

Roger Stoutenburgh D2020199

College at Cambridge Names New Prize After Distinguished Alumnus, BNL's Maurice Goldhaber

To mark the significant rise in academic performance in both arts and science subjects at Magdalene College, Cambridge University, England, the College has expanded the number of its "named" prizes by the Maurice Goldhaber Prize for Natural Sciences or Mathematics, in honor of alumnus Maurice Goldhaber, a BNL distinguished scientist emeritus.

This prize, which recognizes Goldhaber's eminent academic career in nuclear and particle physics and also commemorates his association with the College as a Ph.D. student and subsequently as the Kingsley Bye Fellow, is awarded to a student offering a distinguished performance in experimental or theoretical physics or mathematics. Tom Pugh, who performed with great distinction in Part III Mathematics in July 2008, won the inaugural prize.

One of the world's most distinguished physicists, Goldhaber, who was born in Austria, earned his Ph.D. in physics at Cambridge University in 1936. Working in 1934 with James Chadwick from the Cavendish Laboratory at Cambridge, he made the first accurate measurement of the mass of the subatomic particle known as the neutron. He thus showed that the neutron was not a compound of a proton and an electron, as was believed at the time, but a new particle.

In 1938, Goldhaber arrived in the U.S. to join the faculty of the University of Illinois. He came to BNL in 1950, where he served as Physics Department Chair from 1960 to 1961, and Laboratory Director from 1961 to 1973. Goldhaber has received numerous awards during the course of his long and extremely productive career, including:

See *Goldhaber* on pg. 2

INSIDE STORIES

- DOE Publishes *Decade of Discovery*, cites BNL for RHIC, nano, and fuel research, has STAR detector image on cover
- BNL research cited as a favorite of 2008 by *Nature* Editors
- Craig Woody is president of IEEE's Nuclear & Plasma Sciences Society

Four BNL Scientists Named APS Fellows

Four BNL scientists have been named Fellows of the American Physical Society, a professional organization with about 46,000 members. Election to APS Fellowship is limited to no more than one half of one percent of its membership in a given year, and election for this honor indicates recognition by scientific peers for outstanding contributions to physics. The 2008 Fellows are:

Thomas Ludlam

"For his contribution to the establishment of the scientific program for the Relativistic Heavy Ion Collider [RHIC] at Brookhaven National Laboratory and for his leadership in the design and construction of the RHIC detectors."

Ludlam, now Physics Department Chair, played a major role in the development of BNL's world-class accelerator, RHIC, from its design stage starting in the early 1980s to the design and construction of its four detectors and the development of its research programs. RHIC began operations in 2000, colliding high-energy beams of heavy atomic nuclei, known as heavy ions, for experimental studies performed by physicists from around the world. These collisions allow the study of nature's strongest force, through the interactions of subatomic particles called quarks and gluons, by creating an extraordinarily hot and dense type of matter that is thought to have characterized the universe a few millionths of a second after the Big Bang. In 2005, physicists at RHIC found such a state of matter, and discovered that it behaves like a "perfect" liquid.

Triveni Rao

"For pioneering work on metal photo cathodes for high brightness RF injectors."

Rao, Instrumentation Division, pioneered the research on metal photo cathodes that are the workhorse of



Thomas Ludlam D3111208



Triveni Rao D2801208



Peter Siddons D0050109



Werner Vogelsang D1840705

Photos by Roger Stoutenburgh

various electron accelerator facilities worldwide, including facilities at BNL. When photo cathodes are struck by light, they release electrons. Rao's research focuses on measuring and enhancing electron yield and the lifetime of the cathode material. She was the first to recommend copper and magnesium as suitable cathodes for high brightness injectors. Rao also developed a laser-cleaning process for metal photo cathodes that improves the yield by a hundred to a thousand. Currently, she is investigating diamond to amplify electron yield by a hundredfold.

Peter Siddons

"For his contribution to x-ray optics, x-ray physics, x-ray detectors, and the development of synchrotron radiation instrumentation and

experimental techniques."

Siddons is the group leader of the experimental systems detectors section at the National Synchrotron Light Source (NSLS). To enable the study of a wide variety of materials ranging from computer components to proteins, the NSLS produces intense beams of infrared, ultraviolet, and x-ray light in the form of photons at varying energies. He helps experimenters implement new and more efficient ways to "see" their results through better optics and new systems of detectors.

Werner Vogelsang

"For his outstanding contributions to the development of perturbative QCD and the theoretical methods of analysis of the spin structure of the nucleons."

See *APS Fellows* on pg. 2



Roger Stoutenburgh D2541007

Ilan Ben-Zvi Named IEEE Fellow

Ilan Ben-Zvi, a senior physicist in the Collider-Accelerator Department (C-AD), has been recognized as an IEEE Fellow. The IEEE originally represented electrical and electronics engineers, but it has expanded its scope and today is the world's leading professional association for the advancement of technology. The IEEE Fellowship is one of the organization's most prestigious honors.

Ben-Zvi was recognized "for leadership in superconducting accelerators, high brightness electron sources and free electron lasers."

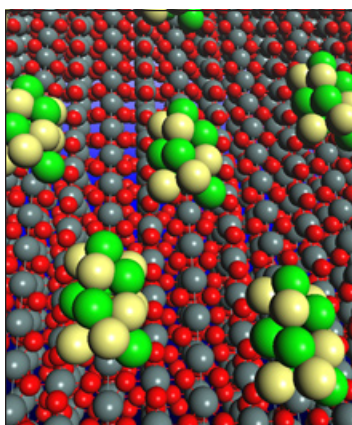
Ben-Zvi is head of the superconducting accelerator and electron cooling group in C-AD, where he develops state-of-the-art superconducting radio frequency accelerator elements and high-current, high-brightness electron beams. As director of BNL's Accelerator Test Facility (ATF) for 15 years, Ben-Zvi saw to its development as the premiere advanced accelerator physics facility in the world. Working at the ATF, Ben-Zvi developed devices and techniques for improving free electron lasers, instruments used to study a wide variety of materials and chemical reactions; and devices for more efficiently operating accelerators for physics research.

For more about Ben-Zvi, go to www.bnl.gov/bnlweb/pubaf/pr/PR_display.asp?prID=884.

New Catalyst Paves Path For Ethanol-Powered Fuel Cells

A team of scientists at BNL, in collaboration with researchers from the University of Delaware and Yeshiva University, has developed a new catalyst that could make ethanol-powered fuel cells feasible. The highly efficient catalyst performs two crucial, and previously unreachable steps needed to oxidize ethanol and produce clean energy in fuel cell reactions. Their results are published online in the January 25, 2009 edition of *Nature Materials*. The work is supported by the Office of Basic Energy Sciences within DOE's Office of Science.

