the Bulletin

BROOKHAVEN NATIONAL LABORATORY

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2007 BNL Employee Awards — Engineering

At the annual Employee Recognition Ceremony held on February 7 in Berkner Hall, 15 BNLers were honored with the Lab's highest awards: five received the Brookhaven Award; four, the Science & Technology Award; and six, the Engineering & Computing Award. The Brookhaven and Science & Technology Award winners were featured in the Bulletin of February 29. The Engineering & Computing Award recognizes distinguished contributions to the engineering and computing objectives of BNL over one or more years. The award amount is $5,000. Lanny Bates, Assistant Laboratory Director for Facilities & Operations, presented the Engineering & Computing Award to: Sorin Viorel Badea, Collider-Accelerator Department; Peter Boyle, Plant Engineering Division (PE); Paul Kovach, Superconducting Magnet Division (SMD); Stephen Plate, SMD; William Leonhardt, Condensed Matter Physics & Materials Science Department; and James Wright, PE. Their citations are featured below.

Roger Stoutenburgh D1410208

BNL's 2007 Engineering Award winners are: (from left) James Wright, Plant Engineering Division (PE); Peter Boyle, PE; Stephen Plate, Superconducting Magnet Division (SMD); Paul Kovach, SMD; Sorin Viorel Badea, Collider-Accelerator Department; and William Leonhardt, Condensed Matter Physics & Materials Science Department.

Sorin Viorel Badea, a senior project engineer in the Collider Accelerator Department (C-AD), is cited for his 18 years of exceptional performance that has touched every accelerator in the C-AD complex. His contributions have improved engineering projects from the Alternating Gradient Synchrotron (AGS) Booster construction to the Spallation Neutron Source. The lead mechanical engineer supporting the C-AD power supply group, Badea's responsibilities include the maintenance and upgrade of the Siemens and Westinghouse power supplies, which are classic motor generator sets with over 100 tons of rotating mass. His reorganizations extended their useful life and implemented significant upgrades to their ancillary equipment. Badea has also been responsible for the design, assembly, testing, and installation of various accelerator magnets, other power supplies, rotating cryogenic equipment, shielding upgrades, and high voltage septums.

Peter Boyle, Manager of Construction Services in the Plant Engineering Division, has provided expert technical leadership of BNL's construction program for over 20 years. He oversees over $20 million of construction projects annually, including, for the last two years, managing construction field activities for BNL's new Center for Functional Nanomaterials to a safe and successful completion. His architectural expertise, work ethic, and in-depth knowledge of construction contracting have produced creative and effective methods of constructing BNL's facilities. His sound judgment and proven record of success and fairness have prevented costly claims and litigation arising from design, labor, or safety issues. Thanks to the efforts of Boyle and his team, BNL's construction safety record is near perfection. Boyle serves on both the Director's and Plant Engineering's Safety Committees.

Stephen Plate, a senior project engineer in the Superconducting Magnet Division (SMD), is cited for outstanding contributions to the success of a challenging achievement, the AGS Snake magnet. This unique magnet was engineered and built by SMD to help control the spin of protons in the Relativistic Heavy Ion Collider (RHIC). Plate, who headed the mechanical engineering effort and was responsible for systems integration, ensured that all the magnetic, cryogenic, mechanical, electrical, and installation requirements were achieved, and resolved conflicts as needed. Much of his work required making decisions on magnet configuration based on calculations, finite element analyses, and understanding of engineering principles. The

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Battelle President, CEO Carl Kohrt Addresses Lab Community

Roger Stoutenburgh D2270208

"Congratulations on the many achievements you have made both individually and organizationally for over 60 years," said Battelle President and CEO Carl Kohrt to a large gathering of BNL employees in Berkner Hall on February 28. Lab Director Sam Aronson explained in his opening remarks that Brookhaven Science Associates (BSA), the company that manages BNL, consists of a partnership between Battelle and Stony Brook University, each institution providing a Chair of the BSA Board of Directors for two years on a rotating basis. Kohrt, Chair of the BSA Board of Directors for the next two years, was at the Lab for a BSA Board meeting and was taking the opportunity to address the Lab.

Kohrt introduced co-Board members from Battelle who were in the audience: Jeffrey Wadsworth, Jeffrey Smith, also of Oak Ridge National Laboratory (ORNL); and Martin Inglis. He also complimented BNL on the appreciation recently expressed to him by Under Secretary for Science Ray Orbach on BNL's progress in 2007. Kohrt explained that his purpose in speaking to the Lab community was to provide "a little education about Battelle and where we see our future in Battelle, and BNL's role in that future, which we see as very rich for both of us."

As Kohrt outlined, Battelle is a nonprofit research and development (R&D) organization with $1 billion of its own assets, about $4 billion in annual revenue, and about 20,000 employees worldwide, a number that has doubled in the past six years. As stated by its founder in 1923, Battelle has a specific mission: to be devoted to scientific discovery, to applying that discovery to industry to allow industry to become more competitive, and to using a minimum of 20 percent of net profits to benefit the community by charitable works and education — education being of particular interest — and to reinvesting the remainder to advance new scientific discoveries.

"Today, Battelle has a branded approach of simultaneous excellence recognized internationally," continued Kohrt. "Excellence in science and technology, excellence in lab operations, and excellence in community service." He emphasized that lab operations include providing facilities so that good and affordable science can be done, and that environment, safety, health and quality considerations in all operations are equally important.

> *"I thank you all for what you do. We're going to do everything we can to find ways to allow you to keep doing it."*
>
> — Carl Kohrt, Battelle President and CEO

"Issues around safety are absolutely critical at Battelle, as at every one of our facilities," he stated, remarking that Brookhaven's latest safety performance has somewhat improved. "We will do everything we can [to help], but it's got to be done locally," he said.

Kohrt listed many of the scientific laboratories and ventures managed or cooperatively managed by Battelle, which include Pacific Northwest National Laboratory, BNL, ORNL, National Renewable Energy Laboratory, and Idaho National Laboratory, as well as many others. He explained that, in its business model, Battelle seeks a balance between the different branches of operations: scientific research, technology transfer to industry, and commercialization, and between the different risks associated with various sources of funding. The future could hold, for example, more non-governmental sources of income, sources outside DOE, limited-run manufacturing, international locations, etc.

"In less than ten years, we hope that three-quarters of our revenue will be associated with labs and research. Scientific laboratory operations are really core to Battelle," Kohrt said. The broad base of science and technology capabilities from Battelle's involvement in nine major labs will be vital in matching U.S. needs in energy, national security, and health and life sciences, he indicated.

