

Then & Now — And Beyond 60th Anniversary Symposium Provides Look at BNL's Past, Future



Laboratory Director Sam Aronson

From nuclear and particle physics to neuroimaging, BNL employees and visitors heard about the Lab's history and bright future at the 60th anniversary symposium on October 19, in Berkner Hall. During the all-day symposium, key scientists and administrators from the Lab's past and present highlighted developments in fields in which the Lab has been and continues to be a pioneer, including: accelerator design and instrumentation, basic energy sciences, nuclear and particle physics, life sciences, computational science, climate change, and energy.

As Master of Ceremonies, Laboratory Director Sam Aronson welcomed the audience to learn about "six decades of outstanding scientific achievement" and future plans for the Lab, such as the National Synchrotron Light Source II

(NSLS-II), eRHIC, involvement in the Large Hadron Collider (LHC) in Switzerland, and an emphasis on computational science, nanoscience, and energy. "There's a really great future at the Lab and it's up to all of us to realize that," Aronson said.

Aronson (p. 2, photo 3) then introduced Brookhaven senior physicist Robert Palmer (p. 2, photo 2), who gave a brief history lesson in accelerators and their future applications at BNL and across the world. Explaining that a conventional battery has one volt, Palmer told the audience that researchers are hoping to build accelerators that run at the teraelectronvolt level, or the power equivalent of 30 million miles of two-inch batteries lined up end to end. "That's longer than the solar system, so we have to do things a little more intelligently than that to advance from the bat-

tery to this huge energy scale," Palmer said.

Instrumentation Division Head Veljko Radeka (p. 2, photo 9) then detailed BNL's history in developing and using various detectors, ranging from cloud and bubble chambers to the complex instrumentation in RHIC's PHENIX and STAR detectors. "Technology has changed from the early days when electronics was a hobby of almost any interested physicist," Radeka said. "It now requires a much more dedicated systematic approach to develop the electronics needed for sophisticated detector systems."

Chemistry Department Chair Alex Harris (p. 2, photo 11) led the basic energy sciences portion of the symposium, first introducing Senior Physicist Emeritus Martin Blume (p. 2, photo 22), who explained how the Brookhaven Graphite Research Reactor, the High Flux Beam Reactor, the NSLS, and the Center for Functional Nanomaterials (CFN) were pioneering facilities technically, scientifically, and organizationally. "Like pioneers, these facilities had to pass raging rivers and deal with some terrible weather," Blume said. However, they've resulted in impressive science on superconductivity, magnetism, chemistry, nuclear physics, structural biology, and numerous other fields, with many more on the horizon, Blume said.

Next, Seamus Davis, a senior physicist in the Condensed Matter Physics & Materials Science Department and a physics

(continued on page 2)

Suh-Urk Chung Honored As Senior Scientist Emeritus

"I came to Brookhaven right after I received my Ph.D. from Berkeley — I recall that Nick Samios initially interviewed me — and I've stayed here ever since," said Suh-Urk Chung at his BNL office, contemplating his 40 years of groundbreaking research in physics that earned him the title of Senior Scientist Emeritus. "What's unique about my career is that I've spent a great deal of time working in western Europe."

Since Chung received his new title on January 1, 2007, he has continued to pursue his research as a scientific consultant for the Cluster of Excellence for Fundamental Physics program, in Munich, Germany, and as Mercator Visiting Professor at Technical University, also in Munich. In addition, he is a research consultant for both the STAR experiment at BNL's Relativistic Heavy Ion Collider, and for the COMPASS experiment at CERN, the European Organization for Nuclear Research near Geneva, Switzerland.

The Emeritus title is given to a select number of retired scientists with at least ten years of service to the Lab who continue to be active in their research and have made noteworthy contributions to BNL's reputation as a world-class scientific institution. Retired employees who receive the Emeritus title retain many of the rights, privileges and obligations of active employees.

Chung led an international team of 51 researchers from BNL and numerous other institutions who discovered the exotic meson, an unusual elementary particle, which helped to validate the standard model, the central theory of modern physics. The researchers uncovered an exotic meson after analyzing data from the products of billions of particle collisions made during the experiment's run at BNL's Alternating Gradient Synchrotron. After three years of studying the data, the team published their findings in a series of physics journals, from the September 1, 1997 issue of *Physical Review Letters* to the January 28, 2005 issue of that journal and more to follow.

"In some sense, we've discovered a new form of matter," Chung said shortly after the discovery. "This particle had been hypothesized, but it's never, never been pinned down." (continued on page 3)



Roger Stoulenburgh D6510807



Joseph Rubino D1111007

429th Brookhaven Lecture, 10/31

'How Big Science Came to Long Island: The Birth of Brookhaven Lab'

Robert Crease, historian for BNL and Chair of the Philosophy Department at Stony Brook University, will give the 429th Brookhaven Lecture, titled "How Big Science Came to Long Island: The Birth of Brookhaven Lab," in Berkner Hall at 4 p.m. on Wednesday, October 31. He will follow this lecture on December 12 with the 431st Brookhaven Lecture, on the history of the Lab's Relativistic Heavy Ion Collider. Both lectures are part of the ongoing celebration of BNL's 60th anniversary year.

Next week, during his October 31 talk, Crease will cover the founding of the Lab soon after World War II as a peacetime facility to construct and maintain basic research facilities, such as nuclear reactors and particle accelerators, that were too large for single institutions to build

and operate. He will discuss the key figures involved in starting the Laboratory, including Nobel laureates I.I. Rabi and Norman Ramsey, as well as Donald Dexter Van Slyke, one of the most renowned medical researchers in American history.

