Bulletin





BNL's Paul Sorensen Receives Prize From the American Physical Society

Paul Sorensen, a Maurice & Gertrude Goldhaber Distinguished Fellow in the Physics Department, will receive the 2009 George E. Valley Jr. Prize from the American Physical Society (APS). The \$20,000 prize was established in 2000 under the terms of a bequest from Massachusetts Institute of Technology physicist George E. Valley, Jr. It is awarded biennially to recognize one individual in the early stages of his or her career for an outstanding scientific contribution to physics that is deemed to have significant potential for a dramatic impact in the field. Sorensen will receive the prize at the April 2009 APS meeting in Denver, Colorado.

Sorensen was recognized for his role in discovering that subatomic particles called quarks are important throughout the expansion of the matter created in heavy ion collisions. The collisions are generated by physicists as they attempt to recreate the matter that existed in the universe one millionth of a second after the Big Bang. They do so by smashing together beams of heavy ions moving at nearly the speed of light in Brookhaven's world-class accelerator, the Relativistic Heavy Ion Collider (RHIC). The matter that they create behaves like a "perfect" liquid - having almost no viscosity or frictional resistance to flow.

See Sorensen on pg. 2



Chemistry's Doctoral Student Patterson Wins Stony Brook University Award

student mentored by Michael to modify the activity of molyb-White, Chemistry Department, has been named a recipient of Stony Brook University's (SBU) Presidential Award to Distinguished Doctoral Students. The award for excellence in research is given to five students each year. She will receive the award, which consists of a citation and \$500, on May 20, two days before her graduation ceremony.

Patterson was cited "for improving our understanding of chemical reactions on nanostructured catalysts for energy applications."

Patterson and her BNL colleagues created model nanocatalysts of molybdenum sulfide, the first step in developing the next generation of materials to be used in hydrosulfurization (HDS), a process that removes sulfur, a pollutant, from natural gas and petroleum products.

"In our laboratory, we are

Melissa Patterson, a doctoral using the tools of nanoscience denum sulfide nanoparticles by tuning their size, structure and chemical composition," Patterson said. "We have identified one particular structure that is most reactive as a model HDS catalyst, since it readily absorbs sulfur and releases carbon mon-

After earning a B.S. in chemistry from SUNY Binghamton in May 2003, Patterson enrolled in SBU's doctoral program in chemistry in 2004. Since that time, she has been a research assistant for White, who is also on the faculty of SBU. All of her doctoral research has been done at BNL.

"When I visited Brookhaven Lab, I knew it would be a good opportunity to work here," Patterson said. "I've been able to collaborate with many scientists in Chemistry as well as other

See Patterson on pg. 2

New Patent for BNL, BioSET, Inc., Research Synthetic Peptide Enhances Bone Growth

BioSET Inc. uses the peptide in bone graft system and initiates clinical trials

Brookhaven Science Associates, the company that operates and manages BNL, and Biosurface Engineering Technologies, Inc. (BioSET), have been issued a U.S. patent on a synthetic peptide, called B2A.

"About 250,000 Americans ∯ undergo lumbar spine fusion surgeries each year to treat lower back pain," said Tom Roueche, BioSET President and CEO. "We have developed a novel combination medical device, called AMPLEX, that incorporates B2A osteo-inductive growth factor with an ultra-high grade ceramic bone substitute for use in this type of surgery. Preclinical studies have found that it is a safe and highly effective."

B2A enhances the effects of a tissue growth factor known as bone morphogenetic protein 2, or BMP-2. BMPs are a family of proteins in the human body responsible for the proliferation, repair and differentiation of cells in many tissues, including bone.

Louis Peña of the Medical Department developed B2A with BioSET, and he performed the initial studies at BNL. The initial research to develop B2A was funded by DOE's Office of Science, the National Institutes of Health, and BioSET.

"I became interested in bone growth factors after NASA built a radiation research facility at Brookhaven," Peña said. "Weightlessness in space causes bone loss, and cosmic radiation can cause damage to cells, so I thought I might be able to study the interaction of the two. In setting up for that, I developed B2A and couldn't ignore its biomedical applications, so I focused on it instead. The ability to shift direction and follow promising leads is important in science, and I've had the freedom to do that at Brookhaven. I am grati-



(From left) Paul Zamora of BioSet, with Xinhua Lin, formerly of BNL, now of BioSet, and BNL's Louis Peña prepare a synthetic peptide for use in bone-healing experiments that involve the bone growth factor BMP-2.

fied that BioSET has been able to take the B2A technology to a new level of clinical testing."

In recent preclinical studies, University of Iowa researchers used a rabbit model to evaluate AMPLEX spine fusion. They found that it enhanced the fusion, compared to a conventional surgical method that uses the rabbit's own pelvic bone to form the bone graft. Also, a team of researchers assembled by BioSET reported at a 2008 Orthopedic Research Society meeting that AMPLEX enhanced spine fusion in sheep, a large animal model with a spine that more closely resembles the human spine.

BioSET has received approval from the U.S. Food and Drug Administration to initiate a pilot study to evaluate the safety and preliminary efficacy of AMPLEX in approximately 22 patients. Also, the company received approval from Health Canada for a similar study with 24 patients in that country. Each controlled study will compare AMPLEX to an autograft from the patient's own hip bone in lumbar fusion procedures to treat degenerative

The first patient surgery in the Canadian study was performed

by a neurosurgeon at Foothills Medical Centre in Calgary, Canada. The surgeon reported that AMPLEX handled as well as other ceramic graft alternatives and the patient was recovering well after surgery. Data from all patients in the clinical studies will be evaluated at six-month

The patent on B2A (Patent # US 7,482,427 B2), titled "Positive Modulator of Bone Morphogenic Protein-2," was issued on January 27, 2009.

BioSET is a private, clinical stage company developing proprietary therapeutic peptides as medical devices to improve bone and soft tissue repair. BioSET products incorporate chemically synthetic growth factor mimetics with procedure specific biomaterials to address multiple large and clinically relevant applications. The company's lead program combines BNL/BioSET's novel B2A osteo-promotive peptide with a resorbable bone scaffold to offer substantial safety and cost benefits to currently available bone grafting alternatives. For more information, contact Tom Roueche, President of BioSET at: (301) 795-6010.

— Diane Greenberg

Earth Day and 449th Brookhaven Lecture, 4/22

Rogers To Talk on Global Change And the Terrestrial Biosphere

In honor of Earth Day, Alistair Rogers of the Environmental Sciences Department will give a talk titled "Global Change and the Terrestrial Biosphere," on Wednesday, April 22, at 4 p.m. in Berkner Hall. The talk, which is also the 449th Brookhaven Lecture, is free and open to the public. Visitors to the Lab age 16 and over must carry a photo ID.

Since the Industrial Revolution, the increased use of fossil fuels has resulted in a dramatic and unprecedented rise in the concentration of atmospheric carbon dioxide. Most scientists agree that increasing levels of carbon dioxide and other greenhouse gases have raised Earth's temperature, and without a reduction in emissions, will continue to do so.