As to what Battelle and BNL can do together, one example Kohrt mentioned is a recently signed multi-Lab contract in energy that will get some revenue back to the labs. Another such contract, that includes BNL, is being considered in the arena of national security. "Battelle wants to be the convener for multi-lab contracts," he said.

Other possibilities of collaboration can be explored, he said. Regarding energy discoveries, BNL's advantages include research done at the Center for Functional Nanomaterials, computation on

(continued on page 2)

Scientists Highlight Nanotech Applications at Media Roundtable — Part I —

New ways to deliver drugs directly to tumor cells without poisoning the rest of the body

Beach umbrellas that absorb sunlight and allow you to plug in your laptop or cell phone

Quantum dots that produce multiple electrons per photon of absorbed light, increasing the efficiency of solar energy

The items highlighted above are just some of the high-tech nanoscience applications reporters learned about at a special session hosted by the National Nanotechnology Coordination Office (NNCO) during the annual meeting of the American Association for the Advancement of Science (AAAS) in Boston on February 15. The session, organized by John Carter of DOE's Brookhaven Site Office and Audrey Haar of NNCO, brought reporters face-to-face with four of America's foremost nanotechnology experts for a wide-ranging discussion on nanotechnology applications in medicine and energy.

The aim, said Carter, was to highlight the role of the federal government in supporting nanotechnology research through the National Nanotechnology Initiative (NNI) and its member agencies, including DOE. "We have some very exciting research going on at the DOE Nanoscale Science Research Centers, in academia, and in industry," Carter said. "The AAAS meeting, which attracts hundreds of science reporters from all over the country and the world, was an ideal venue to present this work and shine a spotlight on the role of DOE and other NNI agencies in funding basic research and supporting the transition of promising technologies to the marketplace."

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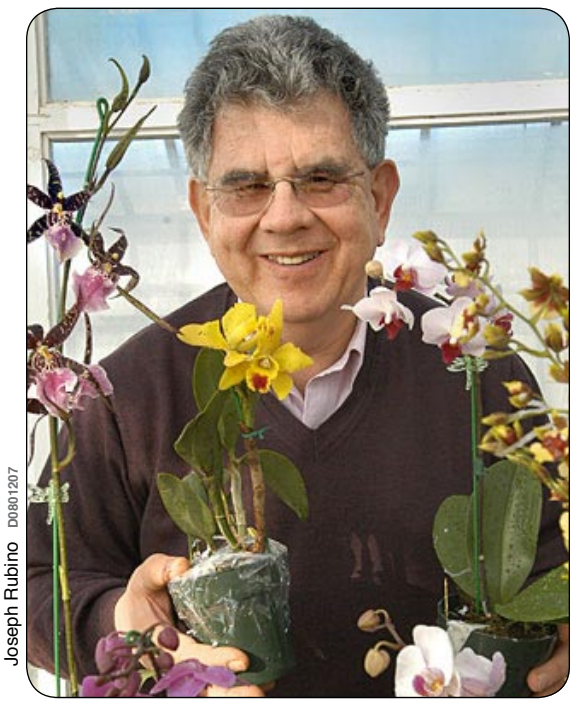
Joseph Rubino D2800907

Derek Lowenstein: Passion for Science and Orchids


Joseph Rubino D0801207

"I always had a plant on the window sill that I tended when I was growing up in Brooklyn," Derek Lowenstein, Chair of the Collider-Accelerator Department, said, explaining his interest in plants - and, in particular, orchids. "During the summer I also grew vegetables and flowers as part of the children's program at the Brooklyn Botanical Garden."

Later in Lowenstein's life, Herb Kinney, a BNL retiree, and his wife Betsy invited him to the summer auction of orchids given by the Suffolk Orchid Society, and, "after that, I was hooked," Lowenstein said.

For about 20 years, Lowenstein has been collecting and growing orchids, and today he has over 300 orchids in his collection. "I grow them under lights in my basement, and in the summer they all go out on my front porch," he said.

Lowenstein is currently vice president of the Suffolk Orchid Society, which meets at 7:30 p.m. every second Monday of the month at the Emma S. Clark Memorial Library in East Setauket. The Society sponsors an annual trip to the International Orchid Show, which this year will be held on March 29 in Longwood Gardens. "Anyone who's interested can join the trip*," said Lowenstein. "It's an excellent way to see many beautiful orchids at one time. Photographs are great, but there's nothing like seeing the blooms right in front of you."

Although orchids are sometimes considered rare and exotic, there are more than 20,000 species of orchids in the world, and orchids grow on every continent except Antarctica. Some varieties of orchids can be found growing wild in the woods of Long Island, but it is illegal to collect them. Lowenstein always has at least a few orchids in bloom in his collection, since different orchid species bloom at different times of the year.

"You need the appropriate amount of light and fertilizer for an orchid to thrive and most importantly to bloom," Lowenstein explained. "Most orchids in the wild are attached to trees or rocks, and for the most part do not grow in direct sunlight. They receive nutrients from the minerals and organic matter in the rain runoff. So, when growing orchids, keep them away from direct sunlight (there are some exceptions), and water and feed them both weekly and weakly. They don't like to have wet feet. Again, there are some exceptions, but don't allow them to stand in water. I think most home-grown orchids die due to poor watering practices."

Lowenstein has created two new orchid hybrids, which he has registered with the Royal Horticultural Society, an organization that maintains the database of orchid hybrids and species, recording about 3,000 new hybrids a year. Lowenstein's hybrids are named "Elaine Lowenstein," after his wife, who works in BNL's Community Relations Office, and "Alexander Leif," after his grandson. Since the hybrids are still little seedlings, it's too soon to tell what they will look like when mature, but hybrids are often more beautiful and vigorous than the two plants from which they originated.

When asked, it's hard for Lowenstein to choose his favorite orchid because they are all so different. But after some thought, he said he is partial to the *Paphiopedilum*, or Lady Slippers, an orchid genus that has "cousins" that grow on Long Island but is mostly often found in Southeast Asia.

Looking at photos of his orchid collection on his computer, he has one final thought about orchid growing. "It's a socially acceptable addiction," he said. — Diane Greenberg

**For information on joining this year's trip to the International Orchid Show, see "Happenings" in the ads on page 4.*

Kohrt Addresses Lab Community *(cont'd)*

New York Blue, and research done at the National Synchrotron Light Source (NSLS) and the future NSLS-II, Kohrt said. BNL also has promising work ongoing in the life sciences that could match with Battelle's focus in biology and medicine, in defense, on detection and protection, and in applied science.

Kohrt explained that Battelle's strategic thinking is global, seeing its labs collectively as resources for global business in basic science, energy science and technology, national security, and health and life sciences. "Our goal is to focus our earnings growth on those four global businesses," he said.