Like batteries that never die, hydrogen fuel cells convert hydrogen and oxygen into water and, as part of the process, produce electricity. However, efficient production, storage, and transport of hydrogen for fuel cell use is not easily achieved. As an alternative, researchers are studying the incorporation of



Model of a ternary electrocatalyst for ethanol oxidation consisting of platinum-rhodium clusters on a surface of tin dioxide. This catalyst can split the carbon-carbon bond and oxidize ethanol to carbon dioxide within fuel cells.

hydrogen-rich compounds, for example, the use of liquid ethanol in a system called a direct ethanol fuel cell.

"Ethanol is one of the most

ideal reactants for fuel cells," said Radoslav Adzic of BNL's Chemistry Department. "It's easy to produce, renewable, nontoxic, relatively easy to transport, and it has a high energy density. In addition, with some alterations, we could reuse the infrastructure that's currently in place to store and distribute gasoline."

A major hurdle to the commercial use of direct ethanol fuel cells is the molecule's slow, inefficient oxidation, which breaks the compound into hydrogen ions and electrons that are needed to generate electricity. Specifically, scientists have been unable to find a catalyst capable of breaking the bonds between ethanol's carbon atoms.

But at BNL, scientists have found a winner. Made of platinum and rhodium atoms on carbon-supported tin dioxide nanoparticles, the research team's electrocatalyst is capable

of breaking carbon bonds at room temperature and efficiently oxidizing ethanol into carbon dioxide as the main reaction product. Other catalysts, by comparison, produce acetaldehyde and acetic acid as the main products, which make them unsuitable for power generation.

"The ability to split the carbon-carbon bond and generate carbon dioxide at room temperature is a completely new feature of catalysis," Adzic said. "There are no other catalysts that can achieve this at practical potentials."

Structural and electronic properties of the electrocatalyst were determined using powerful x-ray absorption techniques at BNL's National Synchrotron Light Source, combined with data from transmission electron microscopy analyses at the Lab's Center for Functional Nanomaterials. Based on these studies and

See *Fuel Cells* on pg. 2

CALENDAR
OF LABORATORY EVENTS

- The BERA Store in Berkner Hall is open weekdays from 9 a.m. to 3 p.m. For more information on BERA events, contact Andrea Dehler, Ext. 3347, or Christine Carter, Ext. 2873.
- Additional information for Hospitality Committee events may be found at the Lollipop House and the laundry in the apartment area.
- The Recreation Building #317 (Rec. Hall) is located in the apartment area.
- Contact names are provided for most events for more information.
- Events flagged with an asterisk (*) have an accompanying story in this week's Bulletin.

— REGULARLY —

Weekdays: Free English for Speakers Of Other Languages Classes

Beginner, Intermed., Adv. classes, various times. All welcome. Learn English, make friends. See www.bnl.gov/esol/schedule.html for schedule. Jen Lynch, Ext. 5094

Mondays: BNL Social & Cultural Club
Noon-1 p.m., Brookhaven Center, South Room, free beginners dance lessons. Rudy Alforque, Ext. 4733, alforque@bnl.gov

Mondays & Wednesdays: Pilates
12:15-1:15 p.m. Mons.; 5:15-6:15 p.m. Mon. & Wed. Rec. Hall. \$65/once/wk., Ext. 5090

Mondays & Thursdays: Kickboxing
\$5 per class. Noon-1 p.m. in the gym. Registration is required. Ext. 8481

Mon., Thurs., & Fri.: Tai Chi
Noon-1 p.m., B'haven Cntr N. Rm. Adam Rusek, Ext. 5830, rusek@bnl.gov

Tuesdays: Hospitality Coffee
10:30 a.m.-noon, Rec. Hall lounge. Restarts 9/9. All welcome. Ext. 5090

Tuesdays: BNL Music Club
Noon, B'haven Center, N. Room. Come hear live music. Joe Vignola, Ext. 3846

Tuesdays: Knitting Class
2 p.m. Rec. Hall. All levels of skill. Ext. 5090 for information

Tuesdays: Jiu Jitsu
6:30-7:30 p.m. Gym. All ages, 6 yrs. to adult. \$10/class, pay as you go. Tom Baldwin, Bldg. 452, Ext. 4556

Tuesdays: Toastmasters
3 monthly meetings: 2nd Tuesday: Noon, Berkner, Rm. D: 1st & 3rd Tuesdays, 5:30 p.m., Bldg. 463, Rm 160. Guests, visitors welcome. www.bnl.gov/bera/activities/toastmasters/

Tue., Wed. & Thurs.: Rec Hall Activities
5:30-9:30 p.m. General activities, TV, ping pong, chess, games, socializing. Christine Carter, Ext. 5090

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

Tuesday & Thursday: Aqua Aerobics
5:30-6:30 p.m., Pool. Starts Tues., 9/9; Thurs., 9/11. 8-wk session, \$20 1x/wk, \$40 2x/wk. Mail chk to Recreation Office, Bldg. 400.

Tuesday and Thursday: Jazzercise
Noon-1 p.m. Rec. Hall. 8-wk session, \$90 2x/wk. Holbrook & Wading River locations too. Mail chk to Recreation Office, Bldg. 400.

Wednesdays: On-Site Play Group
10 a.m.-noon. Rec. Hall. Infant/toddler drop-in event. Parents meet while children play. Restarts 9/10. Petra Adams, 821-9238

Wednesdays: Ballroom Dance Class
B'haven Center, N. Ballroom. Instructor: Giny Rae. Three 1-hr. classes, starting at 5:15 p.m. Ext. 3845

Wednesdays: Weight Watchers
Noon-1 p.m. Michael Thorn, Ext. 8612

Wednesdays: Yoga
Noon-1 p.m., B'haven Center. Free. Ila Campbell, Ext. 2206, ila@bnl.gov

1st Wednesday of month: LabVIEW
1:30-3 p.m., Bldg. 515, 2nd fl. Seminar Rm. Free technical assistance from LabVIEW consultants. Ext. 5304, or Terry Stratoudakis, (347) 228-7379

Thursdays: BNL Cycletrons Club
Noon-1 p.m., First Thurs. of month. Berkner, Rm. D. Toni Hoffman, Ext. 5257

Thursdays: Reiki Healing Class
Noon-1 p.m., Call for location. Nicole Bernholz, Ext. 2027

Fridays: Family Swim Night
5-8 p.m. BNL Pool. \$5 per family

Fridays: Family Gym Night
5-8 p.m. Family gym activities. Free

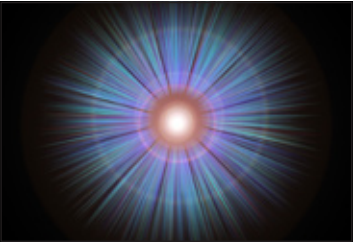
Fridays: BNL Social & Cultural Club
Noon-1 p.m., B'haven Center, S. Room, free beginners dance lessons. 7-11:30 p.m. N. Ballroom, Dance Social, workshops. Rudy Alforque, Ext. 4733, alforque@bnl.gov

CIGNA Representative

A CIGNA Healthcare representative is available as needed in Human Resources, Bldg. 400, or by phone to assist with claims issues you have been unable to resolve yourself through CIGNA's Customer Service number (1-800-CIGNA24). Mary Beth Kivlen will be available by appointment only. You will need to provide all pertinent documentation. To schedule, call the Benefits Office, Ext. 5126.

