



Roger Stoulenburgh 4-736-91

Celebration Held For Satoshi Ozaki

See story, photos on pg. 2

Energy Secretary Chu Highlights BNL Video On His Facebook Page

Video details labwide use of Recovery Act funding

On January 23, 2010, Energy Secretary Chu posted on his Facebook Page:

I wanted to take a moment to highlight some of the great projects that are under way at our national labs, thanks to funding from the Recovery Act. Brookhaven Lab alone has accelerated construction of a new light source, creating jobs for construction workers in the New York metropolitan area and buying materials from manufacturers and suppliers across the country. This new science facility will help America develop abundant, safe, and clean energy technologies.

Take a look at a video the lab recently put together.

Excerpt from <http://www.facebook.com/stevenchu>

To watch the video, by Lab Videographer Alex Reben, go to the Lab's YouTube page: <http://www.youtube.com/user/BrookhavenLab>.

BNL, Advanced Energy Systems Open Hi-Tech Production Facility

On January 15, BNL and Advanced Energy Systems, Inc. of Medford, N.Y. (AES) celebrated the opening of a new hi-tech facility at the AES site that will produce crucial components used in particle accelerators around the world. Brookhaven Science Associates (BSA), which manages BNL for DOE, purchased equipment worth approximately \$2 million as its contribution to the facility. AES invested in the infrastructure improvements it needed to expand its operations, assisted by a \$200,000 grant from the Empire State Development Corporation.

"This facility is the result of a unique public/private partnership meant to spur technology advances on Long Island," said BNL Director Sam Aronson. "The collaboration — the first of its kind that BSA has undertaken — will help us reach our scientific goals while contributing to the growth of a local company."

"The effort by Brookhaven Lab and New York State to support the growth of AES has already resulted in more hi-tech jobs for Long Island, with more to come in the future," said AES president and founder Tony Favale. "It's a testament to what you can achieve when government helps small businesses grow."

"As U.S. industries are fighting fierce competition from around the world, this program is bolstering America's leadership in hi-tech manufacturing," said U.S. Congressman Tim Bishop — who, with the rest of the federal and New York State delegation, has supported the Lab's efforts to grow New York's technology base. "Brookhaven Lab continues to draw the best scientific minds to Long Island in pursuit of new technologies that will make Amer-



Officials from several levels of government and principals from Advanced Energy Systems, Inc. (AES) and BNL gathered at AES headquarters in Medford on Friday to celebrate a new partnership that will lead to advanced technology in superconducting materials. Attending were: (from left) Brookhaven Town Supervisor Mark Lesko, U.S. Congressman Tim Bishop, BNL Project Leader Ilan Ben-Zvi, Lab Director Samuel Aronson, Empire State Development Corporation Director Andrea Lohneiss, AES President/CEO Tony Favale, State Senator Kenneth P. LaValle, and State Assemblyman Marc S. Alessi.

ica stronger and more competitive, and I will keep advocating for federal funds to support the Lab's critical work and bring even more of these high-quality jobs to Long Island."

AES will use the new facility to produce superconducting radio-frequency (SRF) cavities, which are used to accelerate particles to very high energies. Since SRF technology is a highly efficient way to accelerate particle beams, nearly all particle accelerators and colliders currently proposed or under construction incorporate them. Particle accelerators based on SRF cavities have great potential in basic and applied research in the fields of nuclear physics, medicine, energy, environment, and national security.

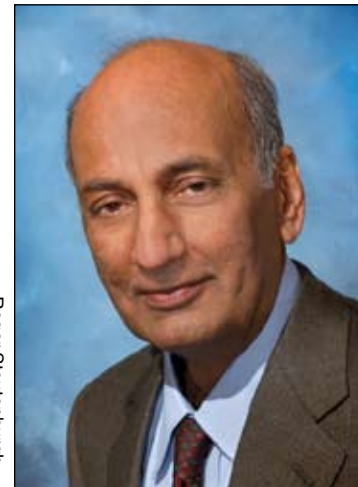
Favale estimates that AES will add 10 to 15 employees to its 28-person staff by 2011 to take advantage of the increased production ability enabled by BSA's investment. AES recently won several contracts worth more than \$11

million to produce SRF cavities for institutions around the world.

SRF cavities are difficult to make because they must have an almost flawless surface. During production and assembly, the niobium metal undergoes a demanding chemical cleaning and polishing process, which must take place in a clean room. BNL's investment in the AES facility includes the clean rooms and equipment necessary to ramp up production of these cavities.

"In partnering with AES, we saw an opportunity to help them expand and also reduce the long-term costs to the Lab," said physicist Ilan Ben-Zvi, BNL's lead on the project. "The end result is that we now have the capability to develop these cavities as we need them, while the ongoing costs for the highly trained technicians needed for this operation can be spread across many projects from different institutions."

Over the next several years, BNL anticipates using the AES... See BNL/AES on pg. 2



Roger Stoulenburgh D0260203

In Memoriam Praveen Chaudhari

Praveen Chaudhari, who was Director of BNL from April 1, 2003, to April 30, 2006, died on January 13. He died at the age of 72, after a long battle with cancer.

Brookhaven Lab Director Sam Aronson said, "Praveen truly left his mark on the Laboratory. He helped guide Brookhaven through some very challenging times, and he did it with pride and integrity. He is largely responsible for putting the Laboratory on a path that led directly to the vision we're following today — one that has resulted in numerous successes, including the construction of the Center for Functional Nanomaterials and the award of the National Synchrotron Light Source II project."

Chaudhari shepherded the Laboratory through a period of significant funding challenges. During his tenure, he helped to develop a vision for science and operations to put BNL on a firm path for the future, including securing funding for its flagship facility, the Relativistic Heavy Ion Collider (RHIC); making investments in scientific computing, the Center for Functional Nanomaterials, and the National Synchrotron Light Source-II project; and fostering the kind of interdisciplinary science that is essential for breakthroughs in energy and the life sciences.

Peter Paul, currently Research Professor of Physics at Stony Brook University, was Deputy Director for Science and Technology when Chaudhari was the Lab Director. Paul commented, "As the person who introduced Praveen to the research enterprise of the Laboratory, I was immediately impressed with how quickly he embraced the full breadth of Brookhaven's science, including the science of RHIC, which he later defended against budget cuts. His deep love for science and his uncompromising drive for excellence, which was only slightly masked by his genteel, friendly and soft-spoken demeanor, matched Brookhaven Lab's historical striving for excellence. For a scientist like myself, it was an absolute pleasure to work with him."