In response to a question on the renewal of the BSA contract, which has two one-year periods remaining to run, "We'll do whatever we must do to continue," Kohrt said. "We really want it." Answering another question as to whether Battelle is fulfilling DOE's requirements, he replied that Battelle has had increasing access to DOE leadership and that efforts to provide information to help with energy policy have been well received. But we all face challenges when administrations change, he noted. "We're subject to the same challenges that you are.

"I thank you all for what you do," Kohrt concluded. "We're going to do everything we can to find ways to allow you to keep doing it."

— Liz Seubert

Note: Carl Kohrt's talk is available on the web through WBNL streaming media, at www.bnl.gov/video.

Healthcare Providers: Are They Still In-Network? Make Sure to Ask First

If you are participating in one of BNL's medical plans, the Human Resources & Occupational Medicine Division Benefits Office recommends that before seeking services from a provider, confirm if the provider participates in the network for your insurance plan. You can contact your provider or your insurance company for such information. Confirming whether or not your provider is participating in your program prior to receiving such services can help you to avoid unexpected out-of-pocket expenses.

A provider's participation in a network may change at any time. For example, Long Island Cardiology Associates and Brookhaven Women's Imaging are currently not participating in CIGNA's Open Access Plus network, but were previously in the network.

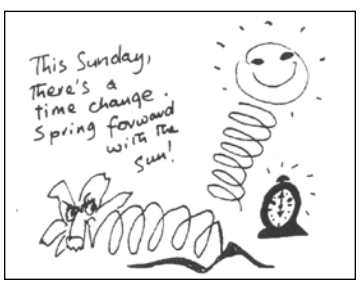
In addition, a provider may be contracted with an insurance company for some services and not others, so this is also an important detail to check. For example, an audiologist may be participating for hearing tests but not for providing hearing aids or an ophthalmologist may be participating for diseases of the eye but not for routine vision screenings.

Reimbursement Account Deadline

According to the Internal Revenue Service, contributions to health care or dependent day care accounts not used by the end of the calendar year will be forfeited. So, do not forget to use up balances within all 2007 reimbursement accounts by claiming expenses incurred in 2007. To do so, submit claim forms by March 31, 2008.

Defensive Driving Course in Two Parts, 3/17 & 20

The six-hour Defensive Driving (Point & Insurance Reduction) course will be held in two parts on Monday and Thursday, March 17 and 20, 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.



TIAA-CREF One-on-One Retirement Counseling

A TIAA-CREF consultant will visit BNL on Thursday, March 13, Thursday, March 20, and Wednesday, March 26, to answer employees' questions about their financial matters. The consultant will help you: understand the importance of protecting your assets against inflation, find the right allocation mix, learn about TIAA-CREF retirement income flexibility, and compare lifetime income vs. cash withdrawal options. For an appointment, call Suzanne Leone, (866) 842-2053, Ext. 4601.

Scientists Highlight Nanotech Applications at Media Roundtable *(cont'd)*

Altaf (Tof) Carim of the DOE Office of Science and co-chair of the Nanoscale Science, Engineering and Technology (NSET) Subcommittee of the National Science and Technology Council kicked off the discussion with an overview of NNI as an interagency effort to coordinate the nanoscience research already under way across 25 agencies within the federal government.

Some of the most exciting nanoscale research is taking place in medicine. Guest speaker Robert Langer of the Massachusetts Institute of Technology described his research at the interface of biotechnology and materials science, including work to develop one-centimeter-square grids that contain 100 nanoliter-volume wells. These "pharmacy on a chip" grids could be implanted, or made into pills, to carry 100 doses of a drug (or 100 different drugs) into the body in a single application, with each well opening remotely in a time-release manner when a tiny electrical current is applied. The same technique could also be used to develop implantable sensors for glucose, for example, to spare diabetics the need for constant blood testing.

Langer, whose research has been supported in part by the National Science Foundation and the National Cancer Institute, also described attaching nanoparticles to cancer-fighting drugs to both help the drug molecules evade the body's immune system and find their way directly to their target cells. Such targeted therapy, he said, "would be more effective and less expensive — than conventional chemotherapy — because you'd be directing all of the drug, at much lower doses, to the cells you want to treat instead of dumping a whole lot of drug into the whole body."

Langer's final example — though it was clear he could have gone on — was a new kind of adhesive modeled on the sticky nanostructured protrusions on gecko toes. Though others have tried modeling gecko nanopillars before, Langer said his group is the first to create a nanopillar adhesive that sticks very well when wet, making it ideal for surgical applications such as hernia repair.

Next up was Emilio Mendez, Director of Brookhaven's Center for Functional Nanomaterials (CFN), who presented a variety of ways researchers at DOE Office of Science Nanoscale Science Research Centers are addressing challenges in meeting our nation's energy needs. He pointed out the enormous waste in today's energy production balance sheet, due to inefficiency, as well as the geopolitical instability of our main energy sources.

"The solution," he said, "is very simple: use less energy, use it more efficiently, and look for alternatives to fossil fuels. Nanoscience can help in all of these areas."

For example, research at Brookhaven has shown that adding gold nanoparticles to the platinum catalysts currently used in fuel cells can increase the efficiency and stability of the platinum. This results in lower cost — because you do not have to replace the expensive platinum — and higher energy yield.

"But we don't really understand why it works," Mendez said. "More understanding is necessary. Is gold unique? Can we use other materials? That's the beauty of the kind of basic research we do at the national labs. We can ask these questions and do experiments to look for ways to understand the process and optimize the catalytic properties."

In the search for alternative energy sources, nanoscience may offer breakthrough possibilities. For example, it is widely believed that because a single photon of light produces a single electron in traditional silicon solar cells, there is a theoretical limit to how efficient these solar cells can be — around 30 percent. But engineering new kinds of solar cells at the nanoscale may allow scientists to overcome this limit. Research using quantum dots at DOE's National Renewable Energy Laboratory has shown that it may be possible for one photon of light to produce more than one electron, Mendez said.

DOE scientists are also experimenting with silicon nanowires, which produce electricity from sunlight without using plastic. This could improve efficiency because the polymers used in organic solar cells trap some of the electrons generated, reducing the current. "In silicon nanowires, there is not much time for the electrons to become trapped," Mendez said.

To be continued in next week's Bulletin. In Part II, BNL's Emilio Mendez reports on an exciting new development in nanotech self-assembly using complementary strands of DNA, and the session's final speaker, Rick Hess, President and Chief Executive Officer of Konarka Technologies Inc., describes his company's development of flexible organic solar cells, which could be used in a wide range of applications from powering beach umbrellas, to bringing electrical power to people living off the mainstream grid.