Crease also will focus on the many problems that had to be overcome in creating the Lab and designing its first big machines, as well as the evolving relations of the Lab with the surrounding Long Island community and news media. Throughout his talk, Crease will tell fascinating stories about BNL's scientists and their research.

After earning a B.A. from Amherst College in 1976 and a Ph.D. from Columbia University in 1987, Crease joined the faculty at Stony Brook University in 1987, and, in 1989, began

working part-time as the historian for BNL. He has written ten books and numerous articles on the history and philosophy of science, including *Making Physics: A History of Brookhaven National Laboratory, 1946-1972* (University of Chicago Press, 1999), which covers the events and people that shaped the Lab during its first 25 years.

Crease is currently working on a sequel, which will cover the next 25 years of BNL's history, and he has written several historical articles about the Lab for the journal *Perspectives in Physics*. He wrote the entry for BNL's first accelerator project head, M. Stanley Livingston, in the forthcoming edition of the noted reference encyclopedia, *Dictionary of Scientific Biography*. Crease also frequently mentions BNL in his monthly column, called "Critic-

cal Point," in the international magazine, *Physics World*.

Open to the public free of charge, the talks will be held to celebrate the Laboratory's 60th

anniversary. Visitors to the Laboratory age 16 and over must bring a photo ID. Refreshments will be offered before and after the talk. — Diane Greenberg



Robert Crease

Roger Stoulenburgh C118-3001-96

Then & Now — And Beyond: BNL’s 60th Anniversary Symposium

(continued from page 1)

professor at Cornell University, discussed the new frontiers in determining the electronic structure of complex materials. “The basic materials we use are reaching their limits, not engineering limits, but limits due to quantum mechanics,” Davis (photo 8) said. “We need to find new materials in which the electronic structure is useful, complex, and more malleable.” BNL has one of the leading groups in this area, but the formation of the right suite of tools is still needed in order to produce an integrated way of determining electronic structure, Davis said.

BNL Senior Advisor to the Director Peter Bond (photo 12) chaired the session on nuclear and particle physics, first introducing Nick Samios, Director of the RIKEN BNL Research Center. Samios (photo 7, left) outlined the Lab’s physics achievements prior to RHIC, from identifying parity conservation to the discovery of solar neutrinos. In each case, Samios said, “simple and elegant physics finally emerges, but it took lots and lots of work and a redundancy of

data to get to the results.”

Columbia University physics professor Bill Zajc (photo 1) then discussed BNL’s work at RHIC, its future nuclear physics endeavors on site, and particle physics research at the LHC, the Large Synoptic Survey Telescope, and the Sanford Underground Science and Engineering Laboratory. This research all relates back to the so-called energy budget, Zajc said, emphasizing that everything we see around us makes up just 4 percent of the universe, with the remaining 96 percent composed of dark energy and dark matter. “That’s a small amount, but there is fascinating physics in that 4 percent that will lead to an exploration of the rest of the universe,” Zajc said.

BNL senior biophysicist emeritus Richard Setlow (photo 4) introduced the speakers in the symposium’s life sciences session. Wayne Hendrickson (photo 5), Columbia University professor of biochemistry and molecular biophysics, took the stage first to present a personal perspective on structural biology research at the Lab, includ-

ing neutron science, the protein data bank, Scanning Transmission Electron Microscopy, the NSLS, and the future of the field at NSLS-II. Determining the structures of proteins has been and continues to be “instrumental in changing the way we understand biological systems and disease,” Hendrickson said.

Next, Nora Volkow (photo 7), Director of the National Institute on Drug Abuse, showcased BNL’s research on the neurobiology of free will in addictive disorders, stressing the role of memory and the depletion of the brain’s receptors for dopamine, a natural brain chemical involved in motivation, movement and the sensations of pleasure. “You may say that addicts have no will power,” Volkow said. “But the area of the brain that allows you to have control has been damaged by the activity of taking the drugs. The areas that allow us to exert control are profoundly damaged.” At BNL, Volkow said, researchers with very different backgrounds are working together to find a treatment.

Deputy Director for Science & Technology Doon Gibbs (photo 15) introduced the last three symposium speakers. First, David Keyes (photo 13), Columbia University Z.Y. Fu Foundation Professor of Applied Mathematics, outlined the history and bright future for computational science at Brookhaven and across the nation. With resources such as the newly acquired New York Blue supercomputer, funded by New York State, and backing from DOE’s Scientific Discovery Through Advanced Computing (SciDAC), Brookhaven will be able to use computer simulation to guide expensive experiments, test theory and increase productivity, Keyes said. “Computers, too, can be an engine of discovery at Brookhaven,” he said.

Next, senior chemist Steve Schwartz (photo 6) discussed the topic of climate change and associated research methods at BNL. The Lab studies the effect of increasing carbon dioxide and aerosols with field programs, instrument development, and modeling through

involvement in the Atmospheric Science Program and the Atmospheric Radiation Measurement Program, Schwartz said. “Actions that we make or don’t make now are going to have a lasting influence,” he said. “Early knowledge of climate sensitivity is very important in terms of avoiding poor decisions.”

As the last speaker, Jim Misewich (photo 10), Acting Associate Lab Director for Basic Energy Sciences, outlined the Lab’s energy strategy, which covers the complete spectrum of research from discovery to deployment. With strong collaborations and the tools available at the CFN, NSLS, New York Blue, and soon at NSLS-II, Brookhaven focuses on four key areas: biofuels, catalysis, complex materials, and solar energy. “We would like to be leaders in the effective use of renewable energy through improved conversion, transmission and storage,” Misewich said.