William F. Hempfling, who is now retired but served as the Laboratory's Director of Human Resources during Chaudhari's tenure, remembered him in this way: "Praveen was a wonderful Lab Director, and it was a pleasure to have him as my boss. Over the years, we developed a true friendship and continued to... See Praveen Chaudhari on pg. 2

Stopping in the Rain: BNLER Stops Work to Avoid Injuries

Not often are employees actively encouraged to stop working, but when Ulysses Tapley of the Lab's Site Services Division stopped a job to avoid getting hurt, his supervisors sure were glad he did. Tapley correctly exercised his responsibility as a BNL employee to stop work whenever there is an imminent danger to staff, the environment, or equipment.

One day last May, it was raining and the truck regularly used to collect recyclable waste paper was in the shop for repairs. With the truck out of commission, Tapley followed the back-up plan: he and a coworker stood on the deck of the Division's flatbed truck and emptied the large bins of waste paper by tipping them into a dumpster positioned below the truck.

As the rain fell, Tapley realized that the deck he was standing on had become very slippery and that he or his coworker, Andrew Trent, might slip and fall — maybe even into the dumpster.

"Working safely has been ingrained in us at the Lab and I didn't want to become one of those injury statistics," said Tapley.



From left, the Site Services Division's Ulysses Tapley, Mike Pankowski, and Tom Lambertson with the new tipper, which hydraulically lifts and empties trash containers.

He told Trent to stop work and immediately called his supervisor, Mike Pankowski, to notify him of the hazard.

"I always tell my employees that if they see something that doesn't look right, stop and call me over," said Pankowski.

Any Brookhaven Lab employee, guest, contractor, or visitor, having once been trained in the "Stop Work Procedure," can issue a stop work order, just as Tapley did. Each member of the Lab community has already completed this training, which

is also required for all newcomers, and anyone who would like a refresher can recomplete the training online: <http://training.bnl.gov/course/stopwork/default00.asp>.

Since that rainy day in May, the recycling truck has been repaired, and following an investigation of Tapley's "Stop Work" incident, a new back-up plan has been put into place: the Site Services Division has purchased a new "tipper" that uses hydraulics to lift and empty bins directly into a truck's dumpster.

"The new tipper will make

the job much safer because our employees no longer have to lift or tip heavy bins of waste paper. The tipper does it for them," said Site Services Manager Tom Lambertson.

In addition, Site Services has worked with Lab videographer Alex Reben to create a series of videos documenting training sessions for its new equipment. This will ensure that all operators receive the identical, proper training for each piece of equipment.

"My coworkers and I have become very safety conscious and we really try to look out for each other," Tapley said. "Before going out on the job, we grab extra earplugs in case someone needs them, and we never hesitate to remind each other, 'Hey, don't forget your safety glasses.'"

"Everything I learn about safety at work transfers right into my home with my family," he added. "It can be as simple as reaching for the right tool to fix something — the screwdriver rather than a butter knife — or remembering to wear safety glasses and hearing protection while cutting the grass. I just don't want to see anyone get hurt." — Joe Gettler



Roger Stoulenburgh 02/29/2009



Roger Stoulenburgh 02/29/2009



R.S. 01/69/2009



R.S. 01/79/2009



R.S. 02/51/2009

CELEBRATING SATOSHI OZAKI



R.S. 02/54/2009



R.S. 01/97/2009



R.S. 01/70/2009

A special celebration of talks and a reception recognizing Satoshi Ozaki's 80th year and 50th Anniversary at Brookhaven Lab was held in Berkner Hall on the afternoon of December 4, 2009. After a welcome from BNL Director Sam Aronson, an enthusiastic audience of colleagues and friends enjoyed remembrances that traced Ozaki's long career of unique contributions in accelerator development and project management.

Speakers included William Love of BNL, on "The On-Line Data Facility and the Multi-Particle Spectrometer — from the 60's to the 90's;" Hirohisa Sugawara of the Japan Society for the Promotion of Science, "KEK [high-energy research institute, Tsukuba, Japan] Days — As the Leader of the TRISTAN [accelerator] Project;" Jim Yeck of the University of Wisconsin, "RHIC [Relativistic Heavy Ion Collider] Construction — Valuable Lessons Solving an Over-Constrained Problem;" Mike Harrison of BNL, "Reflections on the RHIC Project;" Nick Samios of BNL, "Satoshi — US/Japan Cooperation, Spin and the RIKEN [natural sciences research center, Japan] Brookhaven Research Center;" Maury Tigner of Cornell Uni-

versity, "Crossing Cultures with Satoshi," and Ferdinand Willeke of BNL, "National Synchrotron Light Source-II, Towards New Frontiers at BNL." John Hauser of BNL, who had worked closely with Ozaki for years on RHIC funding and budgets, shared his appreciation of an astute project manager who retained good relationships while surmounting myriad challenges.

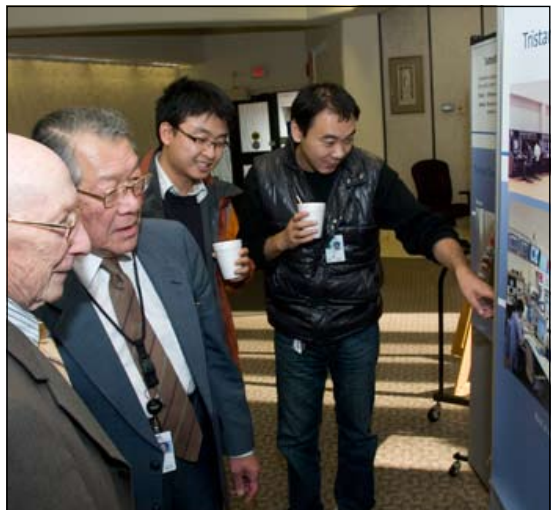
A striking theme emerging from several of the talks and a poster illustrating a letter from Stephen Olsen of Seoul National University describing some of Ozaki's accomplishments at KEK, was his welcoming inclusion of scientists and engineers of all nationalities — an important contribution to the present internationality of the accelerator community.

Ozaki concluded by thanking the scientists and administrators whose commitment had matched his own over the years to overcome difficulties and make new science possible. He deeply appreciated his experiences around the world throughout his career, but, he said, "Brookhaven is my home." To a standing ovation, he repeated, "Brookhaven is my home."

— Liz Seubert



Joseph Rubino 02/29/2009



Roger Stoulenburgh 02/15/2009



Roger Stoulenburgh 01/67/2009



R.S. 02/62/2009



R.S. 02/11/2009



Roger Stoulenburgh 02/07/2009



Joseph Rubino 02/29/2009

Praveen Chaudhari from pg. 1
...to get together up until the point that he became too ill for us to do so. He was devoted to his family, and I was honored to be counted among his friends. I admired him greatly for his personal integrity, leadership skills, sense of humor, and the way he cared for Brookhaven Lab and its employees. I know that I speak for many people when I say that he will be missed immensely."