— Karen McNulty Walsh

BNLers Mentor Four Intel Semifinalists

The Intel Science Talent Search (Intel STS) is the country's oldest and most prestigious pre-college science competition. According to the Intel website, a total of 1,602 entrants representing 45 states, Puerto Rico, and the Virgin Islands entered this year's competition and four of the 300 semifinalists worked on their projects at the Lab under BNL mentors.

"We recognize how busy Lab researchers are and we appreciate the time and effort they offer mentoring high school students and possible future scientists," said Ken White, manager of the Lab's Office of Educational Programs. "The dedication of Lab researchers working with local students helps them accomplish their personal scientific and academic goals."

All semifinalists will receive a $1,000 scholarship for their projects with an additional $1,000 given to their school. A short description of the four semifinalists who worked on their projects with BNL mentors (pictured) follows.

Isaac Degani of Wellington C. Mepham High School worked under the direction of Helio Takai of the Physics Department. With Takai and his physics teacher, William Leacock, Degani developed pattern-recognition software to identify meteors, lightning, and airplane signals seen by MARIACHI radar. MARIACHI Radar detects fluctuations or interference in signals from radio frequency sources located below the horizon. The shape and frequency of the disturbances can help identify the object causing interference. "Isaac embraced the challenge of solving problems related to data collection," Takai said. "His persistence and ingenuity were key factors in the successful conclusion of his project."

Mentor Helio Takai

Teresa Kao of Ward Melville High School tackled a research project on breast cancer imaging. She worked with Zhong Zhong, a researcher at the National Synchrotron Light Source, to improve a new method for distinguishing invasive human breast cancer from normal breast tissue. The method, called diffraction enhanced imaging, uses x-rays in a new way to generate images that show not just hard tissues like bone, but also soft tissues. "Compared with computed tomography, the technique may result in higher contrast, higher resolution images than conventional mammography provides," said Zhong. "I am happy to see Teresa receive well-deserved recognition for her hard work on this project."

Mentor Zhong Zhong

Hefei Li, also of Ward Melville High School chose a problem that is much publicized these days: credit card and ID card security. Li worked with Qiang Li (no relation) of the Condensed Matter Physics and Materials Department on research to enhance security of the data storage encoded on the magnetic strip of credit cards. She applied recently developed "magneto-optical imaging" techniques to visualize the magnetic fields used to store data. This work may lead to unique security features such as incorporating signatures into magnetic strips. "I think Hefei has taken her first steps leading to a bright future in the field of scientific research," said Qiang Li.

Mentor Qiang Li

Daniel Silver of Half Hollow Hills High School East in Dix Hills worked on his project with Yannis Semertzidis of Physics in the summers of 2006 and 2007. The subject was the deuteron nucleus electric dipole moment in a storage ring with an unprecedented sensitivity for CP-violation. CP-violation explains why matter seems to dominate over anti-matter in our universe, a fundamental question related to existence. "Daniel wrote a computer program that simulated the deuteron spin vector rotations as the particle traveled in a storage ring," said Semertzidis. "His work included the investigation of a certain type of systematic error associated with the fact that the order of spin rotations defines the final spin direction, due to the presence of a certain type of background magnetic fields. His perseverance and hard work got him through this very challenging project."

Mentor Yannis Semertzidis

Society for Science & the Public (formerly Science Service), a nonprofit organization dedicated to public engagement in scientific research and education, owns and has administered this contest since its inception in 1942. In 1998, Intel added sponsorship of the Science Talent Search to the Intel Education Initiative to improve math and science education in the United States. — Jane Koropsak

In Appreciation: BNL Mentors

BNL staff who mentored students for the recent Office of Educational Programs' High School Research Program represented the following departments and divisions: Biology; Chemistry; Community, Education, Government & Public Affairs; Condensed Matter Physics & Materials Science; Energy Sciences & Technology; Environmental Sciences; Environmental & Waste Management Services; Instrumentation; Medical; National Synchrotron Light Source; Nonproliferation & National Security, and Physics. Acknowledged here with many thanks are the mentors, who include: Scott Bronson, Thomas Butcher, Avraham Dilmanian, Jeremy Feinberg, Huan Feng, Andrew Gifford, Syed Khalid, Qiang Li, Zheng Li, Kathleen McIntyre, John Miller, Lisa Miller, William Morse, Benjamin Ocko, Allen Orville, Carol Scarlett, Yannis Semertzidis, Helio Takai, Cheo Tang, Peter Thanos, Val Titus, Paul Vaska, and Lin Yang.

Parents, Grandparents: Summer Camp Expo

Long Island summer camp directors and staff will be in Berkner Hall lobby on Thursday, March 13, 11 a.m.-1:30 p.m. with information on programs, registration, and Counselor-in-Training opportunities for teens. If you have questions, contact Susan Foster, Ext. 2888, foster@bnl.gov; or Liz Gilbert, Ext. 2315, gilbert@bnl.gov. A list of some of the summer camps that will be in attendance at the EXPO follows:

Apple Day Camp, Riverhead; Benner's Farm Summer Camp, Setauket; BNL On-Site Summer Program; Brookhaven Country Day Camp, Yaphank; Brookhaven YMCA, Holtsville; Camp Paquatuck, Center Moriches; Girls Scouts of Suffolk County, Bayport; Ivy League Day Camp, Smithtown; LuHi Summer Programs, Brookville; Lyrical Children's School, Calverton; L.I. Voyagers' Day Camp, W. Babylon; Roads to Learning, Port Jefferson Station; St. Joseph's Summer Programs, Patchogue; Stony Brook Summer Camp, SUNY; Summer Fun Days, Yaphank; Tutor Time, Coram.

Elder Law Talk: Paying for Long-Term Care, 3/11

On Tuesday, March 11, noon-1 p.m., in Berkner Hall, Room B, a talk on "Paying for Long-Term Care: Understanding Your Options," will be given by Cynthia Russell a program coordinator of Long-Term Care Insurance Education & Outreach, Cornell University, Cooperative Extension of Suffolk County. Topics to be addressed will include financial planning for long-term care, with an emphasis on appropriate insurance, including policies available through the New York State Partnership for Long-Term Care; and the factors to consider when purchasing long-term care insurance, such as policy options and benefits. Organized by Michael Thorn, BNL's Health Promotion Program Manager, the talk will provide attendees with unbiased information solely intended to educate consumers about their choices.

