codes/regulations such as NFPA 70 and OSHA. Candidate must have excellent written and oral communication skills and knowledge of Microsoft Office (Word, Excel, Outlook, PowerPoint, and Access) and Microsoft Project. CSP or P.E. license is desired. Responsibilities will include continuing the development and implementation of the electrical safety program to ensure compliance with NFPA 70 and 70E, NEC, OSHA, and other consensus standards. Safety & Health Services Division.

RM4261. SR. APPLICATIONS ANALYST (I-5, ERAP eligible) - Requires a bachelor's degree in computer science or a related field or equivalent experience and 1+ year of relevant experience. Must demonstrate a thorough understanding of fundamentals of requirement specification, design, coding and testing of information systems. Requires a solid technical knowledge of design and building data-centric applications (client-server and web-based) using ASP, Visual Basic, .NET, Visual Studio 2005, and Crystal Reports. Experience with Oracle and SQL Server Databases is highly desirable. Experience with C/C++ and UNIX/Linux environments and knowledge of environmental chemistry and radiological data are a plus. Candidate must have excellent written and oral communication skills. Responsibilities will include development and maintenance of a suite of applications including forms and reports for data entry, querying, and reporting for an Oracle environmental database; design and development of a Web-based user interface; data processing; and production of technical and end-user documentation. Environmental & Waste Management Services Division.

NS4461. SR. HUMAN RESOURCES REPRESENTATIVE (A-6) - Requires a bachelor's degree in human resources, business administration or a related field or equivalent capabilities and four years' experience in human resources services. Knowledge of human resources functions and familiarity with human resources policy, procedures and directives is required. Should possess strong skills in relationship building, influencing, negotiating, analysis, coaching, listening and presentation. Prior project management experience or formal project management training and experience utilizing recruiting resources (print and internet media, job fairs, technical meetings, etc.) is highly desirable. Successful candidate will be a Human Resources Division staff member assigned to the National Synchrotron Light Source II Project and report to the NSLS-II Associate Director for Administration and Finance. Responsibilities will include the administration, interpretation and assistance in the development of NSLS-II personnel policies, practices and services, including workforce planning, recruiting, hiring, subcontracting, training and the retention of a diverse and highly qualified project team. Will be responsible for the NSLS-II performance and salary review processes. Human Resources & Occupational Medicine Division.

NS4391. HUMAN RESOURCES ASSISTANT (A-2) - Requires an AAS degree in secretarial science plus related experience of at least four years or equivalent, and excellent organizational and communication skills, both oral and written. Expertise in providing administrative support to include performing complex administrative office and secretarial functions is required, as is excellent word processing skills, and computer proficiency in MS Word, Excel, Outlook and Power Point. Experience with PeopleSoft is highly desirable. Position will support Employment Office functions which may include complex appointment and travel arrangements; extensive involvement in PS HR system; PS queries; and Excel spreadsheets; webpage enhancements and assisting the Manager and Supervisor of Employment with various administration duties. Successful candidate will be expected to perform this position with emphasis on confidentiality and discretion, using initiative, and good judgment, and be able to multi-task. Human Resources & Occupational Medicine Division.

RM4392. ADMINISTRATIVE SERVICES ASSISTANT (A-2, 3 positions, reposting, ERAP eligible) - Requires four years of relevant experience or an AAS (business, computer technology, or database management) and 2 years' relevant experience or a bachelor's degree in a business field. Candidate must have working knowledge of basic database development and maintenance skills; strong analytical, communication, and interpersonal skills; and proficiency in MS Office. In addition, must work independently within established procedures and guidelines, be able to handle non-routine office matters, and be responsive and resourceful in responding to the needs and problems of scientists visiting and working at BNL. Knowledge of PeopleSoft programs a plus. Knowledge of Laboratory policies and procedures and experience in issuing Laboratory appointments and check-in process, which requires a clear understanding of acceptable working INS documentation, personal identifiable information (PII), and all supporting documents associated with work-type visas is a plus. Position may require working non-traditional business days and/or hours. Job involves extensive interaction with user communities, guests of departments, and with BNL staff. Performs complex administrative functions and maintains confidential administrative records and reports. Utilizing various databases; primary responsibilities include issuing user appointments; monitoring training exams; ensuring guests have signed patent and facility agreements in place before working; issuing BNL ID badges, dosimetry badges, and facility access cards; database maintenance and input; expediting requests for foreign national access and initiating extension of guest appointments; and administrative support to the Head of the Guest, User, and Visitor Center. Director's Office.