Terrestrial ecosystems sustain life on Earth through the production of food, fuel, fiber,



clean air, and naturally purified water. But how will agriculture and ecosystems be affected by global change? Rogers will describe the impact of projected climate change on the terrestrial biosphere and explain why plants are not just passive respondents to global change, but play an important role in determining the rate of change.

Alistair Rogers earned a B.Sc. in biochemistry and botany from University College of North Wales, Bangor, in 1994, and a Ph.D. in biology from the University of Essex, Colchester, England, in 1998, when he also joined BNL. From 2004 to 2005, he was deputy chair of the Earth Systems Science Division. Since 2005 he has headed the Lab's Carbon Cycle Science & Technology Group. He was named a biologist in 2006. Rogers has been an adjunct faculty member of the University of Illinois at Urbana, Champaign, since 2003, and a member of the editorial advisory board of the journal Global Change Biology since 2007. — Diane Greenberg Note: To join Rogers for dinner at an off-site restaurant after the lecture, contact Linda Satalino, lsatalino@bnl.gov, Ext. 2380.

The Bulletin April 17, 2009

In Memoriam

William Eberspacher, who joined the Central Shops Division as a machinist on September 26, 1955, and retired as an experimental machinist on June 30, 1971, died on August 25, 2008, at 97. He had returned to the Lab as a custodian in the Plant Engineering Division on October 4, 1971, retiring on December 31, 1976.

Paul Roman, who joined the Lab on November 10, 1947, as a glassblower A, and retired as a glassblowing specialist I after more than 43 years of service, on September 30, 1991, died on February 10, 2009. He was 88.

Mabel Evans, who served as a temporary matron in the summers of 1961 and 1962 and joined the Plant Engineering Division as a matron on February 18, 1963, died at age 81 on February 12, 2009. She retired from the Procurement & Property Management as an administrative services assistant on March 31, 1994.

Robert MacGregor, who joined the Chemistry Department as a chemistry associate III on October 16, 1972, and retired as a chemistry associate I on March 31, 2001, died at the age of 65 on February 15, 2009.

Udo Von Wimmersperg, who came to the Lab as an visiting physicist on June 15, 1987, and joined the Department of Nuclear Energy (NE) on March 21, 1988, as a research engineer I, died at 69 on February 20, 2009. He also worked on the Relativistic Heavy Ion Project in the early 90s, and retired from NE on March 31, 2006.

Henry Boomer, who came to the Lab as a temporary janitor on March 22, 1958, became a permanent employee on May 26, 1958, and retired from the Plant Engineering Division as general supervisor of custodial services on October 13, 1989, died on March 1, 2009. He was 78.

Clarification

In the Bulletins of 4/3/09 and 4/10/09, clarification is needed for the names of the Secretary of Energy Awards for Project Management given on March 31 to BNL's Center for Functional Nanomaterials (CFN). BNL's U.S. ATLAS Detector Project and Fermi National Accelerator Laboratory's U.S. Compact Muon Solenoid (U.S. CMS) Detector Project. U.S. ATLAS and U.S. CMS shared the DOE Secretary of Energy's Project Management Award for Achievement. The CFN was awarded the Project Management Excellence in Acquisition Award.

What is my carbon footprint? Does this car get enough miles per gallon? Should I buy solar panels for my house? When is the best time to fill the home-heating oil tank? Is there alternative energy that I should use?

Have you found yourself questioning your energy usage and the financial and environmental costs? Ron Schroeder, Collider-Accelerator Department, has — for more than 30 years. As a result, he created his own alternative-energy systems for both his car and his home.

Schroeder, an electronics technician, is a native of Ohio and the son of a chemist who lived through the Great Depression; he is also one resourceful guy. His first alternative-energy projects stemmed from an amateur radio hobby in which he designed solar and lard fuel systems to power radio equipment on mountaintops where electricity was not available.

Since Schroeder's early successes using lard to power a diesel generator for radio equipment, he has continued to use recycled cooking oils in a number of ways. "A diesel engine can run on almost any combustible fluid that you can inject in it," he explained. "Gasoline and diesel fuel was inexpensive back when I started, but I knew that the local McDonald's was having a problem getting rid of the lard used to cook French fries. I was able to put it to good use for a few things."

Hit the Road, Ron

In early 1981, Schroeder expanded his work on the diesel generator powered by French fry lard and installed a similar, second heatedfuel system in his one-year-old diesel-powered Audi. The modified car still started with ordinary diesel fuel, but during the first few minutes of driving, the heat emitted from the motor was used to melt and thin the recycled lard. Once the lard was heated to a liquid state, Schroeder could power the engine with the lard fuel system.

When restaurants shifted to healthier vegetable oils rather than lard, Schroeder's modified cars continued to run efficiently. "Regardless of what was cooked in the oil I use, most people say that the exhaust smells like burgers and steak. It doesn't smell as much as diesel fuel though," Schroeder said while listing the advantages of his vegetable oil-powered motors. "The alternate fuel systems also emit fewer greenhouse gases because they come from renewable CO_2 neutral sources. There are

In 2005, physicists at RHIC created a state of hot, dense matter out of quarks and gluons, the fundamental building blocks of matter, that has not existed since micoseconds after the birth of the universe. Contrary to theory, which predicted that a gas called "quark-gluon plasma" would be formed, the matter created appeared to behave more like a "perfect" liquid. With his colleagues, Sorensen measured the mass, momentum and direction of subatomic particles from data derived from the STAR detector at RHIC. Sorensen and his collaborators proved that the perfect liquid depended on the interactions of quarks, rather than on more obvious properties, such as mass. Sorensen's on-

going experiments at RHIC will aim for a better understanding of the perfect liquid's properties, which may shed light on the phase structure of nuclear matter, or how it changes from solid to liquid or gas.

After earning a B.S. in physics from the University of Nebraska — Lincoln, in 1996, Sorensen earned an M.S. and Ph.D. in physics, both from the University of California, Los Angeles, in 1999 and 2003, respectively. After two years at Lawrence Berkeley National Laboratory, he joined BNL in 2005 as a Goldhaber Distinguished Fellow. He is the lead author of 16 peerreviewed publications, accruing

more than 800 citations.

— Diane Greenberg



Ron Schroeder points to the main component of his home-heating recycled cooking-oil burner.

Meet Ron Schroeder

Innovative Energy Conservationist

Before Ron Schroeder purifies

and removes water from the

recycled cooking oil is cloudy

yet translucent. The purified,

de-watered recycled cooking

recycled cooking oil, raw,

oil that is ready for use is

transparent.

fewer unburned nitrous oxide and sulfur oxide compounds so it contributes less to pollution and acid rain."

While Schroeder's recycled cooking oil systems have worked well for him, he does not claim that they are the solution to the country's dependence on fossil fuels. "If everyone in New York modified their cars, there would probably

only be about 12 gallons of recycled vegetable oil for each person per year. Also, preparing the fuel is very time consuming." Schroeder must clean all of the recycled vegetable oil before using it, not only to remove leftover food scraps, but to remove water particles suspended in the recycled oil that would dramatically reduce the life

of the engine.