The symposium was followed by a reception for all employees and attendees.

—Kendra Snyder

To see the video of the symposium, go to www.bnl.gov/video



Session Chairs, speakers, and several attendees at BNL’s 60th Anniversary Symposium on October 19, 2007

Photos by Joseph Rubino
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Benefits Open Enrollment: Now Until 10/31

The open enrollment period for medical and dental benefits, the health care and dependent day-care reimbursement accounts, and the vacation-buy plan began on October 15 and will continue through October 31. During this time, eligible participants may add or drop medical and/or dental coverage, change from one medical and/or dental plan option to another, add or drop family members covered, and/or sign up for the reimbursement account(s) and the vacation buy plan. All changes made during the open enrollment period will be effective on January 1, 2008.

At the Lab as elsewhere, the cost of medical programs has increased, including the cost for the CIGNA and Vytra medical programs. Since BNL is self-insured for its CIGNA and Vytra medical plans, increased claims equal increased plan costs for both the Lab and employees. Therefore, employee contributions to these medical programs for 2008 have had to go up. This necessity is regretted; it is a hardship being experienced across the nation.

All employees should have received a 2008 open enrollment booklet via interoffice mail. It will provide items to consider when making elections, comparisons of the medical and dental programs, and the cost of benefits for 2008. It also contains information on many other benefits available through the Lab.

All are encouraged to review the information provided in the open enrollments booklet. Those who decide to make changes to medical and/or dental coverage must complete forms that are available through the Benefits Office, Bldg. 400B.

Reimbursement Account and Vacation Buy Sign-Up

Reimbursement account and vacation buy elections do not carry over from one calendar year to the next, so if you want to participate in 2008, you must sign up for this benefit. To participate, you must complete an open enrollment form or enroll online. Forms are available through the Benefits Office, Bldg. 400B.

To enroll online: for reimbursement accounts, log into PeopleSoft and click the following links: Employee Self Service, Benefits, Open Enrollment, and Reimbursement Accounts. For the vacation-buy plan, the links are: Employee Self Service, Benefits, Open Enrollment, and Vacation Buy.

If you enroll online for the reimbursement accounts or the vacation buy plan, you will receive an e-mail confirmation of your election. For more information, contact the Benefits Office, Ext. 5126 or Ext. 2877.

Employee Lunchtime Tour — PHENIX, 10/26

Take the employee lunchtime tour today, Friday, October 26, to learn about PHENIX, the Lab's largest detector. This huge detector will soon be rolling into its experimental position for the eighth run of the Relativistic Heavy Ion Collider (RHIC). Meet the group at noon in Berkner Hall lobby to be taken to visit the counting house and control room to see the computers and the large experimental hall. No reservations are needed. The group will be returned to Berkner by 1 p.m. Call Ext. 2400 for more information.



Roger Stoutenburgh CH 3-16-98

Chung Senior Scientist Emeritus (cont'd)

Currently, much of Chung's research focuses on discovering other members of the exotic meson family with different quantum properties. As a member of the COMPASS experimental team at CERN's Super Proton Synchrotron, he is studying hadron structure and hadron spectroscopy with high intensity muon and hadron beams. Muons are part of the lepton family of particles.

Also, as a member of STAR's Ultra-Peripheral Collisions Group, Chung studies hadrons and mesons from the collisions of heavy ions. And, in Germany, under the Cluster of Excellence for Fundamental Physics initiative and as Mercator Visiting Professor, he is working on similar questions concerning the fundamental nature of hadrons.

Chung also devotes considerable time to mentoring graduate students and young scientists, and, in fact, he has brought one of his protégés from Germany, Boris Grube, to BNL to work on the STAR experiment as a guest research associate.

About his current work and travels, Chung said, "I am thriving. The Emeritus position gives me the freedom to continue to pursue my own research and to make my own schedule."

In between his research, traveling and teaching, Chung, with his wife, takes two-and three-day hikes in the French and Swiss Alps. When on Long Island, he prefers bicycling. Classical music, especially piano music, also interests him, and provides balance to a busy work schedule.

After attending Seoul National University in Korea for two years, Chung came to the U.S. in 1959, where he continued his education at the University of Florida, Gainesville, earning a bachelor's degree in engineering science in 1961. He then attended the University of California, Berkeley, where he earned a Ph.D. in physics in 1966. He joined the Physics Department in the same year as a research associate and rose through the ranks to become a tenured senior physicist in 1990.

Five times during his tenure at BNL, Chung worked for periods from several months to three years at CERN and in Germany. He was the recipient of the Alexander von Humboldt Senior Scientist Award in 1992, providing him funding for a year's research in Germany.

Since 2003, Chung has been a research consultant at the STAR experiment at RHIC, and, since 2004, he has been a research consultant for COMPASS at CERN. Chung retired from the Lab in 2005, and, in 2007, he assumed his current position as a consultant in Munich, Germany.

— Diane Greenberg

Talk on Family-Friendly Policies: 'Do Babies Matter?' 10/30

A talk on family-friendly policies will be held on Tuesday, October 30, at 4 p.m., in the Hamilton Seminar Room, Building 555. Mary Ann Mason, Professor of Social Welfare and Law at the University of California, Berkeley, will talk on "Do Babies Matter? The Effect of Family Formation on Men and Women in Science." This free talk is open to the public. Visitors to the Lab age 16 and over must bring a photo ID. Sponsored by Brookhaven Women in Science (BWIS), a not-for-profit organization that promotes the advancement of women in science and related fields, this talk is also supported by Brookhaven Science Associates, the company that manages BNL. Lab management recently established a committee, composed of diverse Brookhaven Lab employees, to review the Lab's family-friendly policies and suggest improvements.