TB2968. HAZARDOUS WASTE TECHNICIAN (term appointment) - Requires an AAS degree in chemistry, engineering, physical sciences, or equivalent experience and the ability to operate handling equipment and the ability to obtain and maintain a Commercial Driver License. Responsibilities include, but are not limited to, the pickup, packaging, transporting, storing and bulking of hazardous and radioactive wastes. Additional responsibilities include completing and maintaining certifications required for the operation of the Waste Management Facility. Environmental & Waste Management Services Division.

TB4028. PRINCIPAL TECHNICIAN (TW–4, reposting) – Requires an A.A.S. in electrical engineering technology plus at least two years' experience, or equivalent experience combined with relevant training or course work. Relevant experience must include maintenance and troubleshooting of complex electronic systems such as power supplies, analog/digital circuitry, RF amplifiers and signal sources, etc. Must be familiar with standard test and measurement equipment – multimeters, oscilloscopes, spectrum analyzers, etc. Must be self motivated, able to work under minimum supervision, and be available for off hours call in as required. Collider Accelerator Department.

TB4427. ELECTRICIAN A (2 positions, term appointments) – Under minimum supervision lays out, constructs, installs, maintains, repairs, and operates (in accordance with the national electrical codes, or as otherwise directed) electrical systems equipment, controls, and related devices. May be required to perform similar duties on other than maintenance division equipment and facilities. Plant Engineering Division.

Motor Vehicles & Supplies

04 CHEVY S10 PICKUP - crew cab, black, 4wd, all pwr., tow pkg., 6 CD changer, hwy. miles. 60K mi. $12,000/neg. 278-1905.

04 VW JETTA GLS - 1.8 turbo Tiptronic trans, blk., pwr m/roof, hted mirrors/seats, airbag curtain. 26K mi. $14,950/neg. Ext. 7277.

01 OLDSMOBILE ALERO - Silver, two door, leather, a/t, pw/pl, hwy Miles, orig owner, CD, . 100K mi. $5,000/neg. 744-7556.

00 MERCURY SABLE LS - Dk blue, loaded. Go to autotrader.com, put in Zip 11717. 145K mi. $4,200. Ext. 4748 or 277-0464.

99 SUBARU LEGACY WAGON - 4-dr, awd, a/t, a/c, abs, am/fm, c/c, cass/cd, p/l, keyless ent., rf rack. 72K mi. $7,350. 331-4538.

97 MITSUBISHI GALANT - ES, 4dr. a/t, a/c, c/c, p/b, p/l, p/s, p/w. 128K mi. $2,400. Ext. 3412.

95 VW GOLF GL III - blk, 5-spd man. trans., s/roof, new front tires, brakes, batt., cd+mp3 player. 140K mi. $1,000/neg. Ext. 8215.

92 PONTIAC GRAND AM - Red, a/t, 6cyl.,4dr., p/w, cass., vg condition. 77K mi. $1,800/neg. Ext. 1098 or 833-0387.

Boats & Marine Supplies

23' SKIPJACK OYSTERMAN 23 - fg sloop, slps 3, 9.9 HP o/brd, 31' LOA, cntrbrd, shallw draft. $8,900/neg. Ext. 2224 or 661-0228.

Furnishings & Appliances

2 CHENILLE BARREL CHAIRS - cust., swivel/casters w/cord, fringe trim. Moving. Paid $1,800+, sell for $900/pr. Kathy, Ext. 5098.

AREA CARPET - 11'2"x7'7" beautiful area rug w/vine detail in muted earth tones. Pd. $850, sell for $350. 929-2839.

BEDROOM FURNITURE - Girl's antique white oak desk w/hutch, matching hdbrd, photo avail. $175. Ext. 3085 or 744-4535.

CLASSIC CAPTAIN'S BED - Wood, excel. cond., orig. purch at This Ends Up incl. mattress, great for child, $275. 737-3453.

COUCH & RECLINER - tan/brown microfbr, 2 yrs. old, gd cond. $600/both. Ext. 7114.

DINING SET - Country French, hand painted 45" rd w/24" leaf. 4 chrs, w/matching buffet, 1 yr. old. $1,200. 929-2839.

FOOD DEHYDRATOR - Snackmaster FD-40, like new. $25. Ext. 3555 or 475-8183.

L/R TABLES - Nichols & Stone, 2-tone, high-shine finish. 2 end tables, 1 coffee table. $200. 278-1905.

PORCH / PATIO SET - Redwd, matching chairs (rocking & swivel), recliner w/mtchg cushns & end tables. $90. Ext. 5475.

REFRIGERATOR - GE, white, top frzr, 32w, 66h, 29d, glass shelves, ice maker in freezer, gd cond., $150. Ext. 3492 or 734-2593.