Decade of Discovery

DOE recently published *A Decade of Discovery*, a book that describes the scientific discoveries and technological advancements “in recognition of the men and women working in DOE’s 17 national laboratories across the country.” The glossy book contains 37 stories, two focused on BNL research and facilities — “A Perfect Liquid” and “Take the Nano-Train” — and one highlighting Brookhaven’s work — “The Future of Fuel.”



Brookhaven’s iconic STAR image from the Relativistic Heavy Ion Collider graces the front cover. For more information, see www.energy.gov/discovery/a_perfect_liquid.html.

Craig Woody Is IEEE’s NPSS President

Senior Physicist Craig Woody of the Physics Department began a two-year term as President of the IEEE Nuclear & Plasma Sciences Society (NPSS) on January 1, 2009. The NPSS is one of 38 societies within IEEE, which is the world’s largest professional, non-profit organization for the advancement of science and technology.



The society has about 3,000 members and is devoted to the advancement of electrical and electronic engineering in nuclear and plasma sciences. Its fields of interest include radiation instrumentation, medical imaging sciences, radiation effects, plasma sciences and applications, fusion technology, pulsed power systems, particle accelerator science and technology, and computer applications for nuclear and plasma sciences. The NPSS sponsors conferences, workshops, and symposia around the world that are related to research being done here at BNL, including the Nuclear Science Symposium and Medical Imaging Conference, the Particle Accelerator Conference, and the Real Time Conference on computer applications.

The society also publishes two peer-reviewed journals, the *IEEE Transactions on Nuclear Science* and the *IEEE Transactions on Plasma Science*, and publishes the *IEEE Transactions on Medical Imaging* in collaboration with three other societies. It also gives out numerous awards for outstanding contributions in various fields of nuclear and plasma science, many of which have been received by BNL scientists and engineers. It also sponsors various educational programs, a program for women in science and engineering, and a Distinguished Lecturer program.

Says Woody, “Brookhaven has had a strong involvement

with the activities of the NPSS for many years. Our scientists attend many of its conferences and publish their results in its journals. Many people at BNL have received very distinguished awards from the society, including Ilan Ben-Zvi and Veljko Radeka, who have won the society’s Merit Award; Satoshi Ozaki, Michael Harrison, Thomas Roser, and again Ilan, who have won the Particle Accelerator & Technology Award; and Ralph James, who won the Radiation Instrumentation Outstanding Achievement Award. Several people, including myself, have also been involved with many NPSS conferences. It is a very active and diverse society, and one which provides a great deal of benefit to people here at the Lab.”

Woody, who joined BNL in 1979, has research interests primarily in the area of particle detectors and instrumentation for high energy and nuclear physics and medical imaging, as well as in relativistic heavy ion physics. He was Co-Group Leader of the BNL PHENIX Group at the Lab’s Relativistic Heavy Ion Collider 2001-2008, and has been a Fellow of the American Physical Society since 2002.

To learn more about the NPSS, go to <http://ewh.ieee.org/soc/nps/>.

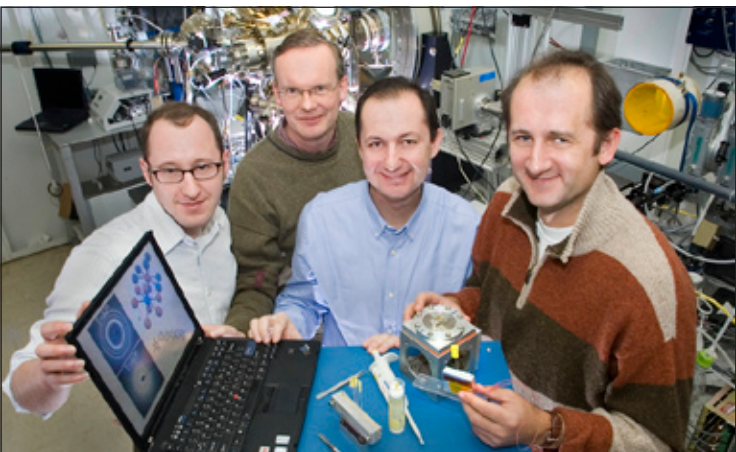
— Liz Seubert

APS Fellows from pg. 1

Vogelsang of the Physics Department makes calculations based on quantum chromodynamics, or QCD, a physics theory that describes the interactions of subatomic particles called quarks and gluons. He compares his results with experimental data to understand how protons, which are made of quarks and gluons, get their spin. This is a fundamental question about elementary particles that has not been adequately answered, despite decades of study. Using earlier experimental results from accelerators in which photons are used to probe protons, Vogelsang, like oth-

er researchers, found that the spin of quarks accounts for only about 25 percent of proton spin. In more recent work at RHIC, data combined with Vogelsang’s calculations so far do not show any evidence of sizable contributions of gluon spin to the proton’s spin. More extensive and detailed studies, both experimentally and theoretically, are needed to determine how the proton’s spin is carried by its inner constituents.

More information about the four new APS Fellows is available at www.bnl.gov/bnlweb/pubaf/pr/PR_display.asp?prID=887.



Roger Sloutenburgh D0831207

Researchers (from left) Matthew Maye, Niels van der Lelie, Oleg Gang, and Dmytro Nykypanchuk.

Brookhaven Nano Research Article Cited by Nature Editors As 2008 Favorite

A BNL nanotechnology paper featured in *Nature* magazine has been selected as one of the editors’ favorites this year. “DNA-guided crystallization of colloidal nanoparticles” was co-authored by Dmytro Nykypanchuk and Oleg Gang of BNL’s Center for Functional Nanomaterials (CFN); Matthew Maye, formerly of CFN and now at Syracuse University; and Niels van der Lelie of the Biology Department.

The article, which appeared

in *Nature* on January 31, 2008, put a 10-year-old theory into practice by showing that DNA attached to gold nanoparticles can be selected to self-assemble as nanocrystalline structures (as probed at BNL’s National Synchrotron Light Source) of the type that may serve as the optical and electronic materials of the future. For more information, see www.bnl.gov/bnlweb/pubaf/pr/PR_display.asp?prID=07-127.