A Distinguished Career

Born in Ludhiana, India, Chaudhari earned a B.S. from the Indian Institute of Technology, 1961, and both an M.S. and Sc.D. from the Massachusetts Institute of Technology, 1963 and 1966, respectively. In 1966, he joined IBM's Research Division, headquartered at the Watson Research Center in Yorktown, New York. Chaudhari had a productive 36-year career with IBM as a scientist and senior manager of research.

Chaudhari was appointed Director, in 1981, and Vice-President of Science, in 1982. In this capacity, he was responsible for IBM's science programs not only at Watson, but also at the Almaden Research Center, in California, and at the Zurich Research Laboratory, in Switzerland. The science programs flourished during

Chaudhari's management tenure in the IBM Research Division. Materials research, for example, became the basis of the \$2-billion-a-year optical-disk industry. Also on Chaudhari's watch, IBM scientists captured Nobel Prizes in physics for two consecutive years, in 1986 for developing the scanning tunneling microscope, and then in 1987 for discovering high-temperature superconductivity in a new class of materials. During those later years, Chaudhari restarted his own research, working as both manager and hands-on scientist. In 1991, he returned full-time to research.

As a scientist, Chaudhari had worked on the structure and properties of amorphous solids, mechanical properties of thin films, defects in solids, quantum transport in disordered systems, superconductivity, liquid crystal alignment on substrates, and on the magnetic monopole experiment. He has published over 150 technical papers, and holds over 20 patents.

For his achievements, Chaudhari had been honored with numerous awards. These include the Institute of Electrical and Electronics Engineers, Inc., Morris N. Liebmann Memorial Award (1992) for "the discovery of amorphous magnetic films

in magneto-optic data storage systems;" the Massachusetts Institute of Technology Harry C. Gatos Distinguished Lecture and Prize (1994) in the field of electronic materials research; and the National Medal of Technology (1995) for "the discovery and development of a new class of materials — the amorphous magnetic materials — that are the basis of erasable, read-write, optical storage technology, now the foundation of the worldwide magnetic-optic disk industry." Chaudhari was also the recipient of the American Physical Society's George E. Pake Award (1987) for his personal contributions to science and science management, and of the Excellence Award of the U.S. Pan Asian American Chamber of Commerce.

Chaudhari was a member of the National Academy of Sciences and the National Academy of Engineering and a fellow of the American Academy of Arts and Sciences and the American Physical Society. He served on a number of professional committees, including the Physics Policy Committee of the American Physical Society, the Governing Board of the New York Academy of Sciences, the National Science Foundation Advisory Committee to the Mathematical and

Physical Sciences (chair), and the Scientific Advisory Council of the International Center for Theoretical Physics (chair) in Trieste, Italy. Chaudhari co-chaired the National Research Council Study on Materials Science and Engineering, which was the basis of a Presidential initiative in advanced materials and processing programs, announced by the White House in January 1992.

Chaudhari was executive secretary of President Reagan's Advisory Council on Superconductivity (1988). He was a member of the National Commission on Superconductivity, which reported its findings to President Bush (1989). He served on the US National Critical Technologies Panel (1992 and 1993). In 1988, Chaudhari reported on science and technology to Prime Minister Rajiv Gandhi of India; in 1993, at the request of the Indian Minister for Sciences and Technology, he led an IBM group to evaluate India's parallel computer activities; and, in 1994, he made a presentation to Indian Prime Minister Rao on materials and critical technologies.

Chaudhari, who lived in Briarcliff Manor, New York, is survived by his wife, Karin; his son, Ashok; and his daughter, Pia. — Diane Greenberg

BNL/AES from pg. 1

...facilities to develop SRF cavities for upgrades to its Relativistic Heavy Ion Collider (RHIC) as well as the construction of the proposed next generation electron-ion collider known as eRHIC. If approved, this billion-dollar facility would require hundreds of SRF cavities. Most if not all of these cavities could be built at AES.

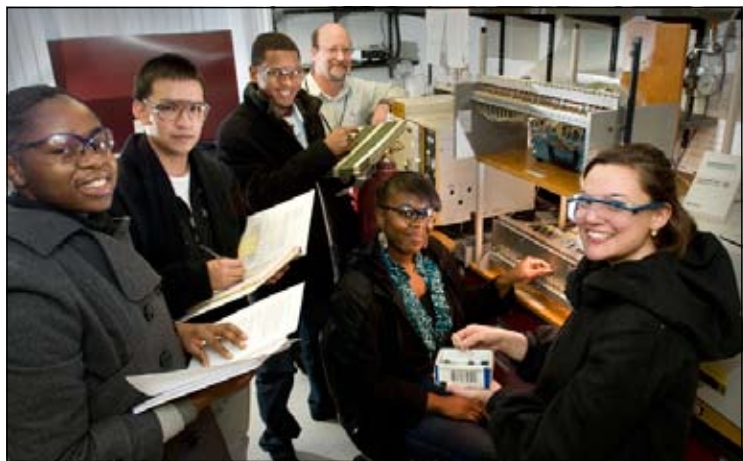
As part of this collaborative effort, in addition to its investment in the AES facility, BNL has also expanded its Vertical Test Facility to give it much greater versatility in testing the performance of the cavities produced by AES for BNL and other institutions.

— Peter Genzer

For more details, see http://www.bnl.gov/bnlweb/pubaf/pr/PR_display.asp?prID=1066.

Nominating Committee Needed for BERA Elections

The BERA Board Election process is about to begin. Nominating Committee members are needed to find candidates or receive their nominations, and attend two or so meetings. Anyone interested in joining the Committee or in being a candidate, please contact Ed Sperry, Ext. 2697 or eds@bnl.gov.



Roger Stoulenburgh 01040110

Preparing perfluorocarbon samples for analysis are College Mini-Semester students: (seated) Kadhah Kamara of Syracuse University (and clockwise, from right) Kristen Constantine, Immaculata University; Senge Ngalame, Talladega College; Jimmy Rodriguez, New Jersey Institute of Technology; Ahmed Barry, Borough of Manhattan Community College, and BNL's Richard Wilke, who is supervising the students' labwork.

College Mini-Semester Students Explore Science & Technology at BNL

Twenty-three students from 22 colleges — from New York and locations as far-ranging as Alabama and Kentucky — learned about world-class science and technological achievements at BNL during five activity-packed days of their winter break. The students were enrolled in the Laboratory's Mini-Semester Program, which aims to expose interested students to cutting-edge science through lectures, tours, and team research.

The students toured the National Synchrotron Light Source, where researchers probe materials as diverse as computer chips and viruses, and the Center for Functional Nanomaterials, where scientists study materials on the scale of a billionth of a meter with the primary goal of finding alternatives to fossil fuels. Also, they learned about research at the Relativistic Heavy Ion Collider, where physicists discovered a "perfect" liquid that they believe existed in the early universe.

