Bulletin



Vol. 56 - No. 21 June 21, 2002

Secretary Abraham Gives Go-Ahead for BNL Nanoscience Center

n behalf of the Department of Energy, I am pleased today to officially announce our approval to begin the conceptual design of the \$85 million Center for Functional Nanomaterials here at Brookhaven."

With this statement, U.S. Secretary of Energy Spencer Abraham declared last Friday, June 14, that DOE will establish a Northeast center for nanoscience research at BNL, as one of five such facilities to be built around the country under the National Nanotechnology Initiative.

The study of materials the scale of billionths of a meter (or 1,000 times smaller than a human hair), nanoscience is expected to allow researchers to design materials tailored to specific needs, such as strong, lightweight materials, new lubricants, and more efficient solar energy cells.

Abraham announced this good news — BNL's first scientific facility construction project since the Relativistic Heavy Ion Collider (RHIC) — at a Lab-wide meeting in Berkner Hall, during the Energy Secretary's first visit to BNL. Abraham delivered his remarks after touring the Lab with BNL Interim Director Peter Paul, U.S. Representative

BNL researchers display an oil burner adapted to biofuels.



At a press conference held after Secretary of Energy Spencer Abraham announced DOE's support for the nanocenter at BNL: (from left) Director of DOE's Office of Science Raymond Orbach, U.S. Representative Felix Grucci, Secretary Abraham, and BNL Interim Director Peter Paul.

Felix Grucci (R-NY, First District), and DOE Office of Science Director Raymond Orbach.

The design and construction activities of the nanoscience center at BNL are expected to start in fiscal year (FY) 2004, with commissioning planned for FY2007. The project's pre-

liminary cost estimate is \$70-85 million. Under DOE's Office of Science, the conceptual design report will be prepared immediately so that construction funding can be requested from Congress.

A standing ovation followed Abraham's announcement as the audience of BNL employees, facility users, and other guests showed its enthusiasm for this new scientific facility, which will allow BNL to become a major player in the new field of nanoscience.

"Nanoscience offers the potential for a second industrial revolution," Abraham said. "The implications are enormous. That is why we are so serious about America's leading the way in nanoscience."

Grucci, a member of the House Committee on Science and a leader on science issues, introduced Abraham, citing the Energy Secretary's strong commitment to science policy from the time when he was U.S. Senator from Michigan, 1995-2001.

"Abraham was widely viewed by his colleagues and most observers as the senator with the most and the best understanding of high-tech policies and issues," Grucci said. As Abraham elaborated, the new center at BNL will be a user facility open to researchers from across the country and around

the world who will gain access

Secretary Abra-

ham (left) learns

about the U7A

beam at the Na-

tional Synchro-

tron Light Source

(NSLS) from re-

searcher Daniel

Fischer, NIST: and

NSLS Chair, Steven

Dierker (right). See also story below.

to its state-of-the-art instruments and equipment through a peer-review process.

"When this center is complete, physicists, chemists, material scientists, and biologists will work with computer scientists and engineers exploring the world atom by atom," Abraham said.

"You need major facilities for this kind of work, major facilities with the best new technology and the best minds America has to offer," he continued. "We have all of this here at Brookhaven."

In his welcoming remarks, Paul had emphasized the Lab's role in pursuing forefront scientific research, both fundamental and applied, and reinforcing collaborative efforts with other scientists, from both research institutions and industry.

"Our motto is 'a passion for discovery,' " Paul told the audience. "We work with a passion for the science and the sciencebased applications that derive from it for the good of the nation and industry."

Abraham acknowledged that nanoscience is still a basic (continued on page 2)

Spencer Abraham (below, left), Peter Paul, and BNL Associate Director for Basic Energy Sciences Richard Osgood.



Roger Stoutenbu

U.S. Representative Felix Grucci (left), U.S. Secretary of Energy Spencer Abraham, and BNL Interim Director Peter Paul look on as Thomas Butcher (right), Energy Sciences & Technology Department, explains BNL's oil heat research. In the foreground is a typical home oil burner that has been adapted to burn biofuels, fuels derived from renewable sources such as plants. BNL's oil-heat research has been prominently featured at two recent DOE-sponsored events, including one last month in Washington, D.C., celebrating the first anniversary of President Bush's national energy policy.

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BNL, NIST, Norway Gain New Insight Into the Superconductivity of MgB₂

New insight into the superconductivity of magnesium diboride (MgB₂) has been recently revealed by a team of scientists from BNL, the U.S. Department of Commerce's (DOC) National Institute of Standards & Technology (NIST), and the University of Oslo in Norway. The findings appear in the June 17, 2002, issue of *Physical Review* Letters.

The new information about MgB₂, an unusual superconductor discovered only last year, may lead to a deeper understanding of superconductivity — the ability of some materials to conduct electricity without losing energy — which could lead to improved magnetic resonance imaging, more efficient

electric power transmission, and smaller, more powerful electronic devices.

"Scientists usually assume that superconductivity arises from electrons coupling in pairs," said Yimei Zhu of BNL's Materials Science Department, lead author of the study. "Though this is the case for most superconductors, it has not been shown yet how electrons contribute to superconductivity in magnesium diboride."

So, the team decided to investigate this, through research supported by DOE and DOC.