Goldhaber from pg. 1

the Tom W. Bonner Prize in Nuclear Physics in 1971, the J. Robert Oppenheimer Memorial Prize in 1982, the National Medal of Science in 1983, the Wolf Prize in Physics in 1991, and the Enrico Fermi Award in 1999. He was president of the American Physical Society in 1982, and is a member of the National Academy of Sciences and a fellow of the American Academy of Arts & Sciences.

— Liz Seubert

Fuel Cells from pg. 1

calculations, the researchers predict that the high activity of their ternary catalyst results from the synergy between all three constituents – platinum, rhodium, and tin dioxide – knowledge that could be applied to other alternative energy applications.

“These findings can open new possibilities of research not only for electrocatalysts and fuel cells but also for many other catalytic processes,” Adzic said.

Next, the researchers will test the new catalyst in a real fuel cell in order to observe its unique characteristics first hand.

— Kendra Snyder

Learn What it Means To Go ‘Red’ Heart Talk, 2/6

February is Healthy Heart Awareness Month, and the Occupational Medicine Clinic invites all to attend a talk titled “What it Means to Go Red,” next Friday, February 6, in Berkner Hall, from noon until 1 p.m. Jean Marie Cacciabuado, M.D., will discuss ways to improve and maintain a strong, healthy heart. RSVP at Ext. 2733 or nlosinno@bnl.gov.

‘Fast, Fabulous Meals’ Noon Talk, 2/3

On Tuesday, February 3, registered dietician Amy Shapiro will talk about new ideas for easy, quick, home-cooked meals, in Berkner Hall, Room B. All are welcome. Register with Michael Thorn, Bldg. 490 or mthorn@bnl.gov.

Please Give Blood, 2/12

As always, blood is desperately needed. The next BNL Blood Drive will be held on Thursday, February 12, 9:30 a.m. – 3 p.m., at the Brookhaven Center.

Donors must be 16 to 75 years of age, in good health and weigh over 110 lbs. Restrictions may apply to individuals from the United Kingdom and Europe. Donors should have a photo ID and know their social security number.

To make an appointment, log on to the Human Resources webpage, click on “Blood Drive” and select “Schedule an Appointment.” Or, contact Liz Gilbert, Ext. 2315.



Forsyth Presents Sailing Trip Video, 2/4 in Berkner

All aboard! On Wednesday, February 4, all are invited to watch a video of BNL retiree Eric Forsyth’s recent trip onboard his sailboat, *Fiona*, to the west coast of Greenland. The showing will begin at noon in Berkner Hall.

The video depicts a four-month summer cruise across the North Atlantic to the Azores and then up to Newfoundland and Greenland. Along the way, the crew visited interesting archeological sites from the Norse explorations and the early English and French settlements. The appearance of several hurricanes complicated the cruise but by and large the weather was good and little ice was encountered in northern waters.

The video is presented by the Green Ocean Race®, which is designed to show boats that can cross an ocean and generate all the energy needed from wind and sunlight.

Send a Love Note to Your Valentine — by 2/9

Is there a special message you'd like to send to your valentine? Are you looking for a valentine? You can have your Valentine's Day message printed in The Bulletin on February 13. (We believe that since love conquers all, it will hold off potential bad luck.) Send your 15 – 20 word "love note" to The Bulletin by Monday, February 9, or earlier if possible. If you use paper, send it to BNL, The Bulletin, Bldg. 400C, Upton, NY 11973, and mark the envelope "Valentine's Day." Or, e-mail your message to bulletin@bnl.gov, marked "For Valentine's Day" in the subject line. You must include your name and life number and extension or home phone, but your name will not be printed unless it is clearly part of the message. Copy must be deemed tasteful. All "love notes" will be accepted at The Bulletin's discretion.

Benefits Office Reminders

All medical/dental plan participants are reminded to submit updated proof of student status to the Benefits Office, Bldg. 400B, for the upcoming college semester. The Benefits Office will submit this to the insurance company on your behalf. Proof of student status must be in writing from the college or university and include: the dependent's name, the name of college/university, the semester for which the dependent is attending, and an indication of full-time status (usually at least 12 credits for undergraduate programs).

For a dependent over age 19 to be eligible for benefits, he or she must be unmarried, a full-time student attending an accredited college or university and primarily supported by you. Dependent children who meet these criteria may be covered until the end of the year in which age 23 is attained. Employees covering dependent children over the age of 19 as full-time students should be aware that full-time students are only covered in between semesters if the student attends classes on a full-time basis for both the Spring and Fall semesters. Otherwise, coverage ends on the last day the child attended an accredited college or university on a full-time basis. If there is a possibility that the child may not be in full-time attendance for the Spring semester, please contact the Benefits Office immediately to discuss continuation of benefits through COBRA.

You must notify the Benefits Office if you have dependents on your coverage that do not meet the above criteria. These dependents may be eligible for COBRA benefits. For more information, call the Benefits Office, Ext. 2877 or 5126.

Pick a Summer Student

Student applications for the summer 2009 undergraduate science internship programs sponsored by DOE's Office of Workforce Development for Teachers and Scientists will be available on February 1, for review on an electronic database. Contact Kathy Gurski of the Office of Educational Programs (OEP) at Ext. 4503 or gurski@bnl.gov for the database address and passwords.

Selections for the first round choices must be submitted by February 28, however, the earlier the better to have a greater likelihood of getting a student. Students will be here for ten weeks, from June 1 to August 7. Stipends, housing, and travel are funded through OEP with a \$1,000 cost share requested from the hosting department. See www.bnl.gov/education for more information.

Toastmasters Club Adds Noon Meeting, 2/10

BNL Toastmasters Club is adding a monthly lunchtime meeting on the second Tuesday of each month, from noon to 12:55 p.m., in Berkner Hall, Room D. The next meeting will be on Tuesday, February 10. Toastmasters meetings are a very friendly way to practice public speaking and communication skills, and many BNLeers attend for the fun they experience. Regular meetings, which are on the first and third Tuesdays of the month from 5:30 to 7 p.m., will continue to be held as usual in Room 130 of the Biology Department.

Let It Snow!



James Taylor of the American Physical Society took this photo while out on site with BNLeer/cross-country skier Alistair Rogers on January 19.

Nominations Wanted for Scharff-Goldhaber Prize For Women in Science: Deadline, 2/15

Brookhaven Women in Science (BWIS) is accepting nominations for the Gertrude Scharff-Goldhaber Prize, which was established to recognize substantial promise and accomplishment by a woman graduate student in physics. The award is open to all students who are either enrolled at Stony Brook University (SBU) or are performing their thesis research at BNL.