Still, Schroeder has stuck with the system that has worked well for him and said that he would not hesitate to drive his current car, a modified 1985 diesel Mercedes Benz, for a long stretch. "I would have to fill my trunk with jugs of pre-cleaned oil before leaving because there isn't any good way of de-watering the oil on the road. But if I were ever in a bind on the road, I could still run the car off of regular diesel fuel or buy jugs of new, clean cooking oil," he added.

Bringing It All Back Home When Schroeder

modified a car or truck, he added a separate tank, fuel lines and filter to carry cooking oil fuel to the vehicle's engine. Whether he used cooking oil or regular diesel fuel, either produced about the same power in the same engine. Schroeder faced a different challenge when he decided to heat his 10-room, Cape-style house

using cooking oils: he had to build the home-heating equivalent of the car engine — a burner in which the oil would be processed and create the heat for his entire home.

"The burner is especially difficult compared to converting a diesel vehicle," Schroeder said.

The completed piece is nearly the same size as a regular homeheating oil burner and can provide heat using either regular homeheating oil or vegetable oil. The system uses electricity to heat the oil to 300 degrees Fahrenheit (°F), reducing its viscosity. The system is also more efficient than a regular oil burner because it uses compressed air to more fully atomize, or evenly disperse, the oil within the unit. In one year, Schroeder's heating system uses well under 275 gallons of recycled cooking oil because his house is so well insulated and it burns much cleaner than a traditional oil system.

In addition to the cooking oil home-heating system, Schroeder utilizes other sources of alternative energy in his home. He has a geothermal cooling unit rather than a standard air conditioner. This unit uses the Earth's constant underground temperature of about 55°F to keep the house cool during the summer. Schroeder also employs solar PV panels to provide his home with electricity throughout the day. "My solar electricity is tied in to LIPA's grid, so I sell electricity to LIPA when I produce more than I use, and I buy back what I need when the sun's not out. Financially, it usually balances out pretty well," he said.

What's a Long Islander To Do?

If you find yourself hesitating to turn the heat up this winter or filling your gas tank more often than you like,

consider Schroeder's advice: "It's usually better to save (conserve) energy than to find a better source of it." For homeowners, Schroeder recommends focusing on proper insulation and air sealing for the home, not only rushing to install solar panels. "By keeping heat in and drafts out during the winter, it's easier to be more comfortable while using less energy," he said. "For the long term, we DO have to find better sources of energy."

For those who must drive to work, Schroeder believes biodie-sel-blended fuels offer the same advantages as his waste cooking oil system without requiring vehicle modifications. But these fuels are not yet available on Long Island. In the meantime, he recommends checking tire pressure, performing routine maintenance, and not over-accelerating. "The best ways to conserve energy are often very low-tech," he stated.

Schroeder has more advice for those who would like to switch to more alternative energy solutions. "Remember that there is no single alternative energy solution that will automatically save the environment and bolster your savings account," he said. "Before you do anything, consider the types of energy that you use, where it comes from, and where it goes. Re-evaluate whether or not these are the most efficient and cost-effective options available to you."

So the next time you hear the old cliché, "Life is a journey," remember that Ron Schroeder has traveled for more than 30 years on the goop you can find in the grease dumpster behind your local McDonald's.

— Joe Gettler

Patterson from pg. 1

departments, which has enriched my research experience. After I graduate, I plan on looking for a postdoctoral position in research."

Patterson also won an Undergraduate Research Award for Excellence in Research, 2001–2003, from SUNY Binghamton, and she was a W. Burghardt Turner Fellow at SBU, 2006–2008. In addition, she won first place in oral presentation at the Preparing for the Professoriate Conference in Albany, New York, in 2008.

Besides working on her doctorate, Patterson has been involved in university service. She was Senator for the Chemistry Department in the Graduate Student Organization, 2005–2008, serving as a representative for chemistry graduate students. She also is a member of the Alliances for Graduate Education and the Professoriate, a network of universities dedicated to increasing the number of underrepresented minorities obtaining graduate degrees in science, technology, engineering and mathematics.

Patterson has coauthored six scientific papers during her time at BNL and has given four oral presentations and presented four posters at scientific meetings. — Diane Greenberg

Sorensen from pg. 1

"I am one of hundreds of people in the STAR collaboration at RHIC, and this award reflects on the talent and hard work of all of them," Sorensen said. "I particularly would like to thank my thesis advisor, Huan Huang; my mentor at BNL, Zhangbu Xu; STAR Group Leader Tim Hallman at BNL; and STAR spokesperson Nu Xu for their guidance and leadership, as well as my collaborators and all the students and postdocs I've worked with and learned from who helped to make this award possible. It's fun to be part of this team that is pushing the frontiers of physics. As exciting as what we've learned already is, I think the next couple of years will be absolutely explosive."

The Bulletin April 17, 2009



BNL Celebrates Earth Week, 4/19–24

Celebrate Earth Week with BNL! For each of the events you participate in, receive a raffle ticket for a door prize of a new bicycle. See also http://www.bnl.gov/ewms/eday.

BNL Booth at Earth Day Celebration, Riverhead Sunday, 4/19, 10 a.m. to 4 p.m.

The Environmental Protection Division will represent the Lab at a booth including a number of popular interactive displays at the Earth Day Celebration, Indian Point County Park, Riverhead. This free event includes interactive exhibits, nature walks, beach grass planting, trail clean-ups, marine life exhibits, live entertainment, and many activities for kids. This is a fun day for all, so bring your family and friends and show your support for BNL and Earth Day. For more information, call Jason Remien, Ext. 3477.

Environmental Displays, Berkner Hall lobby Mon. to Fri., 4/20 to 24

Check out the beautiful photos of BNL wildlife on display and environmental posters created by children from local elementary schools as part of BNL's annual "Your Environment" art contest. For more information, call Karen Ratel, Ext. 3711.

Environmental Pledge Tree Mon. to Wed., 4/20-22, 11:30 a.m. to 1:30 p.m., Berkner Hall lobby Thurs. /Fri., 4/23-24, 11:30 a.m.

to 1:30 p.m., Bldg. 400

Show your support for improving the environment by placing a pledge leaf on the environmental pledge tree. All donations will be forwarded to the Foundation for Ecological Research in the Northeast (FERN), a non-for-profit organization whose mission is to conserve, protect, and enhance habitats in the Northeast through research, education, and dissemination of information. Great giveaways will be available, including tee-shirts; compact fluorescent light bulbs; canvas bags; stainless steel water bottles; more. For more information, call Jason Remien, Ext. 3477

BNL Office Swap Tues./Wed., 4/21/22, 11:30 a.m. to 1:30 p.m., Berkner Hall lobby

Clean out your office, conference rooms, and supply closets. Bring unwanted supplies that are in good

Environmental Speakers

Monday, 4/21, noon, Berkner Hall: Ondrej Chvala

Lembo will talk on "Sustainability in the Technological Age." Historically, the development of human civilization is closely connected with our ability to utilize energy resources effectively. Continuing rise of global energy consumption presents new challenges for the whole world. Quantitative comparison of contemporary energy sources will be shown, in terms of relative risks, direct and external costs. Nuclear fission presents a particularly attractive option. Issues related to its short and long term viability will be discussed. Based on already established technologies, viable and sustainable solutions exist. The main challenges in near future will be in policies and public awareness.