If you would like to attend this free talk, contact Thorn, mthorn@bnl.gov or Ext. 8612. Most speakers who participate in the Health Promotion talks that Thorn arranges donate their time, and if not enough interest is shown ahead, the talk is cancelled. To learn more about future Health Promotion Program events, go to www.bnl.gov/HR/OCCMED/HPP.asp .

2007 BNL Engineering Awards

(cont'd)

magnet, built without benefit of a prototype, operates reliably in the challenging AGS environment, due in no small measure to Plate's careful and competent work.

Paul Kovach, a senior project engineer in the Superconducting Magnet Division, is also honored for his contributions to the AGS cold Snake magnet project. Kovach headed the mechanical design engineering effort for this magnet. In this capacity, he incorporated all the magnet requirements into the 3-D mechanical model and provided a cross-check of the stresses and heat loads through finite element analyses and calculations. The mechanical design is accomplished in a limited space. Parts such as current leads and magnet supports had to be assembled through small access ports in the cryostat. Despite difficulties, all the subsystems of this complex 3-D puzzle fit together and work properly. Kovach's skill with the design software, his familiarity with engineering principles, and his knowledge of shop practices all combined to help ensure this magnet's success.

William Leonhardt, a senior project engineer in the Condensed Matter Physics & Materials Science Department, is honored for his outstanding and innovative achievements in engineering instrumentation. His first work at the Lab was in designing, building, maintaining, and operating instruments to test fluid flow in nuclear reactors. He then worked at the AGS where he supervised and directed designers, technicians and other engineers in building equipment for fixed target experiments. Later, he served as project engineer for the design, construction and installation of the STAR Silicon Vertex Tracker at RHIC. He is currently the Instrument Engineer for a unique instrument being built at the Spallation Neutron Source at Oak Ridge National Laboratory. Leonhardt has earned a reputation for producing experimental equipment that balances affordability, reliability, and sensitivity, and which meets all safety requirements.

James Wright, a project engineer I in the Plant Engineering (PE) Division, is an electrical engineer, the technical lead in PE's Engineering & Design Group. Jim has made innovative contributions to the electrical engineering, design, and project management of many complex building, utility, and experimental facility projects at BNL. In particular, he is recognized for his efforts involving the Center for Functional Nanomaterials, the Blue Gene L Supercomputer, RHIC detector and experimental facilities, and BNL's digital telephone system upgrade. Wright has consistently met customer needs by applying creative engineering solutions and new technologies together with safe and economical design principles. He also serves on the Lab's Electrical Safety Committee, C-AD Accelerator Systems Safety Review Committee, the Communications Planning Committee, and the BNL Traffic Safety Committee.

Calendar

— WEEK OF 3/10 —

Tuesday, 3/11

***Talk on Paying for Long-Term Care**
Noon-1 p.m. Berkner Hall, Room B. All are welcome. Call Ext. 8612 to show interest. See announcement below, left.

Wednesday, 3/12

BSA Distinguished Lecture
4 p.m. Berkner Hall. Thomas Lovejoy, Heinz Center for Science, Economics, & the Environment, will speak on "Climate Change: Prospects for Nature." All are welcome to this free talk, open to the public. Visitors of 16 or over must carry photo ID.

Thursday, 3/13

***Summer Camp Expo**
11:30 a.m.–1:30 p.m. Berkner Hall lobby. Display of information from many Long Island summer camps for children.

— WEEK OF 3/17 —

Monday, 3/17

***Defensive Driving, Part I of II**
6-9:15 p.m., B'haven Center. $38. Part II on 3/19. Preregistration required. See p. 2.

Wednesday, 3/19

BSA Noon Recital
Noon. Berkner Hall. Paul Galbraith will interpret works by Bach, Haydn, Brahms and Debussy, and his own arrangements of folk tunes, on his eight-string Brahms guitar. All are welcome to this free concert, open to the public. Visitors of 16 or over must carry photo ID.

434th Brookhaven Lecture
4 p.m. Berkner Hall. Edward O'Brien, Physics Department, will speak on "What We Have Learned so Far at RHIC: What we set out to do, what we discovered and why it is important." All are welcome to this free talk, open to the public. Visitors to the Lab of 16 or over must carry photo ID.

Saturday, 3/22

***BERA-IAA Holi, Festival of Colors**
2 p.m. Berkner Hall. The BERA Indo American Association celebrates Holi with song, dance, music. Tickets of $5/adult, $3/child, include a snack of samosas or pizza at the Recreation Hall. See p. 4.

— WEEK OF 3/24 —

Friday, 3/28

***Kane Daily Rock, Blues Band**
7:30 p.m. B'haven Center. Sponsored by the BNL Music Club. Tickets: $10 in advance; $12 at the door. See p. 4.

Arrivals & Departures

— Arrivals —

Chih-Hsuan Chang .....Chemistry
Theresa Cutrone .....ITD
Denean Daniels..... ES&T
Sean Hightower .....Chemistry
Luen-Luen Li..... Biol.
Michiko Minty .....CAD
Kunal Shroff ..... Physics
Wade Sisk .....Chemistry

— Departures —

Pabam Agrawala ..... Medical
Narasimharao Krishnamurthy.. Biol.
Alexander Milov ..... Physics

In Memoriam

Warren Johnson, who, as a technician C, joined the Reactor Division on October 30, 1950, and retired from the Department of Applied Science as a senior technical supervisor on April 30, 1986, died on August 9, 2007. He was 83.

Nicolas Sowiak, who joined the Grounds Section as a laborer on October 29, 1951, and retired from the Plant Engineering Division as a rigger on September 23, 1980, died at age 89 on September 4, 2007.

BERA-IAA to Hold 'Holi,' Festival of Colors, 3/22

The BERA Indo American Association (BERA-IAA) will hold its annual Holi Function — the Festival of Colors — on Saturday, March 22, starting at 2 p.m. at Berkner Hall. The program will consist of songs, dances, and instrumental music, all related to the culture of the Indian subcontinent. All are invited to attend. Reservations must be made through the links from the following web site: www.bnl.gov/bera/activities/iaa/Holi2008/. Ticket prices for advanced reservations are $5 for adults (12 years and older) and $2 for children (3 to 12 years, under 3 free). The ticket includes the cultural program at Berkner Hall and a snack of samosas and pizzas at the Recreation Hall in the apartment area.

Kane Daily Band Rock, Blues Concert, 3/28

The Kane Daily Band will perform on Friday, March 28, at 7:30 p.m. at the Brookhaven Center. Sponsored by the BNL Music Club, the concert is open to the public. All visitors to the Lab age 16 and over must bring a photo I.D.