Since the discovery of superconductivity in MgB₂, BNL theoretical scientists, led by physicists James Davenport, Energy, Environment, & National Security Directorate, and Guenter Schneider, Physics Department, made extensive calculations involving interactions between electron "holes," which are empty locations that could be filled by electrons.

"Superconductivity in MgB₂ is expected to arise from interactions between holes," said team member Arnold Moodenbaugh of Materials Science. "Because MgB₂ is made of alternating planes of boron and magnesium atoms aligned parallel to one another, these holes are expected to interact more easily within the planes than between adjacent planes."

(continued on page 2)



Near the NIST/Dow beam line U7A at the NSLS, where part of the MgB2 study was conducted, are: (front, from left) team members Daniel Fischer, National Institute of Standards & Technology; Yimei Zhu, Genda Gu, and Arnold Moodenbaugh, all of BNL; Johan Tafto, University of Oslo, Norway; Tom Vogt and James Davenport, both of BNL. Not present are: Qiang Li and Guenter Schneider, both of BNL.

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The Bulletin June 21, 2002

Calendar

of Laboratory Events

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

— EACH WEEK —

Weekdays: English for Speakers of Other Languages Classes

Beginner, Intermediate, and Advanced classes. Various times. Learn English, make friends. For a complete schedule, see www.bnl.gov/esol/ schedule.html. Jen Lynch, Ext. 4894.

Mon., Tues., & Thurs.: Kickboxing

\$5 per class. Mon. & Thurs. noon-1 p.m. in the gym; Tues., 5:15-6:15 p.m. in the gym; Thurs., 5:15-6:15 p.m. in Brookhaven Ctr. Registration is required. Mary Wood, Ext. 5923, or wood2@bnl.gov.

Mon., Tues., & Fri.: Tai Chi

Noon- 12:45 p.m., Rec. Bldg. Scott Bradley, Ext. 5745, bradley@bnl.gov.

Tuesdays: BNL Music Club

Noon, North Room, Brookhaven Center. Come hear live music. Joe Vignola, Ext. 3846.

Tuesdays: Welcome Coffee

10-11:30 a.m. Rec. Bldg. Hospitality event. Come and meet friends. The first Tuesday of every month is special for Lab newcomers and leaving guests. Hospitality Chair Monique de la Beij, 399-7656.

Tuesdays: Toastmasters

Meetings are 1st and 3rd Tuesday of each month at 5:30 p.m. in Bldg. 463, Room 160. Guests, visitors always welcome. www.bnl.gov/bera/activities/toastmstrs/default.htm.

Tuesdays & Thursdays: Aerobics

5:15-6:30 p.m., \$4 per class. Rec. Bldg. Pat Flood, Ext 7886.

Tuesdays & Thursdays: Aqua Aerobics

5:15-6:15 p.m. \$2 pool fee per class or use pool pass. Mary Wood, Ext 5923.

Wednesdays: On-Site Play Group

9:30-11:30 a.m., Meet at the playground in the apartment area. Parents meet while children play. Monique de la Beij, 399-7656.

Wednesdays: Weight Watchers Noon-1 p.m., Brookhaven Center South Room. Mary Wood, Ext. 5923, wood2@bnl.go

Wednesdays: Yoga Practice

Noon-1 p.m., Brookhaven Ctr. Free. Ila Campbell, Ext. 2206.

Wednesdays: Stretch

5:15-6:15 p.m., \$4 per class. Rec. Bldg. Pat Flood, Ext 7886. Wednesdays: BNL Ballroom, Latin &

Swing Dance Club Lessons 5-9 p.m. North Ballroom, Brookhaven Center.

Marsha Belford, belford@bnl. gov or Ext. 5053, or www.bnl.gov/bera/activities/dance. Thursdays: Science Discussion Group

12:30-1:30 p.m., Berkner Hall, Room A or D.

Patrice Pages, Ext. 3270, pages@bnl.gov. Thursdays: Falun Dafa Class

Noon-1 p.m., Free. Rec. Bldg. Falun Dafa refines the body and mind through exercises meditation. www.falundafa.org.

Fridays: BNL Social & Cultural Club

7-11:30 p.m., Brookhaven Ctr., social. Rudy Alforque, Ext. 4733, rudy@bnl.gov.

June is Gay Pride Month

A display commemorating gay pride is set up in the Berkner Hall lobby. For more information, see www.bnl.gov/ bera/activities/globe.

— WEEK OF 6/24 -

Monday, 6/24

IBEW Meeting

6 p.m., Knights of Columbus Hall, Rail-road Ave., Patchogue. 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.

Thursday, 6/27

Voicestream Wireless Demo

10 a.m. - 2 p.m., Berkner Hall. Special rates will be presented to BNLers on Voicestream's wireless network. Richard Goll, (516) 343-5900.

WEEK OF 7/1 —

Wednesday, 7/3

Spirit Dinner Cruise

\$89 per person, 12 or older only. Celebrate Independence Day by sailing around Manhattan. Cruise past Ellis Island, the Statue of Liberty, and other landmarks. Bus transportation, a hot and cold buffet dinner, live music, and other entertainment will be provided. Tickets available at the BERA Sales Office. Andrea Dehler, Ext. 3347.