Tuesday, 4/21, noon, Berkner Hall: Mark Lembo

Lembo will talk on "Alternative energy technologies: residential, commercial, and municipal — how to access your needs and attain your goals as a community."

Wednesday, 4/22, 4 p.m., Berkner Hall: Alistair Rogers

Rogers, a biologist in the Environmental Sciences Department, will talk on "Global Change and the Terrestrial Biosphere." This Earth Day talk also serves as the 449th Brookhaven Lecture. See story on pg. 1.

Thursday, 4/23, noon, Berkner Hall, Room B: Richard Kidd

Kidd, Program Manager for the Federal Energy Management Program (FEMP) will discuss FEMP's direction and its future role, federal funding trends, future financing trends, and Earth Day observations.

Thursday, 4/23, 4 p.m., Berkner Hall: Rosemary Wiesner

Wiesner of Brookhaven Town will promote a "Garbage Free Lunch." Reduce, reuse, recycle. Learn how to pack a healthy, garbage-free lunch.

Friday, 4/24, noon, Berkner Hall: Eric Forsyth

Forsyth, a retired BNL engineer, will talk on "The Challenges Facing Renewable Energy — Retooling America to Eliminate the Use of Fossil Fuel." Forsyth takes the view that replacing the fossil-fuel economy of the US with alternative energy sources will be the largest engineering undertaking ever attempted, with a seismic shift needed in the way energy is generated and used. He will explain that the conversion will take many decades and urge the essential need for a timeline for the introduction of alternatives as fossil-fuel resources dwindle.

shape to Berkner, swap for what you need. Nothing to swap? Come anyway, take anything you want to use at the Lab, free. All supplies not swapped will be recycled. For more information, call Francine Donnelly, Ext. 3381.

L. I. Transportation Management/NuRide Sign-Up, Berkner lobby

Tues., 4/21, 11:30 a.m. to 1:30 p.m.

Find out how you can cut your commuting costs and make a difference in the environment by reducing air emissions. Sign up for this highly flexible rideshare service, and earn rewards. For more information, call Jeff Williams, Ext. 5587.

Environmental Vendor Fair Wed., 4/22, 11:30 a.m. to 1:30 p.m. Berkner Hall lobby

Learn about "green" products, and conservation. Vendors include LI Greenbelt Trail, LIPA, Brookhaven Town, CLIMB, MSC Supply for Simple Green, Long Island Sound Study, Ocean Janitorial, Home Depot, Sun Stream USA, Melalluca, Mid Island

Electric, more. For more information, contact Ruth Comas, Ext. 3545.

Earth Day Art Poster Awards Ceremony

Thurs., 4/23, 4 p.m., Berkner Hall
Awards in BNL's annual "Your Environment" art contest will be presented

Awards in BNL's annual "Your Environment" art contest will be presented to local schoolchildren for creating posters on "Sustainability at Work and Home." For more information, call Karen Ratel on Ext. 3711.

Hybrid Vehicle Display — BNLers, Bring Your Hybrid Fri., 4/24, 10 a.m. to 2 p.m.

See what's new in the world of hybrid vehicles as vendors bring the new models in an onsite display in the parking lot outside Berkner Hall. BNLers are also welcome to bring their own hybrid vehicles to display. To participate, call Jeff Williams, Ext. 5587. All who attend the display will learn something about the benefits of owning an energy-efficient vehicle and how to help reduce air emissions while enjoying increased fuel economy. For more information, call Williams, Ext. 5587.

Take Our Children To Work Day, 4/23

"Take Our Children to Work Day" for Lab employees' children or grandchildren of ages 10 to 15 will be held on Thursday, April 23. The day will start at 8:30 a.m. and finish at 5 p.m. On-line registration is available on the Human Resources homepage. Click on "Children's Day Registration Form" and follow the prompts. For more information or to get a paper registration form, call Liz Gilbert, Ext. 2315.

TIAA-CREF One-on-One Retirement Counseling

A TIAA-CREF consultant will visit BNL on Thursday, April 23, and Wednesday, April 29, to answer employees' questions about 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 1-800-732-8353.

Earth Week 5K Walk/Run, 4/19

Join with Stony Brook University (SBU) in a new venture: celebrate Earth Week at the first annual Martin Schoonen 5K Walk/Run at the picturesque SBU Southampton campus on Sunday, April 19.

The proceeds from this event will help provide funding for a scholarship to be awarded to a Stony Brook Southampton student. Arrive at 8 a.m.; the race begins at 9 a.m. Register online at www. stonybrook.edu/southampton.

Celebrate Holi, 4/26

The BERA Indo American Association invites all to celebrate with them the Holi/Spring festival 2009, to be held on Sunday, April 26, 3-5 p.m. at Berkner Hall. As always, we will have a colorful, rich cultural program consisting of dances, skits, instrumental music etc. More information is at: http://www.bnl. gov/bera/activities/iaa/holi2009. This event is now open for reservations both to attend and to perform. The event is free, but reservations are needed. All reservations, including modifications and cancellations, must be made by April 17, through: http://www3.bnl.gov/bera-iaa/ holi09/reserve_form.php.

Defensive Driving Course in Two Parts, 4/27 & 30

A six-hour Defensive Driving (Point & Insurance Reduction) course will be held in two parts on Monday and Thursday: April 27 and 30, in the Brookhaven Center South Room, 6-9:15 p.m. The course is open to BNL, BSA, and DOE employees, facility-users, and their families, at \$38 per person. Preregistration is required. To register, call Ed Sierra, 821-1013, and leave a message with your phone number. For more information, call Sarah Wiley, Ext. 4207.

Small-Business Showcase, 4/28

Featuring Service-Disabled Veteran-Owned Small Businesses that provide goods, services to the Battelle Family of Labs

All are invited to attend a one-day showcase for Service-Disabled Veteran-Owned Businesses (SDVOB) on Tuesday, April 28, in Berkner Hall, 9-10:50 a.m., and in the Brookhaven Center, 11 a.m.-3 p.m. BSA and BNL are hosting this one-day event to thank and showcase the proven and reliable SDVOB suppliers currently providing goods and services to the Battelle Family of Labs. Potential users of goods and services at BNL are particularly requested to meet with these suppliers, who may be able to provide for your future requirements.