The prize was created to honor Gertrude Scharff-Goldhaber for her outstanding contributions in the field of nuclear physics, and for her support of women in science. The winner will receive a \$1,000 award from a fund administered by Brookhaven Women in Science, and will be expected to give a seminar on her work at the award ceremony. To be eligible, the nominee must have been admitted to the candidacy for the doctoral degree, must still be actively enrolled in the graduate program, and must not be receiving her degree before Spring 2009.

Nominations can be made by any member of the staff at BNL or faculty of the Department of Physics & Astronomy at SBU. The nominator should include a description of the candidate's accomplishments, a copy of her graduate course transcript, and a list of her publications, with copies of any papers to which she has made a substantial contribution. The Physics Department at the student's university must furnish verification of her candidacy and the expected date of receipt of the degree.

The deadline for nominations is February 15. The award recipient will be announced in April 2009, and the award ceremony will take place in May. Please submit all required materials (before Feb. 15, 2009) to: Linda Bowerman, Ph.D., BNL, EENS Research Operations, Bldg. 185, Upton, NY 11973.

Portfolio Preparation: SCCC Course To Be Offered on Site

Suffolk County Community College (SCCC) will offer a course on Portfolio Preparation, on site, for the spring 2009 semester. This course helps individuals who are choosing a degree program and earning life experience credits towards that degree, especially for those new to SCCC or who have recently started taking courses. For more information, contact Starr Munson, munson@bnl.gov or Ext. 7631.

Invitation: Play in GO Tournament, 2/7

All BNL community members who know GO, a Chinese board game, are invited to join a friendly all-day tournament sponsored by the BERA Asian Pacific American Association at the Recreation Hall on Saturday, February 7, from 9 a.m. until about 5 p.m. All players and their families are welcome at the event. If you plan to attend, contact Xin Zhao, xinzhao@bnl.gov or Ext. 2107.



Roger Shoulenbush xxxxxx

BERA Updates

Virtual Swim to Mexico:

Come join us in the pool and swim laps to help us reach our goal of virtually swimming to Mexico. Swim to get in shape and have fun, and then join us for a tequila party when we "arrive." If you have any questions, contact Peter Heotis, Ext. 7461, or Sue Dwyer, Ext. 3496.

Saturday Pool Hours Extended Until 3/28:

On Saturdays until March 28, the BNL Swimming Pool will open at 9 a.m., a one-hour extension to alleviate waiting for lap swimmers during the Virtual Swim to Mexico, and the increased pool usage during the winter months. Saturday hours will be:

Lap Swimming: 9 a.m. – 11 a.m.; Family Swim: 11 a.m. – 2 p.m.

BERA Summer Camp: Preliminary information has been posted on the BERA website: <http://www.bnl.gov/bera/>. Additionally, a BERA Summer Camp Informational Meeting will be held on Friday, February 6 at noon in Berkner Room B.

Trips

- **Philadelphia Flower Show:** Saturday, March 7. Leave BNL at 6 a.m. Leave PA at 4 p.m. \$35 per person adult or child.
 - **Atlantic City Trip:** Saturday, April 4. Casino to be announced later. Leave BNL at 9 a.m. Leave NJ at 8 p.m. \$25 per person.
 - **NY International Auto Show @ Javits Center, NYC:** Saturday, April 18. Leave BNL at 9 a.m. Leave NYC at 4 p.m. \$20 per person.
 - **Newport, RI Tour:** Saturday, April 25, and Sunday, April 26. Includes ferry (from/to Port Jeff), harbor cruise, Hampton Inn hotel, hot breakfast, tour of Marble House & the Breakers, free time. Single: \$259; double, \$187; triple, \$163; children 17 and under, \$115. \$100 at sign up, remainder by March 24. See also http://www.bnl.gov/bera/linkable_files/Newport-RI-TourBNL2009a.pdf.
- All tickets include transportation on a luxury motor coach, which departs from the Brookhaven Center. Tickets are nonrefundable and are limited to four tickets per person for the first two weeks of sale.

CALENDAR

— THIS WEEKEND —

Today, Friday, 1/30

***Employee Lunchtime Tour**
Noon. Berkner Hall lobby. Meet the group to be taken to see the preliminary magnet calibration system for NSLS-II. All are welcome. No reservations needed. See pg. 4.

— WEEK OF 2/2 —

Monday, 2/3

***Talk on 'Fast, Fabulous Meals'**
Noon. Berkner Hall, Room B. Amy Shapiro, registered dietitian, talks on healthy, quick, home-cooked meals. All are welcome. Register with Michael Thorn, Bldg. 490, or mthorn@bnl.gov. See pg. 2.

Wednesday, 2/4

***Eric Forsyth Shows Sailing Video**
Noon. Berkner Hall. Sponsored by the Brookhaven Retired Employees Association, retiree Eric Forsyth will show a video of his latest sailing adventure, to the west coast of Greenland. All are welcome to this free event.

Friday, 2/6

***What It Means To Go 'Red'**
Noon. Berkner Hall. Jean Marie Cacciabuado, M.D., will talk about maintaining a healthy heart. Register at Ext. 2733 or nlosimmo@bnl.gov. See pg. 2.

Saturday, 2/7

***Play in GO Tournament**
9 a.m.-5 p.m. Recreation Hall. BNL community members who know the Chinese board game "GO" are invited to a friendly tournament. Bring the family. Contact Xin Zhao, xinzhao@bnl.gov or Ext. 2107. See notice at left.

— WEEK OF 2/9 —

Thursday, 2/12

***BNL Blood Drive**
9:30 a.m.-3 p.m. Brookhaven Center. See pg. 2.

— WEEK OF 2/16 —

Monday, 2/16

President's Day, Holiday
The Lab will be closed for President's Day. No Bulletin will be issued on Friday, 2/20.

Tuesday, 2/17

***'Exercise Anywhere, Any Time'**
Noon. Berkner Hall, Room B. Amy Shapiro, registered dietitian, will give a talk on exercise. All are welcome. Register with Michael Thorn, mthorne@bnl.gov or Bldg. 490.

Wednesday, 2/18

446th Brookhaven Lecture
4 p.m. Berkner Hall. Lin Yang, National Synchrotron Light Source Department, will talk on "Beyond Protein Crystallography: Seeking Alternatives to Study Biological Membranes and Membrane Proteins." All are welcome to this free public lecture. Visitors to the Lab of 16 an older must carry a photo ID.

Saturday, 2/21

Rock Bands Electrix, Reckoning
7 p.m. Berkner Hall. Local rock band The Electrix, together with the band Reckoning, will liven the evening at BNL. All are welcome to this concert, open to the public. Tickets are \$15 in advance at the BERA Store or www.ticketweb.com, or \$20 at the door.

Arrivals & Departures

— Arrivals —

Javier Castro-Barba CFN
Annamaria Cuomo-Trillo ..Staff Srvc.
Salvatore DiStefano NSLS-II
Susan Hulse.....Modernization Prj.