"The Mini-Semester program is intense and challenging, and we introduce the students to as many areas of science as possible," said Noel Blackburn, an educational programs administrator in BNL's Office of Educational Programs (OEP). "All the students are science, technology, engineering or mathematics majors, and many of them go on to attend our summer internship programs."

The students assisted in a study of indoor air quality in the Laboratory's Research Support Building (RSB), a three-year-old LEED-certified building, which houses a staff of 170 and has numerous visitors. The students took samples of perfluorocarbon (PFT) tracers

in the RSB and analyzed them to determine air ventilation parameters in the building. The harmless gas tracers have been used in field studies for more than 30 years.

The students' analysis, together with a similar study conducted by BNL scientists last fall, will be used to improve airflow models for modern, atrium-style buildings, information that will help first responders in the event of an accidental or intentional release of hazardous substances. The data will also help improve energy efficiency as well as assist Lab staff in determining the best locations for outdoor smoking areas in order to keep passive smoke from entering the building.

"The students used a gas chromatograph to analyze samples," said John Heiser, a senior environmental research engineer at Brookhaven who supervised the students' participation in the air-quality study. "Although we found a high concentration of PFTs that indicated cigarette smoke from outdoor smokers was entering the building, the 2009 data were inconclusive because they were taken from a 24-hour integrated sample. We're taking hourly samples now, rather than averaging samples taken at night, to be sure the first results were not due to a nighttime air inversion in which the temperature at the ground stays warmer, allowing smoke to linger longer."

All the students are eligible to return to BNL to participate in DOE's summer internship programs managed by OEP. On February 1, Brookhaven's scientific community will start their selection of interns for the summer programs.

— Diane Greenberg

Pick a 2010 Summer Student

Student applications for the summer 2010 undergraduate science internship programs sponsored by DOE's Office of Workforce Development for Teachers and Scientists will be available on February 1, for review on an electronic database. Contact Kathy Gurski of the Office of Educational Programs (OEP) at Ext. 4503 or gurski@bnl.gov for the database address and passwords.

Selections for the first round choices must be submitted by February 26, however, the earlier the better to have a greater likelihood of getting a student. Students will be here for ten weeks, from June 7 to August 13. Stipends, housing, and travel are funded through OEP with a \$1,500 cost share requested from the hosting department. See <http://www.bnl.gov/education> for more information.

One-on-One Fidelity Counseling On-Site

A Fidelity representative will be in Bldg. 400B in the Human Resources & Occupational Medicine Division on Friday, February 5 and Friday, March 12 to answer employees' questions about their financial matters. For an appointment, call 1-800-642-7131 or go to <http://www.fidelity.com/atwork/reservations>.

TIAA-CREF One-on-One Retirement Counseling

A TIAA-CREF consultant will visit BNL on Tuesday, 2/2; Thursday, 2/4; Wednesday, 2/10; and Tuesday, 2/23 to answer employees' questions about their finances. For an appointment, call 1-800-732-8353 or visit <http://www.tiaa-cref.org/bnl> and select Set up a Meeting located on the bottom tab of the page.

Stony Brook University Student Wins Dr. Mow Shiah Lin Scholarship

Brookhaven Lab's Asian Pacific American Association (APAA) awarded Ying Liu, a graduate student at Stony Brook University's (SBU) Department of Materials Science and Engineering, with the fifth annual Dr. Mow Shiah Lin Scholarship on November 19, 2009. The scholarship is sponsored by the APAA and consists of \$1,000 and a plaque to honor the distinguished late BNL scientist for which it is named.

Mow Shiah Lin began his career at BNL in 1975 as a post-doctoral fellow and advanced to co-lead a research team working with an environmental remediation company to use selected bacteria to convert toxic oil wastes, such as used motor oils, into useful products. In 2001, Lin shared an R&D 100 Award, given by *R&D Magazine* to the top 100 technological achievements of the year, for developing a technology to recover silica from geothermal brine. Lin died suddenly due to a brain aneurysm at the height of his career in 2003, and his coworkers, friends and family contributed funds to establish the scholarship.

In remembrance of the manner in which Lin began his career, the scholarship is granted annually to an Asian immigrant with a student visa who is matriculating toward a graduate degree at an accredited institution of higher education in environmental science, biology, or chemistry, in honor of Lin's research and inventions.



Roger Stoulenburgh 04731108

Beth Y. Lin, widow of Mow Shiah Lin and trustee of the Asian Pacific American Association (left), presents Stony Brook University student Ying Liu with the 2009 Dr. Mow Shiah Lin Scholarship.

"I am very grateful to receive this scholarship," said Liu. "I am fortunate that the APAA encourages students to continue their research."

Liu came from China to the U.S. to pursue advanced degrees at SBU. She expects to graduate from SBU with a Ph.D. in materials science in August 2010. Liu studies polymer science with a focus on the interaction between human cells and biocompatible fibers and the encapsulation of microorganisms in polymers. Her research may have applications in numerous areas, including wound repair, drug-delivery systems and wastewater treatment. After graduation, Liu hopes to continue her research on polymers, either as a postdoctoral student or in industry. — Diane Greenberg

BWIS Lunch, 'Regifting' & Raffle, 2/1

Brookhaven Women in Science (BWIS) invites all BNLers to its "super salad" lunch and "regifting" raffle on Monday, February 1, at noon in the third-floor conference room in Bldg. 1005. Attendees each bring one salad ingredient for the main dish served at lunch. Please bring any of your wrapped, unwanted gifts to the lunch for a regifting exchange. BWIS will also donate prizes for a raffle. To list the salad item you will bring, contact Lynn Ecker, Ext. 2538, lecker@bnl.gov, or Kathy Walker, Ext. 7105, kwalker@bnl.gov.

Public Vehicle Auction, 2/1-5

The Government Services Administration will offer 20 motor vehicles, located at Bldg 870, for public auction, Monday through Friday, February 1-5, during which time anyone may bid on the vehicles. Photos of the vehicles, with pertinent information, are available at <http://www.gsauctions.gov>. To inspect the vehicles, call Jerry Quigley, Ext. 4527. For more information, contact Janet Soper, Ext. 2325, soper@bnl.gov.

Adult Swim Lessons On Site

American Red Cross-certified swim lessons will be offered on Wednesdays starting March 3 until April 21 from 5:30 until 6:30 p.m. at the pool (Bldg. 478). The class is open to all employees, guests, users, retirees, and their immediate family members, who are at least 18 years old. \$80 per person, learn more at <http://www.bnl.gov/bera>, or call Ext.

Upton Service Station Update

The on-site Upton Service station is now open for oil changes and other repairs. The vendor is still waiting for County and State approvals to dispense gas and conduct inspections. The Lab community will be notified when the station is fully operational.