Best known for classic rock, rockabilly, and blues performances in the New York area, the Kane Daily Band features Daily on lead guitar and vocals, George Ellert, an experienced, enthusiastic bass player, and the talented Al Henneborn on percussion. Tickets for the show are $10 in advance and $12 the day of the show. Tickets may be purchased through www.ticketweb.com or at the BERA Store, or the door. Seating is limited, and advanced ticket purchase is recommended. For more information, call 631 344-5139.

BERA Bus Trips

- Philadelphia Flower Show, Sunday, March 9. The trip is sold out, but, participants, remember to change your clocks forward the night before. The trip starts at 6 a.m. from BNL.
- New York City "do as you please" trip, Saturday, April 12. The coach will leave BNL at 9 a.m., drop passengers at Bryant Park, and leave Bryant Park at 5 p.m. $10/person (adult or child).
- Atlantic City, Saturday, April 5. Depart BNL 8 a.m. Depart NJ at 7 p.m. $25/person. The casino & bonus package will be announced.
- Fishing with Captain Bob in Mattituck, Saturday, May 17. Meet at the dock for a day of fishing for doormat fluke and other fish. $60 per person includes bait & tip.

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/.

To apply for a position, go to www.bnl.gov. Select "Careers at Brookhaven" and then "Employment Opportunities."

LABORATORY RECRUITMENT - Opportunities for Laboratory Employees

SR. ADMINISTRATIVE SECRETARY (A-3) – (Term/Part-Time 50%) Requires a HS diploma with at least six years of relevant experience that includes two years of Laboratory experience in a similar role. Will work independently processing domestic and foreign travel. Should have a thorough knowledge of PS foreign travel system and laboratory practices, policies and procedures. A high level of competence in performing complex administrative secretarial as well as proficiency in MSWord, Outlook, and Lab-wide administrative systems (Guest system, PeopleSoft HR, PeopleSoft Financials, Web Requisitions) required. Ability to use TEX word Editor highly desirable. Will maintain group publication files for 20+ scientists. May fill in for other group secretaries on an as needed basis. Physics OMEGA and Applications Software Groups/Physics Department. Apply to Job ID # 14390.

MATERIAL HANDLER (L-3) - Performs a variety of laboring and manual tasks in stores operations such as moving, loading, unloading, sorting and storing of materials. May operate motorized equipment pertinent to stores operations. Keeps stores facilities in neat condition. Procurement & Property Management Division. Apply to Job ID # 14386.

OPEN RECRUITMENT – Opportunities for Lab employees and outside candidates.

POSTDOCTORAL RESEARCH ASSOCIATE – Requires a Ph.D. in nuclear chemistry, separations chemistry, radiochemistry, or nuclear physics. Experience is highly desirable in a variety of experimental techniques, such as nuclear detection methods (especially at low activity levels), preparation and handling of radioactive samples, chemical separation methods, and characterization of metal-organic complexes in organic and aqueous media. Expertise in nuclear chemistry or nuclear physics, with emphasis on liquid scintillators and low-background counting; or chemistry, with emphasis on organo-metallic chemistry, separations chemistry, and analytical chemistry methods such as UV spectroscopy, IR spectroscopy, GC-MS, quantitative analysis of chemical species is also desired. When applying for this position, make sure to attach curriculum vitae and a statement describing scientific goals to the Candidate Gateway application, and also arrange for three reference letters to be sent (under separate cover to rhahn@bnl.gov). Under the direction of R. Hahn, Chemistry Department. Apply to Job ID # 14388.

POSTDOCTORAL RESEARCH ASSOCIATE –Requires a Ph.D. in physics or equivalent. Candidates should ideally have a background in RF technology and be familiar with usual test equipment, such as network analyzers and oscilloscopes. Knowledge of photo-cathode preparation or super-conducting technology would be a plus. In the "Polarized SRF Gun" experiment, a gallium arsenide photo-cathode will be placed in a super-conducting RF electron gun. The goal of the experiment is the measurement of the quantum efficiency lifetime of the cathode and the quality factor of the gun cavity and to prove that such gun can be a superior source of high brightness polarized electron beams. The candidate will be involved with the preparation and operation of the experimental setup. Under the direction of J. Kewisch, Collider-Accelerator Department. Apply to Job ID # 14389.

TECHNOLOGY ARCHITECT (I-9) -Requires a BS in engineering, computer science, or physics, or equivalent experience and a minimum of 10 years' experience in control systems applications including: real time systems architecture and real time issues including shared memory, client/server applications, VxWorks, RTEMS or an equivalent real-time OS. In addition the successful candidate will have experience in a lead developer role programming in a combination of C, C++, and Java as well as developing code under LINUX. Responsibilities include: working on a team to design, develop, and deploy accelerator subsystem applications including all aspects of the subsystem: gathering requirements, developing EPICS application, develop any new drivers and tools as needed and provide component test, installation, integration, automation and operational support. Experience in the use of EPICS and accelerator control systems, designing and implementing fast feedback systems at the kHz rate, relational database applications including SQL programming experience and the use of Ajax is highly desirable. Knowledge of modeling codes used in accelerator physics such as Matlab Middle Layer Toolkit, XAL, MAD, or Elegant is a plus. The successful candidate will have superior analytical and problem-solving skills with considerable experience functioning in a lead developer role. Strong communication skills and the ability to work effectively with a diverse group of scientists and engineers are critical. Reports to the Diagnostics & Controls Group Leader, National Synchrotron Light Source II Project. ERAP eligible $1K. Apply to Job ID # 14392.

TECHNOLOGY ARCHITECT (I-9) - Requires a BS in physics, computer science or equivalent experience and a minimum of ten years' experience in control system applications and programming in some combination of C, C++, and Java, as they are applied to accelerators for accelerator physics, modeling techniques, design and development of tables and tools for relational databases. In addition, this position requires at least five years' experience with model based control of accelerators, Matlab or equivalent mathematical programming package, experience in the use of relational database applications to manage accelerator lattice information, including SQL programming experience, as well as the design and implementation of online model control of accelerators. Knowledge of modeling codes used in accelerator physics such as Matlab Middle Layer Toolkit, XAL, or Elegant is required. Experience in accelerator control systems, vxWorks or RTEMS, EPICS experience, feedback systems at the kHz rate is preferred but not essential. The successful candidate will also have superior analytical and problem-solving skills and considerable experience functioning in a lead developer role. Strong communication skills and the ability to work effectively with a diverse group of scientists and engineers are critical. Responsibilities include: working on a team to provide the design and development efforts of high level applications and relational database tools for NSLS-II throughout all phases of the project; the development of an API to support multiple modeling codes, and support the commissioning and operational use of physics applications. Reports to the Diagnostics & Controls Group Leader, National Synchrotron Light Source II Project. ERAP eligible $1K. Apply to Job ID # 14393.