Meditation, Talk: Achieving Peace, 4/24

On Friday, April 24, Davamrita Chaitanya, a disciple of Mata Amritanandamayi, or Amma, will give a talk on "How We Can Achieve Peace" and lead a group meditation, 5-6:15 p.m. in the Recreation Hall. The talk will be preceded at 4 p.m. by an informal social gathering with refreshments, and followed, 6:30-7:30 p.m., by meditation, prayers, and chants for peace. Sponsored by BERA, the Asian Pacific American Association, and the Indo American Association Yoga Club, the event is free and open to the public. Visitors to the Lab age 16 and older must bring a photo ID.

Amma is widely regarded as one of the world's foremost

humanitarian leaders. Dedicated to alleviating suffering through personal outreach, she has won international recognition and awards, including the 2002 United Nations Gandhi-King Award for Non-Violence. She now helps those in need through a network of charitable organizations.

Dayamrita is one of Amma's senior disciples who has helped spread her teachings of love and compassion for 25 years. For the past 15 years, he has been manager of Amma's activities in the U.S., Canada, and Latin America.

For more information, call (631) 344-2206, or see: http://www.ammany.org/events-dayam-rita-090219.php.

CALENDAR

- THIS WEEKEND -

Sunday, 4/19

*Earth Week Starts BNL Booth at Riverhead Event

10 a.m.-4 p.m. Indian Point County Park, R'head. All are welcome. See notice, pg. 4.

- WEEK OF 4/20 -

Mon.-Fri, 4/20-24

*BNL Earth Week Celebrations See detailed schedule of talks and events, left.

*Wednesday, 4/22

449th Brookhaven Lecture and 2009 Earth Day Lecture

4 p.m. Berkner Hall. Talk on "Global Change and the Terrestrial Biosphere" by Alistair Rogers, Environmental Sciences Department. All are welcome to this free public talk. Visitors to the Lab of 16 and older must carry a photo ID. See story, pg. 1. NOTE: The noon time originally given for this talk has been changed. The 4 p.m. time is correct.

Thursday, 4/23

*Take Our Children to Work Day

On-line registration is on the Human Resources homepage, or call Liz Gilbert, Ext. 2315. See notice above, left.

Friday, 4/24

Talk, Meditation: Achieving Peace

4-7:30 p.m. Recreation Hall. Dayamrita Chaitanya will talk on "How We Can Achieve Peace," and lead a group meditation, 5-6:15 p.m. See other details of this free program, open to the public, at left. All are welcome. Visitors to the Lab of 16 and over must carry a photo ID.

Sunday, 4/26

Celebrate Holi Spring Festival

3-5 p.m. Berkner Hall. BERA Indo American Association invites all to a free cultural program to celebrate Holi. Reserve today. See notice at left.

- WEEK OF 4/27 -

Monday, 4/27

IBEW Meeting

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

*Defensive Driving, Part I

6-9:15 p.m. Brookhaven Center. See notice at left.

Tuesday, 4/28

*Small-Business Vendor Showcase

9-10:50 a.m. Berkner Hall lobby; 11 a.m.-3 p.m. Brookhaven Center. BSA and BNL host service-disabled veteran-owned small businesses that reliably provide goods, services to Battelle's family of Labs. All are invited, especially potential Lab users of these goods and services. See notice at left.

Thursday, 4/30

*Defensive Driving, Part II

6-9:15 p.m. Brookhaven Center South Room. See notice at left.

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

Arrivals & Departures

Arrivals	
Dmitry Arkhipkin	Physics
Thomas Conrad	Safety & Hlth Srvcs
David Dudley	NSLS II
Xuerong Liu	. CMP&MS
Departures —	
Damayanti Naik	CAD

Classified Advertisements

OPEN RECRUITMENT – Opportunities for Lab employees and outside candidates.

POSTDOCTORAL RESEARCH ASSOCIATE - Requires a Ph.D. in chemical engineering, chemistry, or material science. Experience working with batch units for process evaluation, wet chemistry, and spectroscopyaided analysis is also required. Will work in a team environment, interface with industry and will be responsible for conduct data analysis and write reports. Knowledge of fuel properties, chemistry and processing is desired, as is experience with biofuels. Expertise with analytical tools in support of fuel chemistry including GCMS, FTIR and HPLC is also desired. Processes of interest include hydrogenation and transesterification. Will contribute to a new research project involving waste materials hydrolysis, the properties and upgrading of products into fuels and the storage, handling and combustion of fuels produced. Under the direction of T. Butcher, Energy Sciences & Technology Department. BNL policy states that Research Associate appointments may be made to those who have received their doctoral degrees within the past five years. Apply to Job ID #14823.

SURVEY & ALIGNMENT / PROJECT EN-GINEER II/ MECHANICAL (P-7) - Requires a bachelor's degree in geodetic or survey engineering with a minimum of eight years experience doing survey/geodetic adjustments of three-dimensional networks or an equivalent combination of education and experience. Work experience in a light source or accelerator facility and C++ is desirable. Must have excellent computer skills including computer-aided design, survey, and data analysis programs. Excellent written and verbal communication skills are required to direct the efforts of laboratory technical personnel and to interact with scientific and engineering staff. Must be able to analyze, adjust, and integrate data from survey instrumentation including total station instruments, laser trackers, mekometers, optical tooling, and other survey and alignment equipment. Responsibilities include reviewing and updating the proposed primary and secondary survey networks, performing error analyses and developing procedures and databases for the survey teams. Will participate in the survey and alignment effort for the NSLS-II facility. National Synchrotron Light Source II. ERAP ELIGIBLE \$1,000. Apply to Job ID #14822.

ASSOCIATE STAFF ENGINEER (P-3) - Requires a BS degree in mechanical or chemical engineering and some research experience in bio-fuels, air pollutant emissions measurements and/or boiler and engine combustion. Responsibilities will include supporting research programs in the development of bio-fuel production processes and end use applications to include: plan and execute fuel combustion experiments and bio-fuel property studies; prepare written technical reports and make presentations to sponsors; and develop data acquisition and analysis programs. Energy Resources Division/Energy Sciences & Technology Department. Apply to Job ID #14820.

SENIOR TECHNOLOGY ANALYST (I-5) Requires a BS in engineering, computer science, physics, or equivalent experience, and at least one year of relevant experience. Course work or experience in project engineering, electrical engineering, control systems, and demonstrated experience/ education in JAVA programming, real time experience, performance optimization, as well as demonstrated experience/education collecting requirements and designing solutions is required. Must also posses experience in executing projects, strong analytical and problem solving skills, strong communication skills, and the ability to work effectively with a diverse group of scientist and engineers. Responsibilities include control system tool evaluation and development in JAVA under LINUX. Project responsibilities include collecting requirements, documenting the requirements, and working on a team to design, develop, and deploying accelerator subsystem applications. Knowledge of instrumentation, steady state control, state rience, particularly EPICS and accelerator control, is preferred. National Synchrotron Light Source II. ERAP ELIGIBLE \$1,000. Apply to Job ID #14825.