BERA Updates

Virtual Swim: Join with the 75 swimmers participating in "virtually swimming" the 1,700 miles of the Danube — in memory of Pavel Rehak, an original member of the BNL Swim Club — by March 31. Go at your own pace, each lap counts! Sign up at the pool.

NY Rangers vs. Nashville Predators: Wednesday, February 10. Depart BNL at 4 p.m., game at 7 p.m., and leave Madison Square Garden at the conclusion of the game. Section 322, \$75 per person.

American Museum of Natural History: Saturday, February 27. Depart BNL at 8:30 a.m. and leave the Museum at 4 p.m. \$25 for adult and \$18 for children, ages 12 and under.

Extra Hours at the Pool: In addition to its regular hours, the pool will be open 2 – 5 p.m. for children to swim for free from February 16 until 19. A parent must be present.

Philadelphia Flower Show: Saturday, March 6. Depart BNL at 6 a.m. and leave Philadelphia at 4 p.m. \$35 per person.

NY Knicks vs. Denver Nuggets: Tuesday, March 23. Depart BNL at 4 p.m., game at 7:30 p.m., and leave Madison Square Garden at the conclusion of the game. Section 310, \$55 per person. Purchase trip or event tickets on weekdays, 9 a.m.-3 p.m. at the BERA Store in Bldg. 488. Also, see <http://www.bnl.gov/bera>.

CALENDAR

— WEEK OF 2/8 —

Wednesday, 2/10

Stony Brook Energy Workshop
9 a.m.-4 p.m. Small Business Development Center, SBU. "Solar and Wind," geared to small businesses or others interested or involved in energy. Presented through a NYS Energy Research & Development Grant. Among the panelists: BNL's Vasilis Fthenakis and Mark Toscano. Registration for this free event starts at 8:30 a.m. Breakfast, lunch included, free. For directions or more information, contact Leslie Rurup, 632-9837 or leslie.rurup@stonybrook.edu.

— WEEK OF 2/15 —

Monday, 2/15

President's Day Holiday
The Lab will be closed. No Bulletin will be issued on Friday, 2/19.

— WEEK OF 2/22 —

Wednesday, 2/24

BSA Noon Recital
Noon. Berkner Hall. Prizewinning pianist Daria Rabotkina will perform, sponsored by Brookhaven Science Associates, the company that manages BNL. All are welcome to this free event, open to the public. Visitors to the Lab of 16 and over must carry a photo ID.

Arrivals & Departures

— Arrivals —

Brent Buetow NSLS-II
Huston Fernandes NSLS-II
Ashutosh Gupta Env. Sciences
Tejas Rao Physics
Anuj Vyas C-AD
Peter Warnicke NSLS

— Departures —

Shinji Ejiri Physics
Hua Zhou NSLS

AdoptaPlatoon Needs Hot, Instant Cereals

This February, the Brookhaven Veterans Association's Adopta-Platoon committee is collecting hot instant cereals to send abroad. Please drop off oatmeal, cream of wheat, grits, etc., by February 20, at: the clinic in Bldg. 490, the Bldg. 400 lobby, the Bldg. 488 lobby, and the library in Bldg. 510.

Classified Ads from pg. 4.

We regret the lack of space for the rest of the ads, which are on pg. 5 of the pdf version of the Bulletin, at <http://www.bnl.gov/bnlweb/pubat/bulletin/default.asp> or call Ext. 2345 for a paper version to be sent.

BENEFIT CONCERT – fundraiser features The Fugitives, Tommy Keyes Band, more at Vail-Leavitt Music Hall, R'head, 7pm, 1/30, for Adam Lamson, former BNL summer intern battling cancer. Adv'ced tkt \$40, incl. food. See adamlamson.com for tickets/donations. Thank you. dberry143@optonline.net.

LOST – women's brown L.L. Bean down vest. Ext. 5053.

MOVING SALE – moving out of USA, avail items: <http://moving2ch.blogspot.com>. Ext. 2618, 681-7605, jckblvr@gmail.com.

6 TICKETS – Shen Yun Perfrmg Arts, Radio City, 2/14, 5 pm, ask/\$55/ea. Ext. 4033.

GLBT SCHOLARSHIP – Applications being accepted for 2010 schol'ship for eligible GLBT 12th graders or coll. students. 3/1 deadline. info from Michael, loftus@bnl.gov.

GIRL SCOUT ENGINEERING FAIR – VOLUNTEERS NEEDED. SWE/WISE prog @ SBU. 9a-3p, Sat. 3/13. 1 hour-all day. Help needed at registration & working with girl scouts on hands-on activities. Lauren, 262-8104 or lahjst13@optonline.net.

SKI TRIP – Ski trip to Hunter Mountain, Feb 10, \$70/pp, incl lift ticket, R/T transportation from exit 63 park and ride. Boyzie, 786-3620 or bsingh@bnl.gov.

Cafeteria Free Raffle — Win Super Bowl Party Pack for 15!
At the Lab cafeteria, Nayyarson Food Service is offering a Super Bowl raffle prize of buffalo chicken wings, heros, two salads, chips, sodas, cookies and paper goods for 15, with no purchase necessary to enter. Receive a raffle ticket and play each time you visit the cafeteria. Two winners will be drawn on 2/4; pick up the food on 2/5, ready for your party!

Classified Advertisements

To apply for a position, go to www.bnl.gov. Select "Job Opportunities," then "Search Job List."

LABORATORY RECRUITMENT - Opportunities for Laboratory employees only.

CUSTODIAN (2 regular positions) - Under general supervision, performs general cleaning and housekeeping duties in all Lab buildings. Hours are 3 a.m. - 11:30 a.m. If interested, please send transfer form to Diana Hubert, Bldg. 400B.

OPEN RECRUITMENT - Opportunities for Lab employees and outside candidates.

POSTDOCTORAL RESEARCH ASSOCIATE (RA-1) - X-RAY POWDER DIFFRACTION BEAMLINE - Under the direction of the X-ray Powder Diffraction Beamline (XPD) Group Leader, the postdoctoral fellow will carry out scientific research needed to optimize and implement the monochromatizing and focusing optics for the XPD beamline at NSLS-II. This work will include theoretical and experimental work on the specially designed double-Laue-crystal vertical monochromator and on a separate side-bounce crystal horizontal monochromator. Will work closely with the XPD scientific and engineering staff on the optical design and perform systematic theoretical analysis using third party software (e.g., SHADOW) and will be involved in experimental/testing work at X7 and X17 beamlines at NSLS to verify the theoretical predictions. This work will lead into the final decision on the most appropriate optical configuration vs. the x-ray high-energy range and the horizontal/vertical divergence characteristics of the source. The work should consider both the crystal lattice distortion effects, crucial for modeling the reflectivity and energy resolution of bent crystals, and the combination of the bent crystals optics with additional reflective, diffractive and/or refractive optical elements. Requires Ph.D. in physics, x-ray optics, diffraction science or related discipline, excellent problem-solving and communication skills, ability to use and/or implement the relevant computing tools, algorithms and experimental set-ups, computational and theoretical skills, and the ability to work with a diverse group of scientists and technical staff. Experience working at a synchrotron radiation center and knowledge of beamline optical design, x-ray tracing issues, diffraction research and x-ray instrumentation (monochromators, mirrors) is highly desirable. National Synchrotron Light Source II. Apply to Job ID #15177.