— Departures —

Natalia Abreu C-AD

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 "Job Opportunities," then "Search Job List."

LABORATORY RECRUITMENT – Opportunities for Laboratory Employees

MASON (LG-7) – Performs a wide variety of cement and concrete work. Lays brick and blocks, and does grouting and finishing as required. Site Services Division Submit an Employee Transfer Request to Diana Hubert, Bldg. 400B. Job ID # 14719.

OPEN RECRUITMENT – Opportunities for Lab employees and outside candidates.

POSTDOCTORAL RESEARCH ASSOCIATE (Computational Surface Physics and Catalysis) – Requires a Ph.D. in physics, chemistry or materials science with primary focus on theoretical research. Candidates should have a strong record of research experience, including the use of computational electronic structure methods. Primary research areas of interest for this position include structure and catalytic activity of transition metal nanostructures, the role of interaction with gas phase molecules and support surfaces, and the properties of epitaxial grapheme on transition metal supports. Research projects in this position will involve close interaction with experimental programs in the Interface Science and Catalysis Group of the CFN. Under the direction of P. Liu and M. Hybertsen, Center for Functional Nanomaterials. 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 # 14729.

POSTDOCTORAL RESEARCH ASSOCIATE (Material Sciences) – Requires a Ph.D. in chemistry, materials science, or physics, with specialization in polymer sciences. Candidates should have solid laboratory skills and significant experience in at least one of the following fields: polymer chemistry, polymer physics, time-resolved spectroscopic/microscopic methods, charge/energy transfer phenomena in organic and nanoscale systems. This position is open in the Soft Bio Materials Group at the Center for Functional Nanomaterials with focus on the development and characterization of novel hybrid structures based on polymers, inorganic nanoparticles, and carbon-based materials for potential application in solar energy conversion. Will investigate charge/energy transfer processes in hybrid materials using time-resolved optical methods and scanning probe microscopy (AFM) and will be involved in material fabrication. Will also interact with members of the Center for Functional Nanomaterials to reveal structure-function relationships using in-situ x-ray scattering techniques and characterize performance of hybrid structures. Under the direction of M. Cottlet, Center for Functional Nanomaterials. 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 # 14730.

ASSISTANT SCIENTIST (S-1) (Reposting) – Requires a Ph.D. in engineering, physics or a related field and at least two years' post-doctoral experience. Will perform the definition, analysis, specification and troubleshooting of high power klystron amplifiers and high voltage power supplies. Expertise with test and measurement equipment, in particular network and spectrum analyzers is required. Experience with high power RF generation and transport, high voltage power supplies, and related crowbar circuits preferred. Expected to be familiar with finite element electromagnetic field solvers and will assist in the modeling of coupling aperture in SCRF cavity and assist with and perform analysis of hybrid combining vs. cavity combining of four IOT amplifiers. Additional responsibilities include assisting with booster cavity turner feedback loop modifications and cavity field controller tests. May include the design of a cavity based high power combiner using the finite element codes Microwave Studio or Superfish, performing bead perturbation electromagnetic field measurements of landau copper cavity model for SBIIR, and assisting in the development of the frequency up/down

conversion system for the cavity controllers. Will report to the RF Group Leader, National Synchrotron Light Source II. Apply to Job ID # 14624.

ASSISTANT CONTRACTS SPECIALIST (A-4, reposting) – Requires a bachelor's degree in business administration or related degree emphasis, with one to three years' related experience; or other degreed education augmented by additional related work experience. Requires familiarity with procurement concepts such as sourcing, bidding, requests for quotation/proposal, negotiation, and contract administration and excellent verbal and written communication skills. Must be computer and Microsoft Office literate. Knowledge of the Federal Acquisition Regulation (FAR) and Department of Energy Acquisition Regulations (DEAR) requirements desired and considered a plus. Must be a multi-tasker in a fast-paced environment. Under general supervision, will be responsible for contracts administration (invoice approvals, expediting, cycle-time, contract amendments, documentation and maintenance of files). Will also be assigned requirements for the procurement of goods and services through contractual agreements and purchase orders, in accordance with procurement internal work instructions, procedures and policies applicable to the Procurement department and Laboratory. Will be required to interface with peers, management, internal customers, and external suppliers on a daily basis. Will also be responsible for entering data into the PeopleSoft procurement module. Familiarity with PeopleSoft data base procurement system is a plus. Procurement & Property Management Division. Apply to Job ID # 14490.

ASSISTANT STAFF SPECIALIST (A-4) – Requires a bachelor's degree with experience in business/database management, development, and maintenance or a combination of education and related work experience that would provide an equivalent level of broad knowledge and expertise. Experience in or knowledge of legal guidelines and terminology is preferred. Requires excellent oral and written communication, organizational, decision-making, and interpersonal skills. Proficiency in Microsoft Office required; knowledge of PeopleSoft highly desirable. As an agent for the Laboratory, must exercise professional discretion and judgment while working independently. Will be responsible to identify appropriate intellectual property agreement for each affiliation at BNL, ensure that appropriate stipulations are met, and have ability to answer questions, as well as identify and resolve issues that arise. Discretionary and confidential handling of sensitive information is essential. Responsibilities include the coordination of intellectual property agreements for the Laboratory including collecting, processing, tracking, and renewing intellectual property agreements for all guests and visitors of the Laboratory to ensure that all guests and visitors comply with BNL/DOE's requirements on intellectual property; administering and maintaining all required database functions as well as administrative records and reporting for the Laboratory. Candidate will be required to work closely with personnel in the Business Systems Division in designing a PeopleSoft system to administer this program as well as BNL's Legal Counsel to facilitate legal reviews as necessary. Candidate will initiate new Designated User Facility Agreements for BNL's experimental facilities and assure agreements are renewed when required and are active when guests perform work at BNL. Candidate will also prepare documents and record keeping for proprietary user agreements and for reporting to DOE. Candidate will work with guests and their Sponsored Research Program Offices at universities and industries around the world to determine appropriateness of specific agreements and communicating DOE requirements to the legal counsels outside the Laboratory. Candidate will report directly to the manager of the GUV Center. Director's Office. Apply to Job ID # 14728.