Mason's research on the impact of family on the careers of academic and professional women and men has garnered national attention. Her data-driven advocacy has fostered major new family-friendly initiatives for faculty and graduate students in the ten-campus University of California system, as recognized in 2006 by an Alfred P. Sloan Foundation achievement award. In her talk, she will discuss the difficulties of women who have a career in science or in other male-dominated professions.

Mason received a B.A. from Vassar College, a Ph.D. in American history from the University of Rochester, and a J.D. from the University of San Francisco. She taught American history and practiced law for several years before joining the faculty at Berkeley in 1989. She was the Dean of the Graduate Division at Berkeley from 2000 until earlier this year. Mason is the author or coauthor of five books on family, and women's and children's issues, including *Do Babies Matter?* and the recently published *Mothers on the Fast Track: How the New Generation Can Balance Career and Family*, coauthored with Eve Mason Ekman. As a national expert on child custody issues and family law and policy, Mason frequently addresses these issues at conferences and in the media.

Another lecture, titled "Diversity in Science and Engineering Faculty at Research Universities: Are we Preparing for the Great Crew Change?" will also be sponsored by BWIS on Wednesday, November 14, at noon, in Berkner Hal. The talk will be given by Donna Nelson, Associate Professor of Chemistry at the University of Oklahoma.

— Diane Greenberg

Call for Nominations for Employee Recognition In Program for Safety Awareness

For the second year, the Environment, Safety & Health Directorate is sponsoring a site-wide employee recognition program to highlight outstanding efforts by BNL employees in the area of health and safety performance. The Sitewide Safety Steward Program (S3) is open to all BNL employees, contractors, visitors, and guests. All are encouraged to submit nominations of fellow employees through 11/16.

For more information, see www.bnl.gov/esh/shsd/ohsas/S3_homepage.asp. Organizations are encouraged to disseminate the information on this program to their staff in an appropriate manner. Employees may use the S3 Nomination form available from this link to submit a suggestion for a safety improvement. For more information, or to submit forms, contact S3 Program Manager Nicole Bernholc, Building 120 or bernholc@bnl.gov.

Water-Main Flushing Week of 10/29

To improve the quality of BNL water delivered to the consumer's tap by eliminating "rusty" water, the Lab's water mains will be flushed via the site's fire hydrants Monday through Friday, October 29, through November 2, as follows:

- Mon. 10/29: Rutherford and Lawrence Drives
- Tue. 10/30: Upton Road through the apartment area
- Wed. 10/31: Cornell Avenue and its cross streets
- Thu. 11/1: Brookhaven Avenue
- Fri. 11/2: Bell Avenue

Before drinking or using water during and after hydrant flushing, run the water in the sink, fountain, or shower to flush discolored water from the tap. In some places, you may have to run the faucet for several minutes until the water runs clear.

To make sure that discolored water is not used for washing clothes, the laundries in the apartment area and in Curie and Cavendish Houses will close at 8 a.m. on Tuesday, October 30. The laundries will reopen on Wednesday, October 31, 10 a.m.

For more information, contact Bill Chaloupka, Ext. 7136 or cell phone (631) 514-1282.

Defensive Driving Course in Two Parts, 11/8 & 15

The six-hour Defensive Driving (Point & Insurance Reduction) course will be held in two parts on consecutive Thursday nights: November 8 and 15 in the Brookhaven Center South Room, 6 p.m.-9:15 p.m. The course is open to BNL, BSA, and DOE employees, facility-users, and their families. The cost is \$38 per person. Preregistration is required. To register, call Ed Sierra, 821-1013, and leave a message. Include your phone number. For more information, call Sarah Wiley, Ext. 4207.

Celebrate Diwali — the Festival of Light, 11/17

The BERA Indo American Association (BERA-IAA) is pleased to announce its annual Diwali Event — the Festival of Light — on Saturday, November 17, starting at 2:30 p.m. in Berkner Hall. As in previous years, this program will showcase the rich culture and traditions of the Indian subcontinent through music, dance, and the arts, performed by both professional and amateur artists. Authentic Indian snacks will be served during the intermission and a semi-formal Indian dinner will be offered after the cultural program. For more information, see <http://www.bnl.gov/bera/activities/iaa/diwali2007/>.

CALENDAR

— THIS WEEKEND —

Friday, 10/26

***Healthfest 800-yard Swim**
11:30 a.m.-1:30 p.m. Pool. Timed 800-yd. swim for all 18 and older. Part of biathlon. Register with mthorn@bnl.gov.

***Lunchtime Tour: PHENIX**
Noon. Berkner Hall lobby. Meet the group to be taken to the PHENIX detector at the Relativistic Heavy Ion Collider. Back by 1 p.m. No reservations. See notice at left.

WEEK OF 10/29

Monday, 10/29

IBEW Meeting
6 p.m. Centereach Knights of Columbus Hall, 41 Horseblock Road, in Centereach. A meeting for shift workers will be held at 3 p.m. in the union office. The agenda includes regular business, committee reports, as well as the president's report.

Tuesday, 10/30

***Talk on Family-Friendly Policies**
4 p.m. Hamilton Seminar Room, Bldg. 555. Mary Ann Mason, University of California, Berkeley, will talk on "Do Babies Matter? The Effect of Family Formation on Men and Women in Science." All are welcome to this free talk. Visitors to BNL of 16 and over must carry a photo ID. See notice at left.