Secretary of Energy Spencer Abraham.



(From left) Bill Christie, BNL; Jane Abraham; Staffer Majida Dandy, DOE; Director Raymond Orbach, DOE's Office of Science.



(From left) Secretary Spencer Abraham, Associate Laboratory Director Ralph James, and BNL Deputy **Director for Operations Thomas Sheridan**



(From left) Secretary Spencer Abraham, Associate Laboratory Director for Basic Energy Sciences Richard Osgood, Associate Laboratory Director for High Energy & Nuclear Physics Thomas Kirk, and Associate Laboratory Director for Life Sciences Nora Volkow.

BNL Nanoscience Center

science with no clear applications yet. But he expressed his commitment to supporting basic science because of its unknown ultimate applications.

"What is so exciting about the work we do [at DOE] is that we produce benefits to America and the world that go well beyond the original scope of our mission," he said. "No one really knows where nanoscience will ultimately lead us, but we do know that we are at the beginning of a science initiative that may change the way we look at, and can use, the world around us."

Before the all-hands meeting, Abraham, Grucci, and Orbach, with the Secretary's wife, Jane Abraham, Frank Crescenzo, Acting Manager of DOE's Brookhaven Area Office, and others had toured some of the Lab's main facilities. After receiving an overview of the Lab from Paul, they listened to a lunchtime presentation by Nora Volkow, Associate Laboratory Director for Life Sciences, on the Lab's positron emission tomography facility and the proposed cyclotron isotope research center. Following lunch, the group toured the RHIC tunnel and STAR detector, accompanied by Thomas Kirk. Associate Laboratory Director for High Energy & Nuclear Physics, and others, and learned about BNL's national security and energy research from Ralph James, Associate Laboratory Director of Energy, Environment & National Security. The visitors were then shown the National Synchrotron Light Source (NSLS) by Richard Osgood, Associate Laboratory Director for Basic Energy Sciences, and Steven Dierker, NSLS Chair, including an overview from Osgood of the then-proposed nanoscience center.

(cont'd.)

"With RHIC and with the nanoscience center, which we launch today, Brookhaven is on track to remain one of America's — and the world's — most valuable centers for scientific research," Abraham concluded. — Patrice Pages

To read a full transcript of Secretary of Energy Spencer Abraham's speech to the Berkner Hall audience, go to http://www. energy.gov/HQDocs/speeches/2002/junss/ BrookhavenNationalLaboratory.html.



(From left) Nonproliferation & National Security (NNS) Department Chair Joseph Indusi, U.S. Representative Felix Grucci, Energy Secretary Spencer Abraham, Acting Area Manager of DOE's Brookhaven Area Office Frank Crescenzo, NNS's Nonproliferation & Counterterrorism Division Head Paul Moskowitz, and Associate Laboratory Director for Energy, Environment, & National Security Ralph James.

Photos on this page are by Roger Stoutenburgh.



In the tunnel of the Relativistic Heavy Ion Collider: (from left) U.S. Representative Felix Grucci, Acting Deputy Laboratory Director for Science & Technology Satoshi Ozaki, Energy Secretary Spencer Abraham, Accelerator Division Head Thomas Roser of the Collider-Accelerator Department, and BNL Interim Director Peter Paul.

Superconductivity of MgB,

Johan Tafto, a physicist at the University of Oslo and another team member, added, "Compared to other superconductors, MgB, has a relatively simple structure. So, we hoped to get more insight into superconductivity by focusing on a simple compound rather than on more

complex ones." The theoretical predictions about MgB2 were tested with two

complementary techniques: xray absorption spectroscopy and electron-energy-loss spectroscopy. In the first technique, very intense x-rays enter the sample and are absorbed by the electrons inside it.

(cont'd.)

In this experiment, the electrons, which are ejected out of their original positions, are tracked in a unique x-ray detector designed and built by NIST

physicist Daniel Fisher and his team.

"When the ejected electrons fall into the holes, they reveal the number and density of the holes in the sample," said Fischer, who has worked with the x-ray absorption technique for the last 18 years at the NSLS.

The second technique uses state-of-the-art transmission electron microscopes (TEMs) at BNL. Unlike optical microscopes, which use visible light,

electron microscopes project electrons toward the sample. These electrons transfer some of their energy to electrons in the sample, which bump around the sample atoms and reveal the positions of electron holes.

"We needed to use both techniques because they complement each other so well," said Zhu. "They lead to a very accurate determination of the distribution and number of electron

(continued on page 3)

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Lab Safety **Awareness Day** Monday, July 8



Billy Robbins

BNL is planning a Safety Awareness Day for Monday, July 8. The day will include presentations in Berkner Hall and department/division staff meetings all over the site.

At 10 a.m. in Berkner Hall, motivational speaker Billy Robbins will give a talk on safety.

In December 1980, while working on a power cable, Robbins was injured in an terrible accident that resulted in the amputation of both his hands. Since then, he has become one of the most recognized motivational speakers in the U.S. His talk, "Hooked on Safety," can change the way people view safety for a lifetime. The presentation is open to all, but technicians, support personnel, and departments or divisions with occupational injuries above the BNL average will be asked to attend.

Later that day, at 3 p.m., in Berkner Hall, retired DuPont scientist and manager Paul Kende will talk about his R&D experience and line responsibility for safety of groups of up to 120 individuals.