TECHNOLOGY ARCHITECT (I-9) - Requires a BS in engineering, computer science, or physics, or equivalent experience and a minimum of 10 years' experience in control systems applications including: FPGA programming, real time systems architecture and real time issues including shared memory, client/server applications, VxWorks, RTEMS or an equivalent real-time OS. In addition the successful candidate will have experience in a lead developer role programming in a combination of C, C++, and Java as well as developing code under LINUX. Responsibilities include: fielding an architecture that supports hard, real time, low latency, hardware for global feedback, equipment protection, and global timing and event synchronization. Experience in the use of EPICS and accelerator control systems, designing and implementing fast feedback systems at the kHz rate, relational database applications including SQL programming experience and the use of Ajax is highly desirable. Knowledge of modeling codes used in accelerator physics such as Matlab Middle Layer Toolkit, XAL, or Elegant is required. Experience in accelerator control systems, vxWorks or RTEMS, EPICS experience, feedback systems at the kHz rate is preferred but not essential. The successful candidate will also have superior analytical and problem-solving skills and considerable experience functioning in a lead developer role. Strong communication skills and the ability to work effectively with a diverse group of scientists and engineers are critical. Responsibilities include: working on a team to provide the design and development efforts of high level applications and relational database tools for NSLS-II throughout all phases of the project; the development of an API to support multiple modeling codes, and support the commissioning and operational use of physics applications. Reports to the Diagnostics & Controls Group Leader, National Synchrotron Light Source II Project. ERAP eligible $1K. Apply to Job ID # 14394.

SENIOR TECHNOLOGY ENGINEER (I-8) - Requires a BS in engineering, computer science, or physics, or equivalent experience and a minimum of eight years of experience in control system applications of which five years should be in programming in some combination of C, C++, and Java and in developing code under LINUX. The successful candidate will have strong analytical and problem-solving skills. Experience in the use of EPICS and accelerator control systems, designing and implementing fast feedback systems at the kHz rate, use of relational database applications including SQL and Ajax; as well as knowledge of modeling codes used in accelerator physics such as Matlab Middle Layer Toolkit, XAL, MAD, or Elegant is a plus. Strong communication skills and the ability to work effectively with a diverse group of scientists and engineers are critical. Responsibilities include: working on a team to design, develop, and deploy accelerator subsystem applications. Job responsibilities include all aspects of the subsystem: gathering requirements, developing EPICS application, any new drivers and tools as needed, component test, installation, integration, automation and operational support. Reports to the Diagnostics & Controls Group Leader, National Synchrotron Light Source II Project. ERAP eligible $1K. Apply to Job ID # 14395.

SENIOR TECHNOLOGY ENGINEER (I-8) - Requires a bachelor's degree, or equivalent experience in computer science or a related field, and at least eight years' experience in the design, coding, testing, and troubleshooting of information systems. Experience in configuring, administering, patching, securing and performance tuning Linux platforms and clustered computing (including schedulers, resource managers and distributed file systems); ability to independently generate creative solutions to atypical problems using open source technologies in a fast-paced and dynamic environment; debugging hardware, managing RAID storage systems, knowledge of security (iptables, TCP wrappers), authentication and the following services: NFS, DNS, DHCP, NIS, LDAP, Samba, Printing, FTP and Apache, is required; ability to write shell scripts is required. Preferred requirements include the ability to use PERL or Python; experience with Mac OS and experience with the Open Science Grid services of similar grid technologies. Responsibilities include system administration, maintaining and expanding Linux clusters, and engineering level system troubleshooting and debugging. Will act as Primary Engineer designing, implementing and supporting UNIX services at the NSLS-II. Reporting directly to the IT Manager, will play a leading role in the formulation of needs, the design and the implementation of UNIX services in support of a community of 2500 users. Currently the project provides data storage and data processing capabilities for physics simulations and accelerator design. It is expected that the candidate will use his/her creativity and expertise to further expand the scope of UNIX services and also lead the efforts to integrate the facility with the Open Science Grid operations. National Synchrotron Light Source II Project. ERAP Eligible $1K. Apply to Job ID # 14391.

SENIOR TECHNICIAN (TW-3) – Requires an AAS degree in mechanical technology or equivalent relevant experience in precision prototype machining. Experience with AutoCAD is desirable but nor required. The successful candidate will be trained in basis crystallography, crystal cutting, polishing and mounting. Excellent written, verbal and interpersonal skills are required. Responsibilities include preparation of specifications, procurements, installation, and operation of crystal fabrication equipment to establish a state-of-the-art crystal fabrication lab. Will assist scientists and engineers to develop the 0.1 meV energy resolution optics. Will report to the NSLS-II Inelastic X-ray Scattering Group Leader. National Synchrotron Light Source II Project. Apply to Job ID # 14396.

Motor Vehicles & Supplies

05 NISSAN NISMO FRONTIER - 4L,6cyl,a/t,c/c,4wd,p/s,p/w,p/l, p/mnroof, trans.100K warr, 38K mi. $22,500/neg. 766-7488.

05 CHEV BLAZER - ZR2, 4.3L, 4x4, excel. cond., loaded, 6 disk cd, cowl induction hood, never off road. 32K mi. $15,500. 820-2122.

04 CONTINENTAL CARGO ENCLOSED TRAILER - 5X10, 15" wheels, spr tire, Rear Barn Doors, Side Dr, $1,595/neg.928-1254.

03 CHEVY BLK. TRAILBLAZER - M/roof, excel. cond. 59K mi. $11,000/neg. 204-0984.

00 FOREST RIVER CHEROKEE 275B - 30' 5TH wheel trailer, mid-profile, bunks, big slide, all opts,see rvsearch.com in NY. $9,995. Ext. 7160 or 929-8294.

99 HYUNDAI ACCENT - 5spd manual transm, runs well, cd, radio, hatchback. 109K mi. $1,200/neg. Richard, Ext. 7975.

94 OLDSMOBILE CUTLESS CIERA - 4Dr, a/t, a/c, p/w, p/l, p/s, p/b, c/c, AM/FM Cass. new batt. excel. cond. must sell. 84K mi. $3,200/neg. 839-6327.

93 SATURN SEDAN - 4 dr., orig. owner, gd. running cond., well maint. 155K mi. $500. Ron, 475-8162.

92 PONTIAC GRAND PRIX - 2dr, v6, all pwr, a/t, am/fm cass., runs well, minor blemishes, KBB rating 4.3 out of 5. 97K mi. $1,500. Kim, Ext. 7465 or 399-3098.