Wednesday, 10/31

***Benefits Open Enrollment Ends**
Last day to change medical and dental benefits and renew reimbursement account and vacation buys for next year. See at left.

***429th Brookhaven Lecture**
4 p.m. Berkner Hall. BNL Historian Robert Crease, Stony Brook University, will talk on "How Big Science Came to Long Island: The Birth of Brookhaven Lab." All are welcome to this free talk. Visitors to BNL of 16 and over must carry a photo ID. See p. 1.

Friday, 11/2

***Halloween Dance Party**
7 p.m.-midnight. BERA Social & Cultural Club sponsors a dance party with live music by Lil' Cliff & the Cliffhangers. Admission \$20 for advance tickets, only 200 to be sold. See p. 4 for more information.

— WEEK OF 11/5 —

Friday, 11/9

BJ's Wholesale Club at Berkner
11 a.m.-2 p.m. Berkner Hall lobby. BJ's representatives will enroll new memberships at discount: \$38.03 for 2 cards, 15 months; normal fee is \$48.88/12 months.

— WEEK OF 11/12 —

Thursday, 11/15

Talk on Senior Citizen Task Force
12:10 p.m. Hamilton Seminar Room, Bldg. 555. Sponsored by the Brookhaven Retired Employees Association, Suffolk County Legislator Steven Stern, Chair of the Veterans & Senior Committee, will talk on "The Suffolk County-Wide Senior Citizen Task Force." Stern will focus on senior issues such as affordable housing, accessible transportation, and long-term care. All are welcome. Visitors to the Lab of 16 and over must carry a photo ID.

Arrivals & Departures

— Arrivals —

Sumit Kewalramani CMP&MS
Luis Larios Plant Eng,
Benjamin Pucci C-AD
Hua Zhou NSLS

— Departures —

Susan Monteleone ES&T

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/.

OPEN RECRUITMENT – Opportunities for Lab employees and outside candidates.

ASSOCIATE SCIENTIST – Requires a Ph.D. in nuclear engineering or related field. Must have experience in using computer codes for neutronic and/or thermal-hydraulic analysis and an understanding of reactor behavior. Candidate will work with neutronics codes such as those based on lattice physics, Monte Carlo, and neutron kinetics and/or thermal-hydraulic codes such as RELAP5 and TRACE. The application of these codes is to design new nuclear energy systems or fuel management schemes or to assess the safety of existing or proposed advanced detectors. Candidate is expected to have a general background in nuclear engineering with some experience in working with large neutronic computer codes. The work would involve one or more of the following programs: a) the calculation of properties of the NIST (National Institute for Standards and Technology) research reactor in support of reactor operations and the conversion of the reactor to low-enriched fuel, and b) the analysis of light water reactor properties in support of safety issues being pursued by the U.S. Nuclear Regulatory Commission. Under the direction of D. Diamond, Energy Sciences & Technology Department. Send CV to diamond@bnl.gov, referring to Position No. KH 4490.

ASSOCIATE SCIENTIST - Requires a Ph.D. in civil, structural or mechanical engineering and five years of experience in the commercial nuclear power industry. Experience in non-linear finite element analysis, soil-structure interaction, site response, seismic margin analysis, seismic probabilistic risk assessment (PRA), and containment fragility assessment is also desirable. Candidate would carry out structural, seismic, and civil engineering projects and deliver project specific products and services to customers in accordance with contractual requirements; identify opportunities for expanding programs, and identify the best technical approach to assigned projects. Under the direction of C. Hofmayer, Energy Sciences & Technology Department. Send CV to hofmayer@bnl.gov, referring to Position No. KH 4489.

CUSTODIAN – Temporary (Labor Grade 1) - Under general supervision, performs general cleaning and housekeeping duties in all Laboratory buildings. This is an on-call basis position. Plant Engineering Division. Send resume to dianah@bnl.gov referring to Position No. DH 2222.

Motor Vehicles & Supplies

05 MAZDA RX-8 - metallic white w/black int, a/t, sport suspension, 18" wheels, extend warr., perfect cond. 7,600 mi. \$22,000. Ext. 5665.

05 HONDA CIVIC - 4 cyl. coupe, a/c, cd, orig. owner, excel. cond., great MPG. 42K mi. \$11,000/neg. 816-4435.

04 SUZUKI SAVAGE - great 1st/learning bike, 650cc, air cooled eng., for pics email mschwart@bnl.gov. 50 mi. \$3,200/neg. Melanie, Ext. 5810.

02 HONDA ACCORD - 4cyl,a/t,fwd,new tires, 6 cd changer, am/fm radio, moon roof,remote start,p/s, p/w, p/b, color black 77K mi. \$9,900. 369-0885.

01 FORD F350 - 4X4,Crew Cab,Shrt Bed, Lariat, 7.3 Turbo Dsl, a/t,lthr, alloys, loaded, bedlnr/cvr., ext. warr., exc 87K mi. \$19,000/neg. Rich, 681-8634.

01 NISSAN ALTIMA GXE LE - a/t, abs, a/c, c/c, pw/pl, am/fm/cd, 2 yrs transf. serv. agr., excel. cond., KBB value \$7,540. 70K mi. \$7,000/neg. Ext. 3939 or 821-3559.

00 CHEROKEE 5TH WHEEL 275B - orig. owner, bunks, all opts, more, no smkg/pets, kept covered, excel. cond. \$10,800/neg. Maryellen, Ext. 2979 or 929-8294.