Under his leadership, these groups delivered business and technical results safely with zero lost-time injuries. By reducing workplace injuries, illnesses, and death, companies can improve performance, operating costs, public image, and employee morale. Kende's talk will be open to all employees. Scientific staff, principal investigators, and users are urged to attend.

Each year BNL spends millions of dollars in worker's compensation. All are invited to attend one or both talks to see what can be done to work more safely and reduce costs. "Safety Works for Everyone!" is a watchword for this day and henceforward.

— Jane Koropsak

Battelle With BNL Runners/Cyclists Contributes to Long Island Cares



n a visit to BNL on June 7, Carl Kohrt (above, left), BSA Board Vice Chair and Battelle President and CEO, joined with BNL's General Counsel Gregory Fess (third from left) and Peter Pohlot, Environmental Services Division and president of the BNL Runners & Cyclists Club, in giving a check for \$1,000 from Battelle to Kathy Sullivan (right) of Long Island Cares, Inc. In addition, 235 pounds of nonperishable food was collected for Long Island Cares during BNL's third annual 4-Mile Earth Day Race, which was held on April 20 and drew more than 140 participants. Long Island Cares, Inc., is a not-for-profit, anti-hunger organization and food bank, which was founded in 1980 by the late singer and activist Harry Chapin in response to the immediate needs of hungry Long Islanders. The agency works in partnership with charitable agencies in Nassau and Suffolk Counties.

BERA Fishing Trip

Join the Brookhaven Employee Recreation Association (BERA) on its first fishing trip aboard the Captain Bob, sailing out of Mattituck on Saturday, August 3. Tickets cost \$49 per person and include the boat, bait, tackle, fishing rods, and the initial tip for the mate. The boat departs the dock at 8 a.m. sharp and returns at 3 p.m.

Make reservations and get directions to the dock at the BERA Sales Office in Berkner Hall on weekdays from 9 a.m. to 3 p.m. For more information, contact Andrea Dehler, Ext. 3347 or dehler@bnl.gov, or Sue Cataldo, Ext. 4461 or cataldo@bnl.gov.

Hospitality BBQ, 6/29

The Hospitality Committee invites the Lab community, family and friends to an early Fourth of July BBQ on Saturday, June 29, at 5:30 p.m. at the gazebo located in the apartment area. Participants are asked to bring a salad or side dish to share with six persons. Meat and beverages will be provided. There will be games for the children. For information, call Hospitality Chair Monique de la Beij, 399-7656.

Arrivals & Departures

Arrivals

Ruth Comas Staff Services Michael G. Davids Plant Eng. Steven La Marra NSLS Departures

Roland Overton C-A

Superconductivity of MgB,

holes in MgB₂." The leader of BNL's TEM group at the Advanced Electron Microscopy Facility, Zhu has investigated the electronic structure of materials at the nanoscale (one billionth of a meter) level for the last 20

By showing that interactions between holes in the boron planes do occur in MgB2, and that superconductivity stems from such interactions, the scientists showed that results from

both techniques agree with the theoretical predictions.

(cont'd.)

Said Tafto, "As we gain more understanding of the properties of MgB, at the atomic level, I am confident that, in the near future, we will be able to relate them to macroscopic properties such as superconductivity and maybe explain the origin of superconductivity in general."

— Patrice Pages For more detail, go to www.bnl.gov/bnl web/pubaf/pr/2002/bnlpr 061702.htm.

BNL's Child Development Center Renews NAEYC Accreditation



At the Child Development Center, a special celebration for teachers, parents, and children marks the renewal of NAEYC accreditation.

his year, for the second time since its inception in 1992, the Lab's Child Development Center (CDC) received accreditation from the National Association for the Education of Young Children (NAEYC).

NAEYC — the largest U.S. organization of childhood educators — certifies the quality of care provided to young children in preschools and childcare centers across the nation through its voluntary accreditation system.

"We are very proud of our accreditation. It is a reflection of our commitment to the highest standard of an early childhood program," said CDC Director Deborah O'Neill.

Located in Bldg. 373 in the apartment area, the CDC opened its doors in September 1991 to 61 children, ages 6 weeks to 5 years, who were registered for either part- or fulltime care. Today, the CDC cares for 14 infants, 12 toddlers, 18 three-year olds, 18 four-year olds, plus 21 four- and five-yearold full-timers in the little Red School House. — John Galvin

Retirement Savings, 7/9

Understanding your retirement plan options is an important part of planning your financial future. Join TIAA-CREF on Tuesday, July 9, at noon in Berkner Hall, for the one-hour seminar, "Take Charge of Your Retirement Savings."

A representative from TIAA-CREF will discuss the steps for planning a financially secure retirement. Check your mailbox for registration forms and return completed forms to Joyce Wund, Bldg. 185, by June 24.

Defensive Driving

A defensive driving course will be offered on Saturday, August 10, at \$26 per person. See Calendar of Events, above, right.

2002 Tennis Ladder

The BERA Tennis Committee's ladder begins today, to run until daylight saving time ends. For a \$2 fee, players of all levels who are BERA members may sign up for the ladder at the BERA Sales Office in Berkner Hall, 9 a.m. to 3 p.m.