POSTDOCTORAL RESEARCH ASSOCIATE (Experimental Nuclear or Particle Physics) - Requires a Ph.D. in experimental nuclear or particle physics. The STAR Group in the Physics Department at BNL seeks a candidate to work on the analysis of data related to heavy flavor production in heavy ion collisions. RHIC and STAR are currently undergoing a number of upgrades to increase accelerator luminosity and detector capabilities, the first results of which are expected in 2010. These upgrades have dramatically improved STAR's capabilities to examine quarkonia and open heavy flavor. We are seeking a talented individual to actively participate in this effort. Experience in experimental particle or high energy nuclear physics and knowledge of hardware, computing and data analysis are highly desirable. It is also expected to spend a fraction of his/her time on the development of a High Level Trigger (HLT) to tag events of interest for rapid analysis and/or a Muon Telescope Detector (MTD) to measure muons from heavy flavor decays. STAR is a large collider detector experiment at RHIC searching for a new state of matter thought to have existed shortly after the creation of the universe. Under the direction of J. Dunlop, Physics Department. Apply to Job ID #15186.*

POSTDOCTORAL RESEARCH ASSOCIATE (Experimental Nuclear or Particle Physics) - Requires a Ph.D. in experimental nuclear or particle physics. The STAR Group in the BNL Physics Department seeks candidate to work on the analysis of the data collected during the Beam Energy Scan, which starts in 2010. RHIC and STAR are embarking on a multi-year program to locate a possible critical point in QCD phase diagram by colliding Au beams at the lowest energy available. We seek a talented individual to actively participate in this effort. Experience in experimental particle or high energy nuclear physics and knowledge in hardware, computing, and data analysis are highly desirable. Also expected to spend a fraction of his/her time on the recently completed Time of Flight (TOF) system which is a critically enabling device for the Beam Energy Scan. Is expected to participate in the calibration and operation of the detector. STAR is a large collider detector experiment at RHIC searching for a new state of matter thought to have existed shortly after the creation of the universe. Under the direction of J. Dunlop, Physics Department. Apply to Job ID #15187.*

COMMERCIALIZATION & BUSINESS DEVELOPMENT MANAGER (M-4, Reposting) - BNL seeks a senior-level professional for a newly created position of Manager for Business Development and Commercialization. Responsibilities include managing the Technology Commercialization Office. Is expected to play a pro-active role in increasing the technological, economic, and/or social impact of the Laboratory's research efforts and

promoting an entrepreneurial culture in and around BNL. Informed by market research and valuation studies, will lead the development of commercialization strategies in support of IP capture, licensing, and commercialization activities. In addition, is expected to work with BNL staff and senior management to cultivate technology partnerships that connect BNL technologies, facilities, and expertise with industrial/commercial entities, including entrepreneurs, venture capital, and small businesses with the aim of advancing the commercial prospects of new technologies. Requires a bachelor's degree in an engineering or scientific discipline and 10+ years' relevant commercial/business experience(s). Advanced degree, MBA, entrepreneurial, start-up and/or venture capital experience is desired. U.S. Citizenship a requirement. Office of Policy & Strategic Planning. Apply to Job ID #14958.

PATENT ATTORNEY (M-1) - Requires two years as a registered patent attorney, J.D., registration before the U.S. P.T.O., and license to practice in at least one state. Strong technical knowledge with minimum of a bachelor's degree. Technical knowledge such as materials science or computer science preferred. Copyright and trademark experience preferred. Ability to work independently with some guidance, and interact with clients and co-workers with a professional, approachable and positive demeanor. Responsibilities include identifying and conducting patentability analysis of BNL inventions from scientific departments as assigned, and reporting on patentability to Chief Intellectual Property Counsel. Will work closely with the Office of Technology, Commercialization and Partnerships in support of its licensing program/strategy for individual technologies from various scientific departments. Provide IP legal review, as needed, of all agreements including licenses, user agreements, CRADAs, WFOs, NDAs and MTAs. Will obtain patent protection in the U.S. and where appropriate in foreign countries for BSA-owned inventions in the fields of scientific departments as assigned. Assist in discussions as necessary to address IP legal issues and provide IP legal counseling to Commercialization and Partnership managers. Will obtain DOE approval for and obtain copyright protection in the U.S. if appropriate and advise staff on release of Open Source Software and obtain DOE approvals as needed. IP Legal Group. Apply to Job #15117.

TECHNOLOGY ARCHITECT (I-9) - CONTROL SUBSYSTEMS APPLICATIONS - The NSLS-II Controls Group seeks an individual to lead the development to design and deploy accelerator subsystem applications. This position includes all aspects of the design of the control subsystem such as: evaluating the applicability of various technologies, providing guidance to the controls engineering staff, identifying and directing the gathering of requirements, developing the EPICS application and any new drivers and tools needed, testing of components, installation, integration, automation and operational support. Candidate will have superior analytical and problem-solving skills and considerable experience functioning in a lead developer role. Reports to the Controls Group Leader, NSLS-II Project. Requires a BS in engineering, computer science, or physics, or equivalent experience, a minimum of 10 years' experience in control system applications, strong communication skills and the ability to work effectively with a diverse group of scientists and engineers, experience with real time systems architecture and real time issues including shared memory, client/server applications, VxWorks, RTEMS or an equivalent real-time OS, experience in programming in some combination of C, C++, and Java as well as developing code under LINUX, and the ability to work within a team and have demonstrated communication skills. Experience using DCS control systems and EPICS for implementing accelerator and process control systems, knowledge of experimental control software such as Gumtree, GDA, SPEC, and Synapps, and experience in the use of Relational Database applications including SQL programming and the use of Ajax is highly desirable. Reports to the Controls Group Leader, NSLS-II Project. National Synchrotron Light Source II. ERAP Eligible - \$1000. Apply to Job ID #15182.*