98 GMC JIMMY - blk, 2 dr, new tires, low mi., very clean. \$3,100. 289-9727.

97 HONDA CIVIC - 5 spd, manual, 6 cd player, gd. cond. 108K mi. \$4,100/neg. Ildiko, Ext. 2270 or 676-4345.

97 SAAB 900SE - 4 cyl turbo, sunrf, htd leather seats, a/t, abs, tan, 4 dr., hatch-back. 80K mi. \$4,900/neg. David, Ext. 2604 or 473-2473.

96 CHEVROLET CAVALIER - black, 2-door, new tires and breaks, c/c, a/c, am/fm, abs, good cond. 128K mi. \$2,000/neg. Cyrille, Ext. 8255 or 347-605-9662.

86 TOYOTA CRESSIDA - 6 cyl., a/t, p/s, p/b, moon roof, alloys, blk/green, nr-new tires, gd. cond. 0 mi. \$1,400. 751-7250.

85 FORD AVIATOR - cust van, 8cyl, a/t, c/c, a/c, am/fm/cass, capt chairs, cocktail table, rear seat folds to dbl bed. 130K mi. \$2,000/neg. Joe, Ext. 2912.

ATV RIMS & TIRES - 4 Rims/Tires from Honda 400EX ATV. H-Trak M/R-101, tube-less, 2-AT 22x7x10; 2-AT 20x10x9, \$125. Don, Ext. 7237 or 929-6571.

FORKLIFT - '90 Clark, elec., 170" Triple Stage, p/s, 2575 lb. cap., w/charger, 208 single phase, \$4000. 484-4730.

Boats & Marine Supplies

23' SUNRUNNER 230SB - '84, mid-cabin cruiser, 225 volvo-penta fwc aft cabin, full galley canv., many new parts, excel \$4,500/neg. Robert, Ext. 4867 or 278-2192.

Furnishings & Appliances

AIR PURIFIER - Oreck XL Professional with silence Technology AIR8 Series like new \$230 + \$115 for 2nd one if wanted. Linda, Ext. 2733 or 395-6784.

BAR STOOLS - 4 wrought iron blk bar, padded, v gd. cond., \$200 takes all. Ken, Ext. 3124.

BASEBALL ITEMS - 2/shelves/\$10; bat/ball stool/\$5; bat peg rack/\$5, all items are wood, excel. cond. Ext. 5225.

BEDROOM SET - queen platform, mirror back,lights, 2 tall cabinets, armoire, dresser w/mirror, misty oak wood, \$375. Ext. 5026.

BUNK BED - solid wood, like new! \$100/obo, U pick up in Sound Beach or I can bring to Lab. John, 275-8445.

CHAIR - wing, beige, w/green/gold flecks, gd. cond., must pk up, \$75; box fan, 20", 3 spd, \$5. Ext. 7647.

COUCH - castro convertible, queen size bed, \$100, recliner, \$50. Ext. 3259.

DESK AND FUTON - lg. assembled, birch desk, \$80; mattress and cover, \$70. both from IKEA and in great cond. Ext. 3705.

DINING TABLE - oak, \$500; l/r, \$450; recliner, \$35, pic. avail. 909-1498.

FINE ART - print by R. Wms., "Misty Morning Stroll," 34x28 framed, \$178 at www.art.com, \$75/obo,kea06msw@op-tonline.net 803-0506.

SOFA LOVE SEAT - combo, Clayton Marcus, earth tone plaid, v gd. cond., pillows & arm covers incl., \$75. 744-2404.

VICTORIAN COUCH - beautiful reproduction, mauve, 81" L, ask/\$300, call to see pic. Frank, Ext. 5920.

Audio, Video & Computers

ARCADE VIDEO MACHINES - 2, Jet fighter games by Razden, '98 models, grt shape, works well, \$400/ea. neg. 924-0139.

PRINTER - portable, color, Canon BJC-85C w/software and cable, excel. cond., \$200. Ext. 3217.

PRINTER - HP Photosmart 8150, gd. cond., \$75; HP Deskjet 840C printer, \$35. Ext. 7647.

SAMPLE CD-ROM - Ambient Realms by the renowned sound designer Kit Watkins, \$15. Ext. 3621.

STREET ATLAS USA - DeLorme map software suite for PC and handhelds, GPS capable, 2002 Ed., \$10. Ext. 3621.

SYNTHESIZERS - Korg M3R, similar to M1, \$100; Kawai K4r, \$150, both w/manuals and PSU. Ext. 3621.

Sports, Hobbies & Pets

CASIO KEYBOARD - w/stand, excel. cond., \$60. Ext. 2716 or 878-2425.

TREAD MILL - ProForm Distance 660v Heart Rate Monitor, fan, auto. incline,like new, pd/\$700, ask/\$400, will del. Bob, 516-449-1623.

Tools, House & Garden

GENERATORS - 2, 1 powermate, 4000 watt 8HP ask/\$200; 1 Robin 2000 watt ask/\$125. Peter, Ext. 5551.

Miscellaneous

CLARINETS - 2, wood, Selmer-103, \$500; B&H, 2-20, \$100. Mark, 821-3169.

FRENCH DOORS - new, 6', ask/\$75. Albert, Ext. 2792 or 375-2980.

KEY LOCKER - For 30 keys, wall mountable. asking \$10.00. Peter, Ext. 5551.

SUGAR SPICE SHAKER - Victorian, silver plate, 8" tall, needs polishing, perforated screw top, engraved base, v. gd. cond. \$25. 803-0506.

WEDDING DRESS - unused demo, size 10, "W1/White One" brand, \$200, orig \$1,350. Ext. 3621.