ADMINISTRATIVE SERVICES ASSISTANT (A-2, two positions) – Requires four years of relevant experience or an AAS (business, computer technology, or database management) with two years' relevant experience or a bachelor's degree in a business field. Must have working knowledge of basic database development and maintenance skills; strong analytical, communication, and interpersonal skills; and proficiency in MS Office. In addition, must work independently within established procedures and guidelines, be able to handle non-routine office matters, and be responsive and resourceful in responding to the needs and problems of scientists visiting and working at BNL. Knowledge of PeopleSoft programs is a plus. Knowledge of Laboratory policies and procedures and experience in issuing Laboratory appointments and check-in process, which requires a clear understanding of acceptable working INS documentation, personal identifiable information (PII), and all supporting documents associated with work-type visas is a plus. Position requires working non-traditional business days and/or hours. Job involves extensive interaction with user communities, department guests, and BNL staff. Performs complex administrative functions and maintains confidential administrative records and reports. Utilizing various databases; primary responsibilities include issuing user appointments;

monitoring training exams; ensuring guests have signed patent and facility agreements in place before working; issuing BNL ID badges, dosimetry badges, and facility access cards; database maintenance and input; expediting requests for foreign national access and initiating extension of guest appointments; and administrative support to the Head of the Guest, User, & Visitor Center. Director's Office. Apply to Job ID # 14726.

INSTRUMENTATION TECHNICIAN/TECHNICAL SPECIALIST (T-2) – The Center for Functional Nanomaterials (CFN) is seeking a candidate to fill a technical staff position in the Electron Microscopy Group/Facility. This position requires an associate's degree in science or engineering, with at least four years of experience in materials processing; or preferably, a Bachelor's degree in materials science/engineering, physics or chemistry and at least two years' experience with materials processing. Must have excellent communication skills and interest in training others. Knowledge of electron microscopy and instrumentation is preferred. The CFN is a user-oriented research center whose scientific focus is on energy-related themes. The successful candidate, under the supervision of the group leader of the Electron Microscopy group, will be responsible for sample preparation for transmission electron microscope (TEM) measurements, instrument maintenance, and assistance with structural characterization of functional materials using electron microscopy. Will work with users of the TEM facility, training them in sample-preparation techniques and related activities, and supporting their research needs at the CFN. Center for Functional Nanomaterials. Apply to Job ID # 14720.

Motor Vehicles & Supplies

03 MERCURY MARAUDER – black/black, rem. start, 6 cd changer, loaded, warr, excel cond. 19K mi. \$18,500/neg. 379-7961.
02 HONDA ACCORD LX – 4cyl, 4dr, 5spd, orig ownr, no accids, 32 mpg, excel. cond., dearl. maint. 66K mi. \$7,500/neg. Ext. 2799.
00 HONDA ACCORD LX – 4cyl. 4dr. a/t a/c new tires/r brkes, snow tirs w/rims, orig. ownr. 140K mi. \$4,000/neg. Ext. 2635.
98 CHEVY BLAZER – red, 2 dr, 4wd, a/t, all pwr, m/roof, 4.3L, runs well! pics avail. 124 mi. \$3,400/neg. Steve, Ext. 2496.
87 BUICK GRAND NATIONAL – 6cyl., a/t, p/s, p/b, good condition. 60K mi. \$5,000. Andrew, Ext. 4408 or 631-775-6801.
TIRES – 2, new, 195/65R14, off Nissan Stanza, rims 4 lug 14.5/2X5.5, MFG Geo-star, new valves, \$100/set of 2. 487-5717.

Furnishings & Appliances

BEDROOM SET – solid wood, queen, head/ft boards, dresser w/mirror, armoire/nightstand, \$300/all. 871-5652.
CAR SEAT – Britax, roundabout, front/rear facing for newborn/yr., sell/\$199, ask/\$50. Ext. 3008.
COUCH – 2 chairs, ottoman, beige country print, gd. cond., pix avail. upon request, \$325/all, u-pic-up. Donna, Ext. 2826.
ITEMS TO SELL – Air conditioner 25\$; IKEA 5-shelf bookcase & desk 10\$ ea. Chen, Ext. 7698.
WASHER/DRYER – Kenmore wshr, 8 yrs old, excel cond, Whirlpool dryer, older, works perfectly. \$125/pair/obo.Ext. 7132.
WATER COOLER – w/one bottle, 2 spigots, cold & rm temp., \$20. Ext. 7132.

Audio, Video & Computers

DRUM MACHINE – Roland R-5, w/user manual; Compaq handheld computer, iPaq 3800, Windows CE, MS Word/Excel, make offer; Verizon Samsung camera phone, \$15. Ext. 3621.
HP COMPUTER – Windows 2000 Pro, CDRW; Envision 14" flatscreen & Logitech webcam incl. \$250/all. 236-2315.
NIKON COOLSCAN IV 35MM SCANNER – slide/negative scanner w/ digital ICE dust/scratch remover, like new cond., \$450. Chris, Ext. 2326.
ULTRAMOBILE PC – Asus Eee, 4G w/7" LCD, Intel CPU, 512mb ram, 4gb solid state disk, Linux, webcam, WiFi, \$225. Ext. 2492.
VCR – Hitachi #VT-FX6404A w/remote, excel. cond.; numerous pre-viewed Disney tapes, free. Chris, 741-9169.

Sports, Hobbies & Pets

LIGHTNING MCQUEEN BIKE – Toddler, \$30. Ext. 3008.
POOL TABLE – Kasson, 8' 1" slate, ball return, 4 cues, cue bridge, 9 ball & standard racks, \$800. 467-4222.
PUPPY – Mixed breed, 2 mos. old, v/ friendly, shots, needs gd. home. Darcy, Ext. 3362 or 335-5093.

Tools, House & Garden

PELLETS – premium, hardwood pellet fuel, call for more info. Chris, 741-9169.
SKIL BANDSAW – 10", #HD3640, almost brand new, excel. cond., \$100. 286-9606.

Miscellaneous

\$50 GIFT CERTIFICATE – to Rookies Sports Club, Huntington, NY, sell/\$20, expires 2/25/09. Heather, Ext. 4138.
CAT AUTO FOOD & WATER FEEDER – used, but in exel. shape, \$20; cat litter box \$10; buy all w/cat play pen, scratcher, free. Yong, Ext. 7022.
LUGGAGE SET – 5pc Samsonite, dk grn, gd. cond., incl overnighter, carry-on/suit bag, \$25/set. Ext. 4567 or 516-241-4598.

Employee Lunchtime Tour Today, 1/30

See preliminary magnet calibration system for NSLS-II

Today, Friday, January 30, join the Employee Lunchtime Tour to see the preliminary magnet calibration system for the National Synchrotron Light Source-II (NSLS-II). A novel approach to ring design and installation is being worked on for the NSLS-II project. Prior to selection for the \$923 million facility, magnets from around the world are being tested by BNL's NSLS-II and Superconducting Magnet Division staff in a new environmental room where the temperature can be controlled to 0.05 degrees C to simulate tunnel conditions. Meet the group in the upper lobby of Berkner Hall at noon to begin the tour. The group will return to Berkner by 1 p.m. No reservations are necessary.