PRINCIPAL COMMUNITY RELATIONS SPECIALIST (A-8) - Requires a bachelor's degree and a minimum of 10 years' experience in community relations or related field. Highly seasoned and senior professional. Will develop, manage and implement strategic community relations and engagement plans for new and existing programs that align with the Laboratory's science and operations priority programs and initiatives, which include environmental issues, safety in the workplace, and Lab-wide audits like ISM. Will provide input to senior management in areas of responsibility. Will manage special events from strategy through implementation and conduct focus groups/surveys for the CEGPA directorate. Will conduct research and analysis and anticipate, track, and manage issues that may be of importance to the Laboratory. Will be expected to gain a broad understanding of the Lab's research and discoveries and connect them to the interests of key opinion leaders and other stakeholders. Demonstrated ability to cultivate internal and external relationships with a wide range of stakeholders and colleagues is necessary, as are consensus building skills. Proven ability to organize and coordinate many programs concurrently. Must be able to demonstrate a high

degree of initiative and professional judgment. Proven leadership, mentorship and people skills and high ethical standards needed, with a capacity to work in a collaborative work environment. Must be detail-oriented, organized, self-motivated and able to operate effectively under pressure. Excellent written and oral communication skills are required. Will require an in-depth knowledge of both the Lab's needs and community concerns, as well as the ability to effectively problem-solve while maintaining the integrity of the Lab and community based interests. Position may require working some Sundays and evenings. Community, Education, Government & Public Affairs Directorate. Apply to Job ID #15175.

ELECTRICAL RESEARCH ENGINEER (VHDL / FPGA DESIGN) (Reposting, P-5/P-7/P-9) - Requires a bachelor degree in electrical / electronic engineering. Requires a minimum of three years of experience in FPGA firmware design using VHDL, including physical implementation of designs in FPGA hardware. Excellent working knowledge of VHDL, FPGA vendor and third party design entry, synthesis, implementation and simulation tools is a must. Knowledge of specialized FPGA architectural features is a plus - embedded processor cores, multi-gigabit serial transceivers, DSP blocks, etc. Experience in mixed analog/digital design, schematic capture, PCB layout, RF and high speed digital techniques also desirable. Will apply his/her engineering experience and skill to the design of custom high speed signal processing architectures for the Relativistic Heavy Ion Collider. Responsibilities will include conceptual and detailed design and specification, documentation, component selection, PCB layout, test and validation, oversight of technicians, system commissioning and operation. Excellent written and verbal communication and good interpersonal skills are required to interact with a diverse group of engineers, scientists, and technical staff. Will report to the RF Systems Group Leader. Will be placed at the P-7 level dependent upon depth and breadth of relevant knowledge and skills. Collider-Accelerator Department. ERAP Eligible \$1000. Apply to Job ID #15071.**

HR REPRESENTATIVE (IMMIGRATION) (A-4, Term Appointment) - Requirements include a bachelor's degree or combination of education and equivalent experience; plus a minimum of two years of experience in directly related work to include processing immigration transactions and applications, excellent interpersonal and communication skills both oral and written and general knowledge of immigration law. Experience assisting foreign nationals with the processing and completion of all documentation for varied types of visas including H-1B, B and TN is necessary. Computer skills including Microsoft Word and Excel, web and data analysis experience are also required. Will be responsible for conducting a comprehensive audit of active and inactive Immigration files and may be assigned some prospective employees requiring employment visas and assistance with all visa-related concerns, questions and travel issues. Work involves interaction with scientific staff, managers and employees. Preferred: Experience with J-1 program. Diversity Office. Apply to Job ID #15180.

ADMINISTRATIVE SERVICES ASSISTANT (A-2) - Requires an AAS degree or formal secretarial training or equivalent, plus four years of experience in a secretarial or administrative role. Demonstrated proficiency in web-based tools and Microsoft Office applications (Word, Excel, Outlook and PowerPoint) is required. Must have strong communication, organizational and problem-solving skills as well as the ability to work independently, handle multiple and parallel projects, prioritize workload, and handle non-routine office matters. Excellent verbal and written skills are essential. Familiarity with PeopleSoft is desired. Reporting to the PPM Property Manager, will work independently to perform a range of administrative duties related to the PPM Property Group with varying degrees of complexity; which include, but are not limited to, processing weekly timecards, web requisitions, credit card orders, travel and maintaining confidential administrative records, reports and files. Additional responsibilities will include arranging conferences and meetings, setting up appointments and services, preparing reports and correspondence, information gathering and taking minutes at meetings. Procurement & Property Management Division. Apply to Job ID #15171.

ADMINISTRATIVE SECRETARY (A-2) - Requires formal secretarial or office administration training or equivalent, plus four years of relevant experience. Must possess a high level of proficiency in performing administrative secretarial skills and excellent oral and written communication skills. Must be proficient processing information using a PC. Utilize state-of-the-art software for administrative and scientific word processing, presentations, technical reports, manuscripts, spreadsheets, database management and E-mail (knowledge of MS Word, Outlook, PowerPoint, Excel and PeopleSoft Products). Under minimum supervision, will perform a variety of skilled and complex secretarial tasks for the Nuclear Energy & Infrastructure Systems Division, involving both routine and non-routine administrative assignments. Will also assist in activities of the Four Laboratory Consortium (ANL, BNL, ORNL, and PNNL) to support the U.S. NRC.

Typical assignments will include report and correspondence preparation, scheduling appointments, making travel arrangements (both domestic and foreign), assisting in organizing and scheduling small conferences and meetings, and performing complex word process and/or assignments. Will have contacts within and outside the Laboratory. Energy, Science & Technology Department. Apply to Job ID #15185.

ADMINISTRATIVE SERVICES ASSISTANT (A-2) - Requires formal secretarial or office administration training, plus four years of experience in substantive and relevant administrative record keeping and secretarial areas. Must have excellent organization, communication and interpersonal skills and the ability to work well with all levels of management, staff and outside vendors. Under general direction provides office support to entire ITD division, assistant to the Director of ITD, and reports directly to the Business Operations Manager of ITD. Must have the ability to work independently within established procedures and may be required to handle non-routine office matters. Knowledge and demonstrated proficiency using Microsoft Office (Word, Excel, PowerPoint), Microsoft Visio, and Adobe Acrobat is required and knowledge of BNL systems, such as PeopleSoft Travel, WebReq and GIS is desirable. Responsibilities include arranging travel for ITD staff (registrations, flights, hotels, etc.) and processing travel authorizations through expense voucher (domestic and some foreign), processing and approving Guest Registrations, maintenance of Division files and scheduling/organizing Division meetings/conferences/presentations. Will serve as ITD Training Coordinator responsible for updating training plans for all ITD staff and working with ITD managers to ensure that Job Training Assessments (JTAs) are accurate. BNL credit card will be issued to process registrations and accurate record keeping using division credit card system (data entry in Access database, reconciliation of statement and processing of Journal Vouchers) is mandatory. Information Technology Division. Apply to Job ID #15189.