SURVEY AND ALIGNMENT TECHNICIAN (T-4) - Requires an AAS degree in electro/ mechanical technology and a minimum of six years of relevant experience. Previous experience in an accelerator or light source facility and working knowledge of PC software such as Spatial Analyzer, StarNet, ME5000, Autocad, Inventor, Word and Excel is desirable. Must have a strong background and demonstrated competence in the use of modern survey tools (laser trackers, CMM arm, mekometers, optical tooling) and data analysis. Must have a high degree of initiative and judgment, and must be able to plan, coordinate and perform technical assignments under general direction. Responsibilities include participating in the precision alignment of girder-magnet assemblies using laser-tracker-based survey and alignment techniques as well as planning, implementing, and integrating

various survey operations during and after the construction phase. Will assist in setting up primary and secondary survey networks for the NSLS-II facility. National Synchrotron Light Source II. ERAP ELI-GIBLE \$1,000. Apply to Job ID #14821.

Motor Vehicles

08 MINI COOPER S – 8.4K mi. a/t, mint, dynam stability control, alarm, \$24000 neg. All warranties transferable. Ext. 4312.

06 FORD MUSTANG GT – 25.5K mi. red/blk lthr, A/T, all opts. showroom cond. \$18,500 neg. 258-5809 or piper@bnl.gov. 05 CHRYSLER 300 TOURING – 82K mi. Black Pearl, mint cond., leather int. 6cyl.; abs; cd; a/t; pw; ps. \$9,500 neg. 929-4978. 00 HOLIDAY RAMBLER ALUMNASCAPE – sleeps 6. Q/bed., stove, m/wave, refrig/freezer, tv. a/c, heat. more. \$16.900. Ext. 7517.

99 SOUTHWEST TRAILER – encl. trailer, ramp dr, side dr, front shelf/front tool rack. \$3,000 neg. Ext. 4921 or jfranco@bnl.gov. 97 NISSAN PATHFINDER – 125K mi. 5-speed m/t, 4WD, roof rack, vg condition, original owner. \$2,800 neg. Ext. 7505.

96 SUNLINE TRAILER – 0 mi. 24' 5 new tires & mttrss, sleeps 4, electr jack, extras. \$5,500 neg. 924-5187, mabe324@yahoo.com.
96 CHEVY LUMINA LS – 90K mi. Good Condition. \$1,200. 874-3606.

TIRES – 4 Cooper Lifeliner 185/60R14 on Toyota rims. Less than 1500 miles on them, Asking \$575, OBO, Lou, 732-1028.

Furnishings & Appliances

COMPACT REFRIGERATOR – Avanti 248VB 2.5 cf., black, 25bx18.75wx 17.75L, ask/\$75. Ext. 5669 or harringt@bnl.gov. FREEZER – 5 cu. ft chest. \$50. 909-1498. KITCHEN HUTCH – light oak hutch w/ glass drs, excel. cond. \$300/obo, pics avail. upon request. Wendy, Ext. 3924.

LIVING ROOM – 1 dresser w/6 drawers, 2drs; French provincial, 65"L x 34"H x 20"W, \$150, gd. cond. Vicky, 476-0627. TELEVISION – 19", \$60. Ext. 3008 or ddaniels@bnl.gov.

WINE TABLE – sm glass top w/wine storage below, \$25. Ext. 3008, ddaniels@bnl.gov.

Audio, Video & Computers

BOSE SYSTEM – surround sound "lifestyle 800 system". pd/\$1000, ask/\$450. Dennis, Ext. 4028, 375-8519. PHILLIPS DVD PLAYER – Region Free!

Includes remote. \$20. Gary, 312-3205.
TIVO SERIES 2 DVR – 225h capac, lifetime srvice, stdrd res, wired or w/less ntwork adptr. \$300. Ext. 4750, afranz@bnl.gov.

Sports, Hobbies & Pets

CHERRY FISH AQUARIUM – new chrry based 24" tank; cabinet: 24"x17"x 12" w/ blck screen lid, \$100/obo. Sue, Ext. 4931.

LEGOS – used, Vikings (Ship, Army, Catapult, Boat) \$50 all, also sold separately, Mission to Mars \$20, 929-0043.

PLAYMOBIL – used, Knight (castle, dragon, tower etc) \$60, Police (station, boat etc.) \$50,more. Simone, 929-0043.

VIDEO CHAIR - Never used, \$20. Ext. 3008 or ddaniels@bnl.gov.

WETSUIT - Youth Size 12. Orig. \$100, ask \$55. Ext. 7235, 286-1018 or fitz@bnl.gov.

Tools, House & Garden

PUMP & SAND FILTER - 1 HP Hayward, for agp sys. ask/\$275, like new. 298-4121.

Miscellaneous

BRITAX ROUNDABOUT CARSEAT – \$50. Ext. 3008 or ddaniels@bnl.gov.

GIFT CERTIFICATES - (2)\$25 Villa Napoli/Smthtwn, now \$12/ea, (2)\$25 Momento's/Hpton Bays, now \$12 ea., (1)\$50 Hazy Moon/Ptchgue, now \$25, (1)\$50 Meritage/Bellport, now \$25. Ext. 4138.

GUITAR AMPLIFIER - Fender Cyber-De-

luxe w/ 64 presets, 65w w/1-12", Celestion G12T-100 speaker, \$275. Ext. 7805. LLADRO ENDLESS LOVE DOVES – New: sells for \$255, asking \$150. Picture available upon request. Ext. 7007.

PROM DRESSES – size5/6 by Morgan & Co. 1-pink 1-black \$60/ea; sz M by City Triangle green/blue \$40 have pics. 909-1498. SALT WATER SOFTENER – super salt, extra course crystals w/rust remover, 9-40lbs bags, b/o. Jerry, Ext. 2950, 949-3305.

Happenings

CHERRY BLOSSOM FESTIVAL, SBU – Sat. 4/25, 12-5:30p, Wang Cnter. Taiko Drums, Japanese dance, music, crafts, tea, cultural. Free exhibs; Performnces: \$10 Adts, \$8 Srs/Sdts, \$5 Chd. http://matsuri.ryushukan.com/. sge@bnl.gov. FREE MTG ON LOWER ENERGY BILLS – Sat 4/18, 1:30p. Learn to lower energy bills: 2hr mtg, N. Shore Heritage Park Heritage Ctr, Mt. Sinai, Incl. Green bldg. tour, no-cost options on home upgrades, incl. solar, free engy audit info. LI Sierra Club. 689-1568. DINNER/SHOW OUTING – Miracle of

DINNER/SHOW OUTING – Miracle of Christmas Nov 14, 2009 at the Millennium Theatre and dinner at Millers in Strasburg, PA. DEPOSITS of \$60pp due by Jun 1. Call for details and reservation forms. Kim, Ext. 7465, 399-3098 or khayes@bnl.gov.

Lost & Found

BRACELET – found outside of bldg. 400. Barbara, Ext. 3313.

Farewell Gathering

JOHN USHER - Wish Him Well in His Future Adventures. 4/15 Harbor Crab Co., Patchogue, \$40/pp includes dinner/gift, RSVP 4/13 @ 344-3689 or evelly@bnl.gov.