During the first two weeks, open challenges are allowed at any level of the roster. After that, a player may only challenge players on the same rung or one rung higher. The challenger is expected to provide a new or only once-used can of tennis balls. Unless players agree beforehand to another scoring system, the first player to take eight games wins; a 12point tie-breaker will be played if the score is tied at 7-7.

All-Hands Meeting

to be held by Interim **BNL Director Peter Paul**

> Friday, June 28 11 a.m. **Berkner Hall** All are invited.

Calendar

(continued)

WEEK OF 7/8 —

Monday, 7/8

*Safety Awareness Day

10 a.m., Berkner Hall. Billy Robbins talk on "Hooked on Safety." 3 p.m., Berkner Hall, Paul Kende gives safety talk. All are welcome. See story at left.

Tuesday, 7/9

*Money Talks Seminar

Noon, Berkner Hall. A representative from TIAA-CREF will present "Take Charge of Your Retirement Savings. Joyce Wund, Ext. 7516.

Thursday, 7/11

BERA Bridge Club

7 p.m., Brookhaven Center. South Room. Morris Strongson, Ext. 4192, mms@bnl.gov.

WEEK OF 7/22 —

Monday, 7/22

IBEW Meeting

6 p.m., Knights of Columbus Hall, Railroad Ave., Patchogue. 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.

Thursday, 7/25

BERA Bridge Club

7 p.m., Brookhaven Center. South Room. Morris Strongson, Ext. 4192, mms@bnl.gov.

— WEEK OF 7/29 —

Saturday, 8/3

*BERA Fishing Trip

\$49 per person. The $Captain\,Bob$ leaves the dock in Mattituck at 8 a.m. and returns at 3 p.m. See notice, left.

— WEEK OF 8/5 —

Thursday, 8/8

BERA Bridge Club

7 p.m., Brookhaven Center. South

Room. Morris Strongson, Ext. 4192, mms@bnl.gov.

Saturday, 8/10

*Defensive Driving Course

9 a.m.-3:30 p.m., Berkner Hall, Room B. To register, send a check for \$26 per person, made out to Empire Safety Council, in care of Scott Zambelli, P.Ó. Box 670, Mount Sinai, NY 11766. Include your telephone number in case you need to be contacted. All checks must be received by August 2.

- WEEK OF 8/19

Thursday, 8/22

BERA Bridge Club

7 p.m., Brookhaven Center. South Room. Morris Strongson, Ext. 4192, mms@bnl.gov.

Saturday, 8/24

Bronx Zoo Trip

\$32 per adult, \$28 per child. Includes bus transportation and Zooventure tickets. BERA Sales Office, Andrea Dehler, Ext. 3347.

 ${\it Note: This \, calendar \, is \, updated \, continuously}$ 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.

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 employees within the department/division and/or appropriate bargaining unit, with preference for those within the immediate work group; (2) present 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; call the JOBLINE, Ext. 7744 (344-7744), for a list of all job openings, use a TDD system to access job information by calling (631) 344-6018; or access current job openings on the World Wide Web at www.bnl.gov/HR/jobs/default.htm.

LABORATORY RECRUITMENT - Opportunities for Laboratory employees.

TB2716. ADMINISTRATIVE SECRETARY (A-2, Part time 50%) - Requires formalized secretarial training or equivalent experience, plus six years of progressively responsible secretarial and administrative experience of which at least two years should be at the Laboratory. Must be able to obtain and maintain a DOE Q Access Authorization. Responsibilities will include arranging conferences and meetings, attending meetings and recording minutes for distribution as well as collecting and analyzing data and summarizing findings on complex assignments and projects. Will be responsible to acquire and naintain a wide variety of high-level contacts both within and outside the Laboratory which are considered significant and critical to the efficient operation of the Consequence Assessment Program (CAP) office and its functions including development of the Emergency Response Planning Guidelines. Nonproliferation and National Security Department.

OPEN RECRUITMENT – Opportunities for Laboratory employees and outside candidates.

MK3884. DIRECTOR, NANOSCIENCE CENTER - Requires a Ph.D. in physics. chemistry, materials science, or biology with extensive scientific accomplishments coupled with proven managerial capabilities and be a recognized authority in his/her field. The Director is encouraged to maintain his/ her own research program. Will be responsible for continuing to build participation and commitment from the broad outside research community, provide leadership in nanoscience program development and to oversee the design, construction and future operation of the Nanocenter. The BNL Nanocenter will be a premier user facility for interdisciplinary research on new functional nanomaterials with a full time staff of 50 or more and users from academic, industrial and government sources. The initial scientific thrust areas are: nanocatalyst materials, magnetic nanoassemblies, charge injection and transfer, strongly correlated oxides, this organic films and applications of nanoscience. Detailed information about the BNL Nanocenter is available at www.bnl.gov/ nanocenter. The Nanocenter will be a department level organization and the Director will report to the Associate Laboratory Director for Basic Energy Sciences. Applications and nominations should be sent to: Dr. Peter Paul, Interim Director, Brookhaven National Laboratory, Building 460, P.O. Box 5000, Upton, New York 11973-5000.