PLANNER/ESTIMATOR (Fabrication) (T-5) - Requires an Associate's Degree in a related scientific or technical field or equivalent capabilities, plus at least 10 years of relevant and demonstrated working knowledge of manufacturing techniques in the machining processes including a comprehensive background in the areas of milling, turning, EDM, wire EDM, water jet, sheet metal fabrication and welding, along with a thorough knowledge of materials. Must have excellent communication and organizational skills and be proficient with MS Office products. Reports to the Deputy Manager, Maintenance & Fabrication Services Division. Under general technical direction, prepares work requests of a unique nature for specialized scientific equipment or components used in experiments. Estimates, procures, prepares, processes and records all work requests while maintaining high quality and cost effective services. Handles work for offsite vendor fabrication and purchased services which may require special processes or rework of noncompliant orders. Utilizing a maintenance management program, submits cost estimates for all fabrication work orders to departments for approval. Creates CNC/NC programs from prints and models using MasterCam X4, AutoCAD, Pro-Engineer, Flowcut/Path, CadmanB and CatalystEX. Supervisory skills as well as time management and scheduling experience are a must. Facilities & Operations Division. Apply to Job ID #15184.

QUALITY ANALYST (T-4, Three-year term appointment) - Responsibilities include performing and documenting QA audits, and maintaining audit schedules, records, and database. Will also collect, analyze, and report on data relating to quality performance, from various QA management systems and applications. Will assemble and compile end item documentation, including travelers, inspection/test data, and discrepancy reports, and review to ensure completeness and accuracy. Will generate as-built lists (ABLs), verify against as-designed configuration, and resolve differences. Will also maintain calibration program, including recall notices, records, and database. Requirements include an Associate's degree in engineering technology or a related discipline and 6 years experience as a Quality Analyst in an engineering and manufacturing environment. Must have good written and oral communication skills and the ability to provide high quality reports and briefs; excellent interpersonal skills and the ability to interact effectively with a diverse group of scientific, engineering, and technical staff. Knowledge of QA system processes, including inspection and testing, calibration, and corrective and preventive action, as well as quality tools and techniques. Should be familiar with auditing practices and have experience performing internal audits. Preferred requirements include a bachelor's degree, 10 years' experience, and ASQ certification (CQA, CQT). Will report to the NSLS-II Quality Assurance Manager. National Synchrotron Light Source II. ERAP Eligible: \$500. Apply to Job #15179.**

ELECTRICAL TECHNICAL SPECIALIST (T-2) - Requires an A.A.S. degree in Electrical Technology - Electronics or equivalent experience, plus at least four years of relevant work experience including maintenance and troubleshooting of complex electronic, elec-

trical and mechanical systems. Experience with high current/voltage power supplies, analog /digital electronics, programmable logic controllers (PLC's) and basic computer knowledge is desirable. Must be familiar with standard electronic measurement equipment: such as function generators, oscilloscopes, multimeters and spectrum analyzers, basic machine shop skills are a plus. Must be able to repair, modify and build electrical/electronics systems from schematic drawings and assemble chassis using basic mechanical fabrication techniques. Must be self-motivated, able to work with minimum supervision and have good communication skills. Will under general technical direction, and with some latitude for the exercise of initiative and judgment, provide troubleshooting and repair support for high current and high voltage electrical power supplies and high frequency electronic equipment that supports the operation of the Relativistic Heavy Ion Collider complex. Will also design, fabricate, assemble, test, and install complex electronic equipment and components during maintenance periods. This is a rotating shift position. Collider-Accelerator Department. ERAP Eligible: \$500. Apply to Job ID #15172.**

PRINCIPAL ELECTRICAL TECHNICIAN (TW-4) - Requires an A.A.S. degree in Electrical Technology - Electronics or equivalent experience, plus at least two years of relevant work experience including maintenance and troubleshooting of complex electronic, electrical and mechanical systems. Experience with high current/voltage power supplies, analog/digital electronics, programmable logic controllers (PLC's) and basic computer knowledge is desirable. Must be familiar with standard electronic measurement equipment such as: function generators, oscilloscopes, multimeters and spectrum analyzers; basic machine shop skills is a plus. Must be able to repair, modify and build electrical /electronics systems from schematic drawings and assemble chassis using basic mechanical fabrication techniques. Must be self-motivated, able to work with minimum supervision, and have good communication skills. Will under minimum supervision provide troubleshooting and repair support for high current and high voltage electrical power supplies and high frequency electronic equipment that supports the operation of the Relativistic Heavy Ion Collider complex. Will also fabricate, assemble, test, and install complex electronic equipment and components during maintenance periods. This is a rotating shift position. Collider-Accelerator Department. ERAP Eligible: \$500. Apply to Job ID #15173.**

SR. TECHNICIAN (TW-3, Reposting) - Requires an associate's degree in a technical field or equivalent relevant experience plus demonstrated experience in the use of hand tools, power tools, and mechanical measuring equipment, such as, micrometers, calipers and height gauges. Must have the ability to work alone or in a group from verbal instructions and/or written procedures. Familiarity with machine shop equipment is preferred. The use of forklifts, overhead cranes, and other material handling equipment will be an important part of this job after proper training is completed. A knowledge of basic wiring and soldering is also preferred. Responsibilities will include fabricating, assembly, testing, and operation of mechanical machines and tooling that is used to build superconducting magnets and their components. Superconducting Magnet Division. Apply to Job ID #15030.

OFFICE SERVICES ASSISTANT (CW-2, Term: nine months) - The Office Services Assistant for the National Synchrotron Light Source (NSLS) User's Office will provide clerical support within the office and may have some interaction with the NSLS user community and staff. Main responsibilities will include database entry and validation of experimental safety forms as well as training records, file organization and maintenance, creating electronic documents (PDF), answering telephones, and mail distribution. Other duties will consist of assisting with NSLS workshops' preparation and implementation, including confirming attendees and meeting room arrangements, preparing workshop materials, and assisting with registration. Will also provide assistance on ad hoc requests to the supervisor as well as manager of the Users' Office as needed. Requirements include a high school diploma plus at least two years of relevant work experience. Should have a working knowledge of basic database development and maintenance skills, with proficiency in Word, Excel and Outlook a plus. MS Access and PeopleSoft experience at BNL in a similar role, with working knowledge of BNL practices, policies and procedures, is also a plus. National Synchrotron Light Source. Apply to Job ID #15181.

*BNL policy: Research Associate appointments may be made to those receiving their doctoral degrees within the past five years.

**ERAP stands for Employee Referral Award Program. When a BNL employee refers a person for ERAP eligible career opportunities and that person is eventually hired, the employee gets a referral award, in the amount of \$500 or \$1000, as reflected in the posted job description. All opportunities are listed at www.bnl.gov/hr/careers/ and employees may also log on to view all ERAP-eligible positions and sign up for automatic alerts. For more information, contact Nancy Sobrito at sobrito@bnl.gov.

See notice on rest of ads on pg. 3.