STOVE - GE Spectra, gas, XL44, oversz oven, 30w,26d,47h, spec burners, wht/blk oven, 5 yrs old, like new. $300. 734-2593.

TV - 27", excel. cond. $100. Ext. 7114.

Audio, Video & Computers

COMPUTER - PC/E machine, 500 MHz, 128MB, 10GB, writable CD, readable DVD, Win98. Ext. 7370.

CAR STEREO - Durabrand In Dash, CD/MP3/CDR-RW pl/bk w/MP3 disply, 45Wx4, slide down/detchb panl, remt. $100. 434-5824.

HP PHOTOSMART PHOTO PRINTER - New, Model No. 7850, gt. gift. $55. 543-7065.

MONITOR - 17" ViewSonic A70 CRT, excel. cond., bright, crisp & clear, w/speakers. $50. Ext. 4627 or 928-6469.

PIONEER CAR STEREO - 50W/ch.l,CDR-RW/MP3/WMAplayback, sat./ipod compat, $180. 434-5824.

TV - 27" Toshiba flat screen, hi. defin., brd new, pd. over $800, sell $475. Ext. 2882.

VIDEO CAMCORDER - Canon ZR200, digital, like new incl. s/ware, Lowepro, 1 Gb card, 4 tapes, batt. chrgr. $310. Ext. 7187.

X-BOX 360 - brand new, still sealed, $380 see http://pages.zdnet.com/jappe1 for details. Warren, Ext. 2080 or 751-5245.

Sports, Hobbies & Pets

AMERICAN GIRL DOLL - JOSEFINA - Like new. Wooden wardrobe & 9 outfits, w/access. $200. Ext. 5744 or 929-4440.

GOLF CLUB - Adams Golf "Tight Lies" Hybrid, 16deg (equiv. to #2 iron), RH, grphte shft, new, unused, $25. Ext. 7707.

SKI STUFF - Boots, Salomon, man's 11 (33cm), black. $25. Skis, Hd Cyber 190cm, blk/blu w/Sol. 800 bdgs. $40. 513-8275.

Tools, House & Garden

BARBECUE - Aussie, new 6/2006, used 5 times, full prpn tank. $60. Patio set, 2 chrs (turn & rocker) w/footrests, 1 small coffee table, tan color. $120. Ext. 7114.

POWER SNOW SHOVEL - Toro Power-Shovel Plus, elec., like new, used one season, converts from thrower to power broom. $75. Chris, Ext. 2024 or 741-9169.

Miscellaneous

CHRISTMAS TREE STAND - for large tree, contains water basin, $25. Ext. 4340.

DEPARTMENT 56 - McGuire's Irish Pub. New - boxed. Part of Snow Village Collection - Ask. $40. Cheryll, Ext. 2852.

SWEET SIXTEEN DRESS - White gown w/ small pink bow, worn once, will fit 5'4", approx. 130 lb. girl, pics avail. $100. Ext. 4229.

WOMEN'S SUITS - several sm. size 6-8 suits, one red leather w/skirt, seldom worn, excel. cond. best offer. Steve, Ext. 4925.

Free

FREE - desk, dining table, sofa, bed, chairs, etc. Mei, Ext. 4360 or 675-6416.

PUPPY - In desperate need of loving home. Female, 1-yr old, gd w/children. Can no longer take care of. Linda, 591-1781.

TREADMILL - Weslo Cadence 840. Works. You dust off, pick up in Mt Sinai. Ext. 2425.

WROUGHT IRON CHAIRS - Pier One, moving, set of four. Kathy, 929-2839.

Wanted

AT&T CELL PHONE - GSM type, Nokia 3595 or similar. Bill, Ext. 2906 or 929-6189.

EMPTY INK JET CARTRIDGES - Empties wanted, ongoing basis for charity. Canon BCI/Epson not accepted. Ext. 8612.

SKIS AND BOOTS - looking for a recent model, inexpensive skis, boots sizes 8-9, poles and goggles. Ext. 3621.

WRAPPERS - volunteers to gift wrap, also paper and tags, needed for Dec. 19, 20 & 21, 11a.m.-2p.m. All proceeds for United Way. Joanne, Ext. 8481.

WRITING DESK WITH CHAIR - Wooden desk in good condition , preferably cherry finish. Mamta, Ext. 3639 or 355-5630.

For Rent

BROOKHAVEN - 1 bdrm. in a charming house in Brookhaven Hamlet, v. quiet area, 9 mi. to the Lab, use of kit., washer and dryer, rent incl. all. $520/mo. 286-4028.

CENTEREACH - 1 bdrm apt. grd flr, lr/kitch combo, new carpet, applis., paint; own th/stat,pvt. ent., cable not incl., no pets/smkg, avail. 1/1/06, $875/mo. 696-2427.