MK2255. RIKEN FELLOW (reposting) - The RIKEN BNL Research Center (RBRC) has an experimental Fellow position open for research to be carried out in BHIC spin physics. RBRC is a research center focusing on the physics program of the Relativistic Heavy Ion Collider (RHIC), hard QCD/spin physics. lattice QCD and relativistic heavy ion physics. The RBRC experimental spin physics makes use of the RHIC polarized proton capability. Members of the center include postdoctoral Research Associates (two-year appointments) and RIKEN BNL Fellows (up to five-year appointments). Members of the center work closely with existing high energy and nuclear physics groups at BNL. Under the direction of G. Bunce, Physics Department.

NS2058. SCIENTIFIC ASSOCIATE III (P-3) - Requires an MS in a physical science or engineering field, some infrared and/or x-ray spectroscopy background is highly desirable and experience at a synchrotron is helpful. Computing and basic mechanical and electronic skills are desirable. Will support infrared and x-ray imaging beamlines at the NSLS by interacting with beamline scientists and users with multidisciplinary interests, coordinating efforts related to experiments on multiple beamlines. Will ensure the operational status of beamline and experimental equipment, including state-of-the-art infrared and x-ray microscopes, optics, and detectors. Will also participate in instrumentation and methods R&D, spanning fields from biomedicine to materials science. National Synchrotron Light Source Department.

TB2112. TECHNICAL SPECIALIST (T-2) - Requires an AAS degree in mechanical technology or equivalent, plus at least four years of pertinent experience. The candidate should have good mechanical skills, the ability to work with basic hand tools. and familiarity with mechanical drawings and process and instrumentation drawings. Should be familiar with general vacuum techniques and equipment associated with cryogenic insulating vacuum systems. Good communication skills and the ability to work mandatory overtime and regular rotating shift work are required. Responsibilities include operation of large helium refrigeration systems, fabrication and installation of cryogenic piping, valves, cryostats and cryogenic targets. Collider-Accelerator Department.

Motor Vehicles & Supplies

00 FORD EXPLORER XLT - red, 4 wd, a/t, a/c, p/s, p/b, p/w, 36k mi., fully loaded, sports pkg., towing pkg., moon roof, leather seats, excel. cond. \$17,500. 209-0520.

00 YAMAHA YZ125 - many aftermarket extras and new parts, adult owned, excel. cond. \$2,800. Mike, Ext. 7081 or 929-5502. 99 FLEETWOOD TIOGA - motorhome, 24.5 ft., class C, 9,200 mi., many extras. Tom. 744-5096.

98 MERCEDES SLK 230 - black, hardtop convertible compressor, oyster int., every option, new tires & brakes, serviced by Mercedes, garaged, mint cond., 24k mi. \$30.000. 774-3163.

97 BUICK LESABRE - white/blue, top leather seats, 48k mi., loaded, excel. cond., 758-9642

95 NISSAN ALTIMA - white/brown, cloth int., a/t, a/c, p/s, p/b, p/w, 132k mi., fm/cass., well maint., new tires. \$5,700. Ken, Ext. 4935 or 929-4990.

95 TOYOTA COROLLA - blue, a/t, a/c, p/s, p/b, p/w, 115k hwy. mi., runs well, looks good, orig. own. \$4,000. Andrew, 209-0520.

95 YZF600 YAMAHA - blue, 2k orig. mi., good cond. \$3,500. Ronald, Ext. 3020. 91 CADILLAC COUPE DEVILLE - 54k mi., loaded, mint cond. \$6,000. Ed, Ext. 3499. 91 FIREBIRD PONTIAC - red, 5-spd., a/c, p/s, p/b, p/w, 129k mi., spoiler, orig. own.

90 GMC VAN - black, hi-top lux., TV-VCR stereo, anti-lock brakes, loaded, leather seats. \$4.300. Jim. 289-0876.

\$2,395. Rosemary, Ext. 3251.

90 HONDA ACCORD EX - black, 4-dr., moonroof, CD player. \$2,150 neg. Zeb, 516-807-6896

89 VOLKSWAGON FOX - 5-spd., a/c, 110k mi., sunroof, good tires, recent tune-up, runs well, reliable. \$700. Alison, 591-4013. 88 OLDSMOBILE - Delta 88 Royale, 4-dr. V6, dark blue, 121K mi., a/t, a/c, pwr. locks & windows, runs well, maint. records. \$1,200. Zhang, Ext. 4360.

83 HARLEY DAVIDSON SPORTSTER - orig. own., 6k mi., just put \$2,500 into bike, looks brand new. \$5,900. Tony, Ext. 7861 or 281-4799.

MOTORCYCLE HELMET - vetter, full face, mostly black, size large, adjustable air vents, excel. cond. \$25. Peter, Ext. 3293.

Boats & Marine Supplies

22' WESTERLY SAILBOAT - twin keel, fiberglass, clean, newly painted, many extras, needs some work. \$2,500. 744-3569. 17' GRADY WHITE BOWRIDER - 1973, 70 h.p. Johnson outboard, with trailer, needs work. \$1,000. Jackie, 774-3163.

KAWASAKI 900ZXI - 1995, wave runner in excel. cond., with trailer. \$3,000. Ronald, Ext. 3020.

OUTBOARD BRACKET - alum. 23" setback for I/O or Seadrive conversions, \$150; hydraulic side mount steering cyl., instructions, \$50 or \$175/both. Ext. 3827 or 878-8302.