Furnishings & Appliances

BED - lightwht, metal trundle, $35/obo; Hoover upright, $15; set of 3 wall unit w/ liquor cabinet, more. 315-558-1497.

BOOKCASES - lt wood w/gray tops, $50/ea.; computer chr, $50; Mary, Ext. 3670.

CORNER TV HUTCH - maple, fits 32' tv, electr. shelf & 2 drawers, ask $900; couch & loveseat, ask $400. Pics avail. Ext. 4144.

FURNITURE - sofa & love seat, $200; sectional w/recliner/sleeper, $200, more, neg. Milind, Ext. 3327 or 828-6677.

KITCHEN TABLE - Oak, oval table, 4 chairs. Excel. Cond. Pic avail. Ext. 2826.

PATIO SET - many pieces, $900. Ext. 4144.

ELECTRIC STOVE - Hotpoint, 30" w, gd. cond., $90. Leo, Ext. 3103 or 728-0992.

TABLE - dining rm, oval, 58"x43", wood, 2 leaves, 5 chairs, sealed top, $100; loveseat & chair, $250. Ext. 7647.

Audio, Video & Computers

4 GB MICRO SD - w/adapter. $20. Ext. 5322.

AUDIO TAPES - 72 Cassettes, 80 8-Track. Country, Christmas. Make offer. 772-4751.

EXTRNL HARD DRIVE - Western Digital 500GB, unopnd in box, $75. Ext. 7294.

KOSS 5.1 SPEAKER W/100W WOOFER - w/100 W Super Base Woofer, $30. Two add'l speaker stands, $10. Ext. 3747.

LAPTOP COMPUTER - Apple Macbook - black 2.2GHz, 4GB RAM, 160GB HD, 13.3", 1 mo. old - $1400. 902-8188.

MEMORY - for d'top computer. Two 512 Mb DDR2, 667 MHz, RAM $20/ea. Ext. 5080.

RECORDPLAYER, RADIO - c1960, Magnavox, $50; RCA r/player & radio, c1950, $50; HP deskjet 840C printer, $25. 727-0911.

SONY 53" COLOR REAR PROJ. TV - Model KP-53V73, vg cond. $325. 286-3833.

TAPE DECK - dual cassette Onkio Ri, $25. Chris, Ext. 2094 or 831-3469.

Sports, Hobbies & Pets

CANOE - 12' Oldtown Stillwater, excel, $400; Summit tree stands, 2, $1/ea; ground mnt claybird thrower, $50. 727-0911.

DOG CRATE - extra lg., wire, perfect cond., foldable, removable tray, $50. Ext. 7132.

GOLF CLUBS - two sets w/ bags, $25 ea.; skis w/bindings, poles, boots. Several sets. Chris, Ext. 2094 or 831-3469.

Tools, House & Garden

CAR RAMPS - $25 - timing light, $15 - engine analyzer, $25. chris, Ext. 2094.

GENERATOR - pwr. Pro, 2500 watts, brand new less then 1 hr. usage, $200. Michael, Ext. 7861.

Happenings

CHINESE AUCTION - Fundrasier - Patchogue Manor, April 12, Good food and lots of fun! $40pp. Maria, Ext. 4961.

DINNER/SHOW OUTING - DEPOSITS DUE for June 14, Sight n Sound Theatre, Strasburg,PA.Dinner@Good N Plenty. Call 4 info. Kim, Ext. 7465 or 631-399-3098.

INTERNATIONAL ORCHID SHOW - Suffolk Co. Orchid Soc. trip, Longwood Gardens Show, Sat. 3/29, $42. Reserve w/Ron Blasius, 246-5998, Rtblasius@aol.com.

JERSEY BOYS - August 6, 2008 8:00 PM Orch. G 9 and 11. Aug. Wilson Theatre 245 W. 52nd St.. $240/pr. Michael, Ext. 7941.

SPAGHETTI DINNER - dance competition fundraiser, Sat. Mar. 8th, 5-7 pm, Elks Lodge Riverhead, Tickets $10/kids under 10 yrs., $8. Darlene, Ext. 5191.

Wanted

AQUARIUM - 20 gal., that someone would donate for my son's science project. Carl, Ext. 3084 or 291-8304.

FIREARMS - all types, fair dollars pd., any cond. Joe, Ext. 3783 or 487-1479.

GUITARS - old, unwanted or in need of repair. chris, Ext. 2094 or 831-3469.

HELP WANTED-LIFE GUARDS & CAMP - Life Grd-cert./min. 18 yr. old, lessons, camp, & Teachers for summer camp prog. Backgrnd check req. Christine, Ext. 5090 or 457-3231.

JAZZ MUSICIANS/STUDENTS - for Monday evening jams. Ext. 7657.

KNIFE COLLECTOR - will buy your knives, fair price paid, Joseph, 924-5249.

WASHER - free or low cost, in gd. working cond; will pick up. Ext. 4340.

WHEELCHAIR - Standard, Wide-Width. 631-821-1271.

Lost & Found

FOUND - FLASH DRIVE- WHITE - found by Bldg 911. Call to identify. Ext. 5090.

WALLET - brown, with credit, French transportation, & health cards; possibly lost at Berkner, Catherine Silvestre Tello, Ext. 7518 or 2346 or csilvest@in2p3.fr

In Appreciation

To my friends at NSLS, Thanks so much for your condolences for the loss of my Father. It was very touching to see a few of you at the service as well as the beautiful red carnation floral arrangement. Sincere thanks — Michael Santana

On-Site Services

ENTERPRISE RENT-A-CAR - on-site office at Bldg. 355. Wkend specials, daily rates. Ext. 4888 or www.enterprise.com.

ON-SITE SERVICE STATION - Is your NYS inspection sticker out of date? We can do NYS inspections, oil changes, new batteries, etc., while you are at work. Ext. 4034.

CAFETERIA GOURMET SPECIALS - on Mondays & Tuesdays: Boar's Head coldcuts, chips, 16 oz soda, $6:50 +tax. Many other choices. Try b/fast: wkdays, $2.99 up; Dinner: B/haven Center, full menu 5-8 p.m.; $10.99 + tax specials 5-6:30 p.m.

For a full list of this week's ads, ask at bulletin@bnl.gov or Ext. 2346.

the Bulletin

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Liz Seubert, editor
Roger Stoutenburgh, photographer

On the Web, the Bulletin is located at www.bnl.gov/bnlweb/pubaf/bulletin.html. A calendar listing scientific and technical seminars and lectures is found at www.bnl.gov/bnlweb/pubaf/calendar.html.

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