COMMACK - Studio Apt. Full eat-in kitchen area. Full bath, all utilities incl., own thermostat and priv. ent. $850/mo./neg. Gary, 864-8119.

MASTIC - 4-bdrm. ranch close to water, full bath, 100 x 100 prop., quiet str., 15 mins to Lab. $1,600/mo. Ext. 7658 or 495-2596.

PATCHOGUE - house, 2 bdrm, 1 bth, l/r, kitch, fence yard, off-str prkg, w/d, ref micwave, we pay oil and gas, new heating syst. $1,500/mo. Ext. 8410 or 6487612.

PATCHOGUE - Cottage 1/2 mi. to bay, clay tile roof, patio, loft bdrm, full bath, newly renov., 20 mins to Lab $1,000/mo. Ext. 7658.

ROCKY POINT - 1-bdrm. house, lg. l/r, lg. kit., bath, bsmt., no pets/smkg., water incl. $1,075/mo. John, 744-8919.

SHIRLEY - Lrg 1-bdrm Bsmt apt., all incl. Suit. for one. $650/mo. Ext. 3846.

SOUND BEACH - 3 bdrm., 1-1/2 bath, new Col., lg. eik, f/p, bsmt., level corner lot. $1,800/mo. 278-1905.

WADING RIVER - 1-bdrm. apt., lg. rooms & pvt. ent., utilities incl. (elec., heat, & water) 10 min. to BNL, single non smoker please. $1,000/mo. 929-3419.

KISSIMMEE, FL - 5 mins to Disney, 5 bdrm./4 bath, pvt. pool/spa, price incl. taxes, pool/spa heat, 2/17-24, 2007, www.family-vacation-homes.com $1,350/wk. 889-5303.

For Sale

BROOKHAVEN - 4 bdrm, 2 bath cape. New kitch & baths. Oil ht, a/c, eik, full bsmt, 2-car gar. Nxt to wooded preserve, flower & orgnc veg grdns. $459,000. 286-2505.

SHOREHAM - 5-bdrm., 2-bath ranch, move-in cond., br-new appl, driveway, cac, heating syst. & hwh, f/p, Ins, fenced yard, 18x18 shed. $369,900/neg. 848-8072.

SOUND BEACH - 3 bdrm., 1-1/2 bath, new Col., lg. eik, f/p bsmt., level corner lot, taxes $2,900. $340,000/neg. 631-278-1905.

WADING RIVER - 2805 sq ft 8-yr-old 4 bdrm, 3-bath Victorian. Park-like 1/2 acre. CAC, igs, 2.5 car gar., den w/ brick f/p, 580 sq ft master ste w/balc. $659,900, 929-4440.

YAPHANK - 3 bdrm condo, 1 1/2 bath, wood flrs, granite cntrs in kitch, att. gar., full bsmt, CAC, new oil burner. Patio, gardens, move-in cond., $319,000, 949-6109.

On-Site Services

ON-SITE SERVICE STATION - all vehicle services, NYS inspections, new batteries, tires, timing belts, repairs, etc., done while you are at work. Ext. 4034.

BSA Noon Recital

Euclid Quartet, 1/10/07

The Euclid Quartet, a prize-winning string ensemble, will give a concert on Wednesday, January 10, at noon in Berkner Hall. The program will consist of Beethoven's *String Quartets Op. 59, No. 3* and the Argentinian composer Alberto Ginastera's *String Quartet No. 1, Op. 20 (1948)*. Sponsored by BSA, the company that manages BNL, the concert is free and open to the public. All visitors to the Lab age 16 and over must bring a photo ID.

Formed in Ohio in 1998, the Euclid Quartet has been critically acclaimed for its vibrant playing. Winners of the Osaka International Chamber Music Competition in Japan, they have also captured top prizes at the Carmel, Yellow Springs, and Hugo Kauder competitions.

They have performed at many prestigious venues, including Carnegie Hall, Merkin Hall, and the Aspen Music Festival, as well as at BNL in May 2006.

Reminder: Credit Union Now Located in RSB

The on-site branch of the Teachers Federal Credit Union is now located in the Research Support Building, Bldg. 400.

Give to Help Victims of Domestic Violence

The BNL Police group is again collecting items for Suffolk County Coalition Against Domestic Violence (SCCADV). This year ONLY toys, toiletries, diapers, phone cards, and money are needed. NO coats or clothing are needed. Checks can be made out directly to the coalition, SCCADV, c/o Kathy McNaught, Bldg. 50. Also, items can be dropped off at Police Headquarters, Bldg. 50, or given to an officer at the main or north gates.

the 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 Bulletin is 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