SHORELINE TRAILER - excel. cond., fits up to 18 ft. boat, single axle. Carol, Ext.

TRAILER - small boat trailer. \$25. Ben, Ext. 4299.

Furnishings & Appliances

7686 or 878-0897

BATHROOM SINK - white, American Standard, cast iron, wall mount, includes faucet and drain, excel. cond. \$30. Annamarie, 878-8967.

CHILDCRAFT CRIB - w/mattress, medium oak, excel. cond. \$75. Nancy, Ext. 5132. COMPUTER DESK - large, microwave w/ cart, octagon cocktail table, ship's wheel chandelier, lamps. Eva, Ext. 269-6543.

COUCH & LOVESEAT - leather, camel color, studded arms. \$500. John, 208-0196. FREEZER - white, chest, type 1.5, cu. ft.,

Kelvinator, ask. \$50. Hank, 758-3891. WASHER/DRYER - Frigidaire stackable type washer and dryer, excel. cond. \$200. Austin. 363-2796.

WINDOW FANS - (2) Holmes 8", 3-spd., intake/exhaust, excel., \$20/ea. 475-8658.

Tools, House & Garden

BASINS, (2) Amer. Std., 18" x 18" enam. on cast iron, blue w/single lever faucet & drain, \$50/ea., \$85/both; tractor, 12 h.p. elec. start, 8-spd. w/attch., 42" mower, 42" bulldozer/plow, v.g. cond., best offer. 475-8658. HOT WATER HEATER - Bock 32E, new, in crate. \$425. John. 878-3152.

Sports, Hobbies & Pets

BASKETBALL - Spaulding, excel. cond. \$3. Peter. Ext. 3293.

Audio, Video & Computers

PRINTER - Laserjet II, good working cond. PC printer. Jim, Ext. 7895.

TV - Zenith - 27" color console, brown/black trim, \$75. Hank, 758-3891.

TV - 35", RCA home theater TV w/stand, excel. cond., \$400. Nancy, Ext. 5132. TV/VCR COMBO - 13" Zenith, remote. \$120. Daniele, Ext. 6207.

Miscellaneous

ELECTRIC TYPEWRITER - Olympia with case, new condition, \$20. Donna, Ext. 4599. FLUORESCENT BULBS - circular, 12" (32w), 16" (40w), fairly new, \$3/ea. Morris, Ext. 4192. KIRBY VACUUM CLEANER - G3 sells for \$1,400 new. \$550, has automatic trans. Doug, Ext. 7698.

LEATHER JACKETS - men's, 1 black. L, \$40, 1 brown XL, \$60, 1 brown L, \$40, 1 brown. M, \$60, obo; ladies' coats, jackets, leather, faux furs, corduroy, wool, sm. to med. 475-8658.

PIANO - Kincaid upright w/beautiful finish, may need tuning, \$495 obo. Al, 744-0354. POOL FILTER - 1 h.p. d.e. Hayward inground pool filter & pump, for up-to-40-ft. pool, used 1 month, best offer. Ray, Ext. 3301.

TICKETS - Dave Matthews at Hershey Park in PA on 7/21/02, 3 tickets, \$165 ea. Vera, Ext. 5843.

Wanted

HOUSEKEEPER - part-time, pleasant environment, laundry, shopping, cooking, light cleaning, flexible hours & salary. Shauna, 878-5840.

RENTALS - houses, apts. for BNL visitors and guests. Call Evelyn Silverman, off-site housing coordinator, Ext. 4489.

RESEARCH VOLUNTEERS - healthy nonsmoking men and women, ages 18-65, are needed for MRI study. Strictly confidential, fee provided. 344-2773.

SUMMER SITTER - Manor Park off N. Titimus, 6 yr. old girl, 3 yr. old boy, \$40/day. July through Aug, M-F, excel. kids, Tammy, Ext. 5864.

For Rent

EAST MORICHES - share large house w/professional, furn. bdrm. w/a/c & cable, 300 ft. to water, 10 mi. to BNL, quiet, short block, single nonsmoker. 744-8386.

EAST SETAUKET - 5 bdrms., 3 baths, 3-level house, sliding door leading to wraparound deck cul-de-sac, all hardwood floors, 2½ car garage, 3-Village SD, excel. neighborhood, \$2,300/mo. 689-6495.

MANORVILLE - 3 bdrm., 1½ bath, eik, Ige family rm., less than 10 minutes from BNL, \$1,250/mo. plus utilities, security deposit required. 516-933-6037 or 344-5920.

NORTH PATCHOGUE - share house w/spacious bedrooms, parking avail. Close to Lab & shopping area. 447-6899.

RIDGE - 1 bdrm., walk-in closet, full bath, Ige. kitch. & l/r, private ent., \$700/mo. 924-1679.

ROCKY POINT - studio apt., private yard & private driveway, 10 mins. to BNL, looking for mature adult, \$500/mo plus electric. Linda, Ext. 7187.

SHIRLEY - 2 - 3 bdrm., washer & dryer, garage, big yard, \$1,200/mo. plus utilities. Tony, Ext. 7861 or 281-4799.