Free

CEMENT BLOCKS - Approx. 25 available. Good for blocking boats. Will deliver to Lab. Scott, Ext. 7313 or 553-2477.

DOG - 1 yr. old blk. Lab, friendly w/kids, have papers. Robert, Ext. 2792 or 447-0034.

DRYER - works well, just has slight squeak, u pick up. Lynda or Michael, Ext. 7152 or 286-1018.

Car Pool

MEETS IN PLAINVIEW - established 3-person car pool looking for 4th person, 8:00 to 4:30 shift. Ron, Ext. 6068.

Happenings

AUTUMN HOWL - Martha Clara Vineyards, Fri. Oct. 26, 7-10 PM benefit for animals. Wine, buffet, music, chinese auction, \$40. Heather, Ext. 4138.

Wanted

DESK TOP - memory 512M or 1G,DDR 333/2700. Pierrot, Ext. 2589.

DRESSER - Must have at least 5 drawers and be tall not wide. Need for childrens' clothes. Free or reasonable. Debbie, Ext. 3120 or 776-0188.

FLORDIA RENTAL - Orlando, 4 bdrm. home/condo from Dec 24th - 27th, family vacation. Mamba, Ext. 2176.

GARDEN HELP - student, young person needed as helper for gardening in Shoreham. 821-1435.

GRILL COOK - part time, reliable wkend/holiday hrs., 6:30 a.m-2:30 p.m., some experience req. Nayyarsons, 344-3541.

MEMORY - laptop memory, 512M or 1G, 200 pins, DDR 200/266/333. Ext. 5351.

NAMES OF DEPLOYED FAMILY - To have a box from BNL sent to immediate family member deployed overseas, call BNL Adopt-a-Platoon. Ext. 5483.

VCR, - analog, for play/record, gd. cond. Frank, 569-5482.

For Rent

E. PATCHOGUE - sm. 2 bdrm. house w/ eik, l/r, screened porch, bsmt., w/d, avail. Nov. 1st. 1/mo. sec. & last mo. rent req., incl. util. \$1,100/mo. 646-761-2639.

FARMINGVILLE - bdrm in lg house, full kit, l/r, d/r, share bath w/2, cable, wifi, phone, elec incl. \$425/mo. Ben, Ext. 5879.

LAKE PANAMOKA - House, built 2006; 3bdrm 2bath, f/p, a/c, w/d, water view, beach rights, backs into state land. Plus utilii., pics availi. \$1,900/mo. 516-480-4529.

LENEX, MA - 2 bdrm. timeshare unit, Nov. 17th -24th. \$750/wk. 909-1498.

MANOR PARK - 1 bdrm. apt., new rugs & bath, 7 min. to Lab, incl. all except phone and cable. \$900/mo. \$900/mo. 772-2474.

MASTIC BEACH - 1 bdrm. full bath thermostat & cable, priv. ent., off rd. prkg. 1 mo. sec., no pets, hot plate & microwave, \$700/ all. 10 miles to Lab. \$700/mo. 395-0580.

ROCKY POINT - 1-bdrm. apt., kit, l/r, bath, pvt. driveway/ent., no smkg./pets. 1 mo. sec., all utilities included except electric. \$795/mo. Ron or Kim, 821-3287.

SHIRLEY - 1 rm., stove kitnet, full bath, sep ent, furn, l/r/bdrm combo, tv, elect, cable, heat, a/c, wireless int., all incl., 5 min to stores, 14 to Lab, n \$650/mo. Ext. 8321.

SHIRLEY - 1rm, microwave kitnet, furn, full bath, sep ent, tv, elect, cable, a/c heat, all incl., 5 min to stores, 14 to Lab, no smkg/pets, 1 mo. sec. \$600/mo. Ext. 8321.

WADING RIVER - Cottage 2 bdrm, 1 bth, lvg/dr combo, newly updated, util. xtra, no smkg/pets, 15 min to Lab, near beach. \$850/mo. Michael, Ext. 4202.

BOYNTON BEACH, FL - pre foreclosure, 55+ condo, 1800sf, immed. occup. 2/2 + den, all appli., pool, tennis, clubhouse. \$189,900/mo. 561-495-0187.

S. MELBOURNE BEACH, FL - 3/2 Ranch, 2 car gar, cac, screen rm, unfurn., walk to priv. ocean beach, bkyl., borders nature preserve, close to Sebastian inlet. \$1,250/mo. Ext. 5436 or 369-7809.

For Sale

BELLPORT - 4-BR. ranch, 2 bth, l/r w/dble opening fp to den, d/r, eik, oak flrs, screened deck on priv. yard, laundry rm, fin. bsmt: w/4th BR, bar, full bth, 2 rms; gar, 2 sheds, sprinklers, gt. cond. \$425,000; 949-7797.

BLUE POINT - Colonial, 5 bdrm. or potential Mother/Daughter, two bath, l/r, d/r, kit., bsmt/crawl space, porch, 1.5 car gar., fenced yd., low taxes. \$399,000/neg. John, Ext. 5025 or 730-1165.

EAST MORICHES - Ranch, 3 bdrm, 2.5 bath, kit, l/r, f/p, fin. bsmt, skylights, appli., covered porch, patio, .5 acre, well landscaped, c-de-sc, low taxes. \$415,000/neg. 882-0519.

FLANDERS - 5+ acres in Shmptn. Township, contemp home, 4 br, 2.5 bth, eik, l/r w/fp, den, d/r, plus bsmt w/2 br, 1 bth, kit/lr combo, huge deck, lo tax \$850,000 816-3717.