Become a Lab Envoy: Learn More About BNL, Share What You Know

The Envoy Program of the Community Relations Office offers monthly presentations during work hours to employees interested in BNL so that employee-envoys can learn more about the Lab. The goal: to enable employees to be knowledgeable and comfortable enough to speak to their co-workers, neighbors, friends, and family about BNL's science and operations — and to bring questions, issues and concerns back to the Community Relations Office.

Created in 1998, the Envoy Program is now being revitalized under its new coordinator, Nora Detweiler. Having joined the Lab last June, she also organizes BNL's Summer Sunday open houses.

To encourage new membership, Detweiler is holding an open meeting at 9 a.m. on Wednesday, February 11, for all BNL employees who, with their supervisors' concurrence, would like to consider becoming an envoy. The meeting will take place in the large conference room of the Medical Department, Bldg. 490, where Detweiler will discuss what employees can get out of the program and what they will be expected to give back through their participation. Light refreshments will be served.

If employees become envoys, they will be updated monthly on the Lab's latest discoveries, improvements, or issues at a meeting of the envoys. At the February meeting for instance, Tim Green, who is the Lab's Cultural and Natural Resources Manager, has been invited to discuss the Lab's natural resources management program.

For more information, contact Detweiler, ndetweiler@bnl.gov or Ext. 4458. — Marsha Belford

Attn.: Lovers — Send a Love Note to Your Valentine!

Valentine messages will be printed in the Bulletin, 2/13. See details, p. 3.

Happenings

50'S NIGHT – Enjoy live 50's music while you bowl @ Shirley Lanes on 1/31, 7-10 pm. call to reserve tickets \$22. Jeff, 603-5184.
MEMORIAL FUNDRAISER – For Angelica Nappi, Feb. 14th, The Bayard Cutting Arboretum, Oakdale, \$25. Call for more info. Dawn Nappi, 428-4229.

Farewell Gathering

BILL HEMPFLING – Retirement Party, Friday, Feb. 27, B'haven Center - South Room, 5:30-8pm, \$35/pp. Leesa, Ext. 2700.

Free

BETA VIDEO CASSETTE TAPES – 24. Yin-Nan, Ext. 3294.

Wanted

ADOPT-A-PLATOON – Monetary donations always gratefully accepted towards mailing shipments to military overseas. Joanne, Ext. 8481.
BOXES – for moving house, if anyone has spares, I could use them! Ian, Ext. 3393.
CAR SEAT – convertible, for toddlers, gd. cond. Yuping, Ext. 4992.
DOCK SLIP – Moriches area, reasonably priced for 23-24' boat. Ext. 2576 or 589-5490.
FUTON – v/gd. cond. Bobbi, 291-0245.
LARGE DOG CRATE – under \$50. Christine, Ext. 7101.
LOVE SEAT & KIT. TABLE – Looking for a love seat/couch and kitchen table with 4 chairs. Ext. 8213.
MATTRESS – q-size, like new cond., low price. Ext. 3621.
PACK N PLAY – Good condition. Reasonable price. Ext. 2716 or 878-2425.
PITCHERS, CATCHERS & OUT FIELD – Long Island Knights, 16u travel baseball team, playing local tournaments & at Baseball Heaven. Veronica, 281-6399.
SEAMSTRESS – Needed to machine assemble child's cloth character book Batting, cloth, thread, instructions provided. Carol, Ext. 3667 or 928-6955.

Lost & Found

CELL PHONE – lg brand, verizon, flips open, probably lost in prkg lot of bldg. 197 or 490. Cindy, Ext. 3461.
FOUND – Scarf brown/beige blocks of color in 911. Ext. 5090.
LOST KEYS – bldg. 400/prkg. area, blue clasp w/multi color ring guard. 331-8763.

For Rent

BELLPORT VILLAGE – 2 bdrm, 2 bath house, lg kit., d/r, l/r w/fp, wood flrs, 2 screen porches, fen. yd, patio, +utils. \$1,600/mo. Brooke, 286-9203.

KEY WEST, FL – T/share in historic town, priv beach, pool, hottub, kit, w/d, gym, deck over water, gar, 1-2 wks Apr 11-25, 1&2bdrm/2bath units. \$900/wk. 929-8741.

MASTIC – 3 bdrm house, all wd flrs, open flr plan, circle drwy., fen. yd. w/swings/ slide, clubhouse, cable incl., +utils, no smkg/pets. \$1,300/mo. Michell, Ext. 2541.

MIDDLE ISLAND – all renov. 2BR, 1.5 bath condo. new kitch. & bath, new perg, w/ dows, CAC, laundry rm., clubhouse, gym, pool, near BNL. \$1,500/mo./neg. 767-7916.

RIDGE – Very cute prvt single person studio kitchenette & bathroom house utilities extra. nr. BNL off Wm Floyd pkwy no pets. 1 mo sec 1 mo rent lv msg \$800/mo. 631-744-0559, 631-775-7159.

ROCKY POINT – charming 2 bdrm apt., priv. ent/drway, incl. heat. \$1,200/mo. 849-2908.

SELDEN – 1 bdrm., l/r, kit., drway prkg, priv. patio and ent., a/c, basic cable incl., own thermostat, no smkg/pets, incl. all, 1 mo. sec. \$990/mo. Sue, Ext. 4931.

SHIRLEY – room, kitnet/furn, full bath, sep ent, heat/elect/int/ all incl., 5min to stores beach LIRR, 15min to Lab/no smkg/pets, 1 mo sec. \$600/mo. (631)804-8609.

WADING RIVER – studio apt, priv., comm., huge bath, wood flrs, walk-in closet, plenty of storage, gar. avail., cable/util. incl. \$900/mo. 793-4598.

For Sale

MILLER PLACE/SOUND BEACH – 3 bdrm, 2 bath, Ranch, Legal M/Dghtr, Diamond Rated, \$395,000/neg. 872-9268.

PORT JEFF STATION – 4 bdrm Col in 3-Village SD. 1 car gar., f/p, igr, 2 zone gas heat/hw, cac, lg fen. property, lg sunrm w/ hot-tub. \$400,000. Ext. 2159 or 834-8255.

ROCKY POINT – 3 bdrm, 1.5 bath, gar. & workshop, 59 acre park-like setting, Move in cond. approx. 1300sq. ft. \$329,000/neg. Rolf, Ext. 2305.

SHOREHAM – 4 bdrm., 2.5 bath Col., frml l/r and d/r, den w/fp, fin. bsmt, 12 x 20 deck, igs, new granite counters, SWRSD, 7 mi to Lab, \$499,900. 821-3320.

In Appreciation

To my Co-Workers & Friends at BNL: Words cannot express my sincerest thanks for your prayers & generosity at the loss of my father. It means a lot to me & my family.

— Ralph Giordano & Family

Thank you to all of my Dad's friends at BNL for their good wishes and generous gift.

— Bob Metz Jr.