WADING RIVER - cozy apt., eik, no smoking, no pets, single preferred, \$700/mo. Janet, 929-3910.

WADING RIVER - 3 bdrm. house, 15 min. to Lab, quiet, nr. priv. beach, child & pet friendly, great neighborhood, \$1,700 plus util. 929-0163. LAKE LUZERNE - vacation log home close to Lake George and Saratoga, private beach on Great Saratoga Lake, boating, fishing & hiking, \$800/wk. Al, Ext. 7859.

WILLIAMSBURG, VA - 1 bdrm. time share, 6/ 28-7/5, sleeps 4, mins. from W/burg, Busch Gardens, Water Country, Jamestown, golf; 1-hr. from Virg. Beach, Richmond. www.kingscreek plantation.com, \$500. Maryann, Ext. 5124.

For Sale

BAYPORT - immac. 2/3 bdrm. ranch, oak floors, finished basement, l/r, d/r, 2 full baths, Bayport-Blue Point schools, move-in cond. \$310.000. George Meinken. Ext. 4453.

ROCKY POINT - 2 bdrm., 1 bath, everything new, new siding, rugs, windows, paint, bathroom, low taxes, 10 min. to Lab. \$180,000. Ext. 4028.

RIDGE - Leisure Village Winfield, 5 mins. from BNL, 2 bdrms., 2 baths, near to the Rec. Bldg., \$190,000 firm. 516-627-2146. SHIRLEY - 478 Carnation, 5 rooms, garage, big yard w/fence, ranch, \$215,000 neg. Ext. 3499.

SOUTHOLD CREEKFRONT - 1/2 acre, contemporary, 3 bdrm., 2 bath, great room, 500 sq. ft., deck, fp, ca/c, \$465,000. 765-1299.

CAROLINA LAKE, NC - land in gated community one block from three stacked lakes, golf course, private tennis courts, pool, jogging paths, clubhouse, beaches, marina, near Pinehurst, \$12,500. 467-8297.

KNOXVILLE, TN. - 20 min. from ORNL, 3 bdrms., 3.5 baths, 2-car garage, private, wooded lot near lake access, many features. \$239,900. Ext. 5902 or 286-7950. STORE - Irish imports, est. over 3 years, turnkey op., business district, main road, priced to

sell. 209-0924 from 10:30 a.m. - 4:30 p.m.

In Appreciation

Thank you for your thoughtfulness following the passing of my father Hugh Yerry.

— Jim Yerry

A Student Voice

Meeting Monday, June 24 12:15 to 1:15 in Berkner Hall

BNL is interested in hearing from students at the Lab to explore the establishment of a student organization. This is a great opportunity for student voices, ideas, and suggestions to be heard. The first student meeting will be held on Monday, June 24th, from 12:15 to 1:15 p.m. in Berkner Hall. All students, visitors, and employees are invited to attend. Feel free to bring your lunch.

Some of the key missions of a BNL Student Organization might include fostering interactions among students and between students and various Lab organizations, and representing the interests of both visiting and resident students in all departments to the BNL community and management.

A student organization could also help improve the quality of life and educational opportunities at BNL and provide social events for the student population. Getting involved is a great way to meet people around the Lab and learn more about what BNL's departments and user facilities are doing.

If you have any questions, call Jeffery Mitchell, Ext. 3015, or Susan White-DePace, Ext. 7959.

First ERAP Award Given

Job Referral Earns BNLer \$1,000

On June 18, BNL made the first Employee Referral Award Program (ERAP) award of \$1,000 to Carmen Alvarado of the Legal Office.

The Human Resources (HR) Division established ERAP in January 2002 to reward employees who refer successful candidates for employment. In this program, full-time or eligible part-time BNL employees may recommend applicants to HR for specified jobs and then receive the reward later if the referral is hired. ERAP positions and the amount of their potential award, \$500 or \$1,000, are announced among the placement notices in the Bulletin and on the web.

When Alvarado was reading the Bulletin some months back, she scanned the open positions and saw a job description for a housing coordinator that seemed to be a good match for her sister, Evelyn Silverman.

Alvarado followed the procedure to refer a candidate for an ERAP position. She obtained an ERAP form from HR, completed the form, attached it to her sister's resume, and returned the package to HR. After the interviewing period was over, Evelyn was the chosen candidate. Because Alvarado had been the first to recommend Silverman, she won the award.

Said Nancy Sobrito, who administers ERAP for HR, "That's all Carmen had to do — and now she'll be receiving a \$1,000 check for her referral of Evelyn. All in all, it's a win-win situation for everyone. The Laboratory gets a new good employee, and an employee is rewarded for her efforts."

— Liz Seubert

BNLers! Get to Know Your Lab! Today at Noon, Tour the NSLS

Meet at Berkner

What happens at the Light Source? What's inside the RHIC

To resolve these and other mysteries, all BNL employees and others within the Lab community are invited to explore one of BNL's world-class facilities with one of its researchers. Once a month, meet at noon in Berkner Hall lobby and go by bus on an overview tour, returning to Berkner by 1 p.m.

The first tour is today, Friday, June 21. Participants will visit the National Synchrotron Light Source to learn about the special value of synchrotron light and experiments using it. No reservations are needed. For more information, call Elaine Lowenstein, Community Involvement, Ext. 2400.



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