Free

ABOVE GROUND POOL – 26' Oval pool, needs new liner, you take down. Free chemicals too. Ext. 7132 or asweet@bnl.gov.

MOOCHIE NEEDS GOOD HOME – Adorable mush of a pitbull, male, owner lost job, must relocate to state that does not allow pitbulls. photo avail. Wendy, Ext. 4884 or morrin@bnl.gov.

Wanted

ADOPT-A-PLATOON – Monetary donations gratefully accepted towards mailing shipments to military overseas. Thank you!. Joanne, Ext. 8481 or jrula@bnl.gov. VIDEOGAPHER – wanted for a wedding on May 16, 2009. Lou. 732-1028.

For Rent

CENTRAL ISLIP – 1 bdrm cottage, stainless steel appliances, new fixtures, own driveway, own yard, lots of closet space, all included. \$1,000/mo. Ext. 3008.

E. PATCHOGUE - Cottage studio apt borders Swan Lake. New kitch, bath. Use of yard, sep. entr. Small pets ok. Photos avail. \$950/mo neg. 831-4647, bcolichio@bnl.gov. ISLIP - Room, suit for one. Nr. SS Pkwy, Sun Hwy, LIRR. Furn or unfurn. Priv. entr; priv bath, AC, off-str prk. Cable, internet, smll frdg, m/wave. \$500/mo. 227-7623.

JAMESPORT – 1 bdrm. apt, bath, *l/*r w/gas fp, Frch drs., screend porch, cac, ceilg fans, new paint, flrs. redone, backing vineyard, 1 mi: beach. 287-8334. \$1,175/mo. 745-3957. MASTIC – Spacious rm., 1st flr. in 2bdrm house. 5mi to Lab. Incl. all utilities-internet/cable,elec.,heat,laundry,dw). \$725/mo.

401-575-7042 or jurronimo@yahoo.com. MASTIC BEACH – 1-bdrm apt, full bath, I/r, kit., priv. ent. & drway, no smkg/pets, all incl. except cable, sec/refs req'd. \$950/mo. 281-4559.

MEDFORD – 1-Bdrm Lux Condo Apt. Golf-Pool-Tennis-Parkg. No stairs; Blue Ridge Luxury Condo Complex. \$1,200/mo neg. 516-316-0826, howard@thebermans.com.

MEDFORD – 1 bdrm bsmt apt, eik, full bath, no smkg/pets, 1 mo. sec,10 mins to Lab. utilities incl. \$900/mo. 758-3727.

RIDGE – lakefrnt apt., I/r, b/r combo, full bath, eik, grnd. Ivl., off st. prkg., own therm., cable/int., incl. all. (631)379-5868. \$825/mo. Dan, 379-5866.

ROCKY POINT – 1 bdrm upper unit in Co-op Comm, kit, 1 bath, I/r, balc, nr/stores, laundry rm, personal prkg spot, no smkg/pets, cac. incl. gas/water. \$1,150/mo. 806-5965.

ROCKY POINT – 1 bdrm house, .5 bsmt, oil heat, no smkg/pets. \$1,100/mo. 744-8919. SHIRLEY – 1 m studio/furn/stove kitnet/full bath/sep ent, cable/elect/int. incl., 1 mo. sec, 5 min to stores/beach/LIRR/no smkg/pets. \$650/mo. Ext. 2964, 804-8609.

SHOREHAM – share house w/professional, partial furn. bdrms, 7 mi to BNL, int. & tv incl., no smkg/pets, single preferred, 516-380-2650/cell. \$650/mo. 744-3543.

U.S. OR FOREIGN – Sunterra or Interval International timeshare, u pick place/wk a great way to vacation w/family. \$900 and up. \$900/wk. 900-1498.

WADING RIVER – new 1 bdrm apt., quiet n'hood, cable, int., all incl. except phone, no smkg/pets. \$950/mo. Toby, 838-5879. YAPHANK – priv. home/ent., fully furn. studio for single person, 4 mi. to Lab. cable/int/util. incl. \$750/mo. 516-205-6712.

For Sale

BROOKHAVEN HAMLET, OPEN HOUSE – 4/18 & 4/19, (11-3) 3br, 2.5 ba, 2car gar,cust., wtrfront pro. Col., 1 acre, cul-dsc, nat. prserve, attch office w/waitg rm., backyd. dock., 8 Prairie Lane, off S. Cntry Rd. \$585,000 neg. 286-4584.

PORT JEFF - 2 bdrm, 2.5 bath T/house, move-in cond., eik, I/r w/gas f/p, crown molding, cac, bsmt., w/d, 1.5-car gar, gym, pool, tennis/basketball courts, walk to LIRR, \$339,000 neg. 516-903-3902,

ROCKY POINT - house, .59 acre, workshop/gar., mv-in cond., lots new carpets etc. 3 bdrm., den, Hwd floors. sunporch. Poss. of subdivision. \$319,000 neg. Ext. 2305 or rolf@bnl.gov.

SHOREHAM – 4 bdrm., 2.5 bath Col., frml I/r & d/r, den w/fp, fin. bsmt, 12x20 deck, igs, new grnite cnters, SWRSD, more, 7 mi to Lab. \$499,900. Don, Ext. 2253, 821-3320.

SHOREHAM – Ranch, newly renov, 3 bdrm, bath, I/r, den, wd flrs, kitch/granite cnters, ss applis, garage, large yard, family n'hood, SWRSD. \$350,000. 258-4607. SHOREHAM VILLAGE – spotless custom 3bdrm Ranch, 3ba., rec renov., 1 acre, porters pkland, wd firs pool, screened

SHOREHAM VILLAGE – spotless custom 3bdrm Ranch, 3ba., rec renov., 1 acre, borders pkland, wd flrs, pool, screened porch, igs. \$529,900. Leonard, 744-2404. WADING RIVER – 5 bdrm, 2.5 bath Col, SWRSD, kitch & dinette, *Vr*, *d/r*, fam rm w/fp, full bsmt, 2-car gar, i-gr pool, fncd rear yrd, sprinklers. 905-6615. \$499,000. 929-6771.

Services

Services are neither screened nor recommended by the Bulletin.

A1 LAWN IRRIGATION – complete lawn sprinkler systems installed, repairs, start ups. quality work. 284-2277.



BERA Camera Club
cordially invites all to attend a
Photoshop-photo retouching clinic
featuring instructor Yvonne Berger.

Bearn to remove blemishes, soften
wrinkles, take 50 lbs. off your
subject, create collages, and more.

This free clinic will be held on the
28th of April from 5:15 – 7:15 p.m.
in Berkner Hall's Room B.