MIDDLE ISLAND - 1 br co-op, upper level, new laminate, carpet & balcony deck; bright, quiet, loft-like, 10 min to BNL. \$116,000/neg. 413-478-1621.

SHOREHAM - 4 bdrm., 2.5 bath Col., frml l/r and d/r, den w/fp, lg. kit. w/dinette, 2 car gar., fin. bsmt., igs, SWRSD, much more \$569,000/neg. Don, 821-3320.

WEST PALM BEACH, FL - 1 bdrm., 1 bth, completely renovated, cabinets, appli., etc. \$46,500/neg. 516-375-7330.

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.

BERA Social & Cultural Club Events

Halloween Party: Friday, 11/2; Christmas Party, 12/14

On Friday, November 2, the BERA Social & Cultural Club (S&C Club) will hold a "Halloween Dance Party," at the Brookhaven Center, with live music by "Lil' Cliff & the Cliffhangers." Prizes will be awarded for the best Halloween costumes!

Admission is \$20 if paid before 10/26, \$25 by e-mail reservation, and \$35 at the door. Only 200 tickets will be available. Tickets cover a buffet dinner, 7-8 p.m.; free swing dance lesson, 8 p.m; the band, 8:30-11:30 p.m.; DJ music between sets and until midnight.

Also, save the date of December 14 for the Club's Christmas Party, with the 20-piece "Bill Wilkinson & the Long Island Sound Orchestra," at \$25 for advance tickets, which include buffet supper, refreshments, and music.

Volunteer Days Program Starts

BNLers' volunteering time is matched by BSA \$8 to help the Lab's United Way fund

BNL's fund drive for the United Way has its official kickoff on November 13, but this year's United Way Chair, Ken White, and Co-chair, Kathy Gurski, announced that the Volunteer Days Program, a United Way Fund "spin-off" that has been very successful in past years, started on October 22.

What is the Volunteer Days Program?

Many in the BNL community perform volunteer work and activities at various Long Island services and agencies — and many of those same BNL volunteers are dedicated to helping the United Way, which often helps support the agencies where they donate their efforts. This situation gave rise to the Volunteer Days Program, in which, for every hour volunteered by a BNL employee between October 22 and the end of December 2007, BSA will donate \$20 to the BNL's Long Island United Way campaign, with a ceiling of \$10,000.

Last year, thanks to the employees and retirees who submitted their hours to the Volunteer Days Program, over 926 hours were spent in volunteer activities, the goal was achieved for the sixth straight year, and the United Way received BSA's maximum contribution. BNLers volunteer in so many ways — as firefighters, in soup kitchens, the meals-on-wheels program, hospitals, church activities, Habitat for Humanity, activities to benefit handicapped children, teaching, mentoring, lecturing, coaching, leading scouts — and more.

To encourage participation in a volunteer activity, with supervisory approval, an employee may make a one-time request of an hour's work time to perform volunteer work. A minimum of two hours is necessary, one work hour, and one from your own time. Thereafter, you may volunteer as many hours as you wish on your own time.

Volunteers may earn this benefit and contribute to the total of BNL's Fund Drive for the United Way by filling out and submitting the volunteer work receipt form which is at <http://intranet.bnl.gov/unitedway>. Submitting a form for your efforts is a simple but effective way to help. You may also get a form or more information on volunteer opportunities from the Volunteer Days Program Coordinator, Maria Beckman, Ext. 5483 or beckman@bnl.gov.

Passport Service Now at Upton Post Office

Do you need to renew your passport, or get a new one? The Upton Post Office is now a Passport Acceptance Facility, and can also take passport photos. For more information or to make an appointment for a passport or photo, call Ext. 2539. Also available at the Upton branch are Post Office boxes where you can receive personal mail here at BNL. As a reminder, if you receive mail at your Lab building address and then leave the Lab, the Post Office is unable to forward your mail to your new address. If you have a post office box and leave the Lab, forwarding service is available.

Wanted: BNL Art, Crafts for Fall Show, 11/19-21

BNL artists, photographers, sculptors, and crafters — your work is needed for the upcoming BNL Art and Crafts Show to be held at Berkner Hall, Monday to Wednesday, November 19-21, 11:45 a.m.-1:30 p.m. An evening reception with refreshments will be held on Monday, November 19, 5-7 p.m. BNL employees, retirees, facility users, guests of BNL, and family members 15 years and older, are all very welcome to contribute.

Exhibits for the show must be brought to Room C, Berkner Hall, the afternoon of Friday, November 16, from 2 p.m. to 4:30 p.m. To be included in the program, send your name, home phone, BNL contact name, BNL phone ext., type of art or craft, and title of work, at latest by Monday, November 12, to Bob Chrien, Bldg. 510A, or chrien@bnl.gov. Late entries may be included in the show, but the program has to be printed ahead, so please, remember to send the information on time.

ON-SITE SERVICE STATION - gas, 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 CATERING - Cafeteria: b/ fast: wkdays, \$2.99 up; lunch: \$4.95 up; grill, \$6.50 up incl. fries, soda; Fridays, Catch of Day, from \$5.99; see link on BNL homepage or Ext. 4636 or 3541; B/haven 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); all plus tax.

In Appreciation

The family of Frances V. Ligon wishes to express sincere thanks to Lab employees for your cards, prayers, donations, and other acts of kindness. A special thank you to April Gray.

— Carol Bell

Service Ads

Available at <http://intranet.bnl.gov/ads/displayAdsAll.asp> on the intranet homepage on site. Or request from bulletin@bnl.gov or phone Liz Seubert, 344-2346.