RSVP: Ext. 4672

Rideshare Incentives for April

Through a Long Island Transportation Management (LITM) grant, the Lab may distribute \$20 monthly gas cards to employees involved in carpools. Participants must carpool to and from work a minimum of 12 days each month, and must record their monthly rideshare trips on the NuRide website at http://www.nuride.com/nuride/main/main.jsp. As a special short-term rideshare incentive, a \$20 gas card will be awarded to the first 100 BNL, DOE, and contractor employees who register as carpoolers on the NuRide website before May 1. Also, a \$20 gas card will be awarded to individuals who form new carpools or join existing carpools and record at least six roundtrip rideshare trips on NuRide by April 30. For more information, see Monday Memo of April 6, 2009 (http://intranet.bnl.gov/memo/) or contact Jeff Williams, jwilliams@bnl.gov, Ext. 5587.

Vending Machine Survey

A survey is online until April 24 for comments regarding the service provided by vending machines on site. Ruth Comas, Conference Support Supervisor, asks that as many people as possible complete the survey which will be used to improve services. See http://intranet.bnl.gov/survey/vending/.

35MM SLIDE SCANS – www.pictureperfectscans.com scans & color corrects 35mm slides, photos, negs, converts tto DVD. DVD Music slideshows avail. 928-6469.

A+ SINGER WITH DUO - Weddings, Events, Concerts: Yvette Sings Popular Songs with Bob on Piano/Guitar, Brian on Drums. Reasonably Priced. 516-680-4012.

BABYSITTING - Responsible college grad babysits evenings and weekends. Lots of experience with kids! References available. Emily, 516-662-5896.

BABYSITTING – 14 year old honors student, will babysit in your home, eve's and weekends. Reliable. Manorville and surrounding area. Amanda, 874-8631.

BABYSITTING & PETSITTING – Retired nurses aide will watch your children or pets while you are away. Donna, 398-8024.

BOAT STORAGE - Out/inside boat storage avail. @ CM yd., trailered boats welcome, summer boat slip avail. for 15' boat. 878-2577.

BRICKWORK - Reset your existing walkway, pool area, or patio to look brand new. No job too small. BNL discount. Tony, 736-7942.

CLINICAL PSYCHOLOGIST - PhD, Lic., Stress, depression, insomnia, PTSD, pain, parenting, ADHD, LD, neuropsychological assessment. Min. to BNL. 504-6135, ronturnerphd@brookhavenpsychology.com.

CAR DETAILING SERVICE – Great service, reasonable prices, call for info & appointment. Chris, 960-6243.

CHIMNEY SWEEPS – Fireplaces, wood, coal and oil flue systems. Stainless steel chimney caps, chase pan tops and liners. Michael, 821-5526.

Michael, 821-5526.

COMPUTER REPAIR – PC Software/
Hardware/Network repair, installation,
consultation. Certified and Experienced.

COMPUTER SERVICES, ALL – Home & business specialist. New system set ups, tune-ups, virus control, lessons from cert. business teacher. Plenty of references, reasonable rates. Jim, 821-2558.

Ryan. 294-5797.

DECORATIVE GLASS – Beautiful solutions for all decorative glass needs, front door, kitchen, bath, skylight, or odd-shaped windows all types of glass, custom designs. 338-5412.

FLOORING: INSTALLS & REPAIRS – Carpeting, Vinyl and Laminate. Quality sales and service. Over 20 years' experience. John, 987-6479.

GENEALOGY – advice and research on family history and genealogy, 30 yrs' experience. Jim, 821-9178 or jchiggins22@ hotmail.com.

HANDYMAN - Need a Handyman? Call Joe, 875-0584.

HANDYMAN – licensed & insured, home remodeling, interior/exterior painting, tilework, woodwork, renovations, powerwashing and building decks etc. Work done w/TLC. Bill, 281-4492.

HANDYMAN - Dependable, On-Time, Ex-

pert Service with Attention to Detail. Excellent references. Discount for BNL employees, Veterans & Seniors. John. 365-4815. HOME IMPROVEMENT – All types of repairs, roofing, siding, baths, kitchens, window replacement, decks. Licensed, insured, reliable. Brian, 399-0445.

HOME IMPROVEMENTS - Meticulous. If your home needs work or repairs, large or small, call Anthony. Lic./insured. 312-2670. HOME IMPROVEMENTS - Your home care co. All phases of home improvements, roofing, siding, bath, kitchen, decks & more. Call with any questions. Lic&Ins. George, 878-1178.

HOMEMADE CAKES BY DEBBIE – All occasions, All shapes, Tiered or not. No fondant. Fillings upon request. Have references and pictures. Reasonable. Debie, 776-0188 or djdg00@optonline.net. PAINTER – Interior and exterior painter.

powerwashing, spackling etc. Very conscientious, neat and finished work looks like art, done with TLC. Mike, 291-5026. PERSONAL FITNESS TRAINER – Our mission: to deliver the most effective, convenient, affordable fitness concepts to long island businesses, homes, we come to you.

PHOTOGRAPHY – Fortunato Photography: weddings, children's portraits, photo restoration, color and/or black and white, Fortunato35@yahoo.com for info. Trisha, 258-3699.

www.enterthebunker.com, Bill, 456-2653.

PIANO LESSONS - Classical, All Levels, NYSSMA preparation, in Shoreham. 744-9763.

PORTRAITS – LI Artist working from photos will create wonderful portraits for you of your loved ones - family, friends, pets, cars, motorcycles ... 764-3211.

POWERWASHING - "AT YOUR SER-VICE"- Home exteriors, decks, patios, boats, RVs. Excellent References. BNL employee, Veteran & Senior Discounts. John, 365-4815.

TAX PREPARATION – Full accounting and tax services for business and individuals. Personalized service at affordable rates. My office or your home. Tommasa Rosini, CPA, 886-1545.

TAXES - Prepared by Tax Consultant. Servicing Lab personnel for over 30 years. Reasonable. John, 732-2472.

TREE REMOVAL, GRINDING & FILL – Any yard work, Winter Clean Up, Stump Grinding, Top Soil, Fill, Flower Beds built, Storm Damage. Small Jobs OK. Dave, 774-3736. TUTOR – Experienced chemistry teacher for Regents, AP or College Freshman courses. Stony Brook. 219-7494.

TUTOR – Physics and Mathematics. College or High School levels. Stony Brook.

TUTOR READING/WRITING – Master Level teacher available for private sessions with your child (grades k-12). Very competitive rates. Excellent references available upon request. Jennifer, 395-0984.

TUTORING – Honors college grad will tutor your children in science and elem/middle school math. Transcript and references upon request. Emily, 516-662-5896.

WALL MURALS – Custom Wall Murals, trompe l'oeil, faux finishes, residential and commercial, by Artist with over 30 years experience. References available. 764-3211.
WATCH BATTERIES – Drop off at lunch, next day return. Starting at \$8. Lithium higher. No Swiss Army. 503-1377.

WINDOW CLEANING - sparkling window cleaning. Free estimates, mention BNL for your discount. John, 291-2407.



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

Liz Seubert, editor Joe Gettler, staff 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.asp.

Bldg. 134, P.O. Box 5000 Upton, NY 11973-5000 phone: (631) 344-2345 fax: (631) 344-3368 e-mail: bulletin@bnl.gov