

Daum Chairs Environmental Sciences

Peter Daum has been named chair of BNL's Environmental Sciences Department (ESD), effective January 1. A senior scientist at the Lab, Daum has been acting chair of the department for the past two years.

With 60 employees and an annual budget of \$20 million, the ESD has programs in atmospheric physics and chemistry, carbon-cycle research, plant ecology, and tracer technology programs with applications in energy efficiency, meteorological science, and national security. These research programs respond to DOE's mission to study the transport and fate of energy-related pollutants and the effects of those pollutants on global climate.

"I am looking forward to developing new programs to explore climate change," Daum said. "Secretary of Energy Chu views understanding all aspects of global warming as a science



Peter Daum

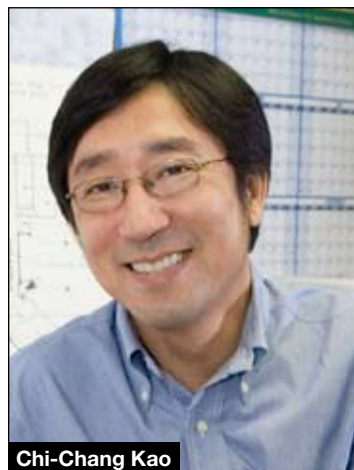
Roger Stoulenburgh D1480110

priority, and my department will be vigilant in undertaking strategic research programs to understand all the factors that have led to an increase in global temperature as well as how fast it may be increasing. This research is focused on development of new insights into how best mitigate the problem."

ESD is currently participating in a multi-institutional project called FASTER (Fast-physics System Testbed & Research) aimed at accelerating the evaluation and improvement of the representation of fast physics processes — processes, such as precipitation of cloud formation, that occur on short timetables — in climate models. The 50 scientists in the project will be using data collected by DOE's Atmospheric Radiation Measurement Climate Research Facility since the early 1990s at locations from the tropics to the southern Great Plains and the Arctic for evaluation of the performance of these new representations in models of various scales. New York Blue supercomputer, based at BNL, will be an important resource for conducting these evaluations.

In the near future, ESD scientists are planning to study the effects of rising carbon dioxide...

See *Daum* on pg. 2



Chi-Chang Kao

Roger Stoulenburgh D4541006



Thomas Ludlam

Roger Stoulenburgh D3111208

Kao, Ludlam Named AAAS Fellows

The American Association for the Advancement of Science (AAAS) has awarded two BNL scientists with the distinction of Fellow. Chi-Chang Kao and Thomas Ludlam will be among 531 AAAS members to receive this honor for their efforts toward advancing science applications that are deemed scientifically or socially distinguished. The new Fellows will be presented with their official certificate and rosette pin on February 20, at the 2010 AAAS annual meeting in San Diego. For more information, see http://www.bnl.gov/bnlweb/pubaf/pr/PR_display.asp?prID=1060.

Chi-Chang Kao

Chi-Chang Kao is recognized for "his many contributions to resonant elastic and inelastic x-ray scattering techniques and to x-ray spectroscopy, their applications to important materials, and his inspired leadership at the National Synchrotron Light Source [NSLS]."

Kao's research interests have focused on developing new experimental techniques using synchrotron light at Brookhaven Lab's NSLS, a facility where, each year, approximately 2,100 scientists from around the world use x-rays, infrared light and ultraviolet light to study materials as diverse as computer chips and viruses. Specifically, Kao has developed x-ray techniques to study superconductors, materials that have no electrical resistance at very low temperatures; magnetic materials for storage devices in computers; and electronic structures of materials under high temperature and high pressure.

As chair of the NSLS, Kao manages a staff of about 170, and he has organized a large...

See *Kao* on pg. 2

Thomas Ludlam

Thomas Ludlam is cited for "the establishment of the scientific program of the Relativistic Heavy Ion Collider [RHIC] at BNL and for his leadership [in] preparing the detectors for RHIC."

Ludlam 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.

The heavy-ion collisions at RHIC 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,...

See *Ludlam* on pg. 2

RHIC Gets 'Cool' for Higher Collision Rates



Mike Brennan



Mike Blaskiewicz

Roger Stoulenburgh D1070908

After speeding around the Relativistic Heavy Ion Collider's (RHIC) 2.4-mile racetrack a few million times at close to the speed of light, the machine's tightly packed bunches of particles, predictably, start to get "hot." But neither water nor air conditioning can chill these high-speed beams. Using a complicated technique called stochastic cooling, RHIC physicists recently made a major advancement toward beating

the heat — a move that will save researchers money and time in their quest to explore the inner workings of the universe.

A team including the Collider-Accelerator Department's Mike Brennan, Mike Blaskiewicz, and Kevin Mernick, together with mechanical engineers and technicians, successfully implemented — for the first time in a high-energy collider — stochastic cooling to correct the tendency of beam bunches to become fatter as they

circulate, a method referred to as transverse cooling.

"Like all charged particle beams, the bunched ions in RHIC tend to spread out, or heat up, as they circulate," Brennan said. "As the ions spread, the number of protons and neutrons colliding — and the amount of useful data — declines."

To "cool" the ion bunches and increase the collision rate at RHIC, physicists measure...

See *Cooling RHIC* on pg. 2

New Housekeeping Project Under Way in Bldg. 490

Cleanup has begun in the storage areas of Bldg. 490 as a new Lab-wide housekeeping standard is implemented under BNL's Leadership Action Plan for ensuring a safer work environment. With the housekeeping project already under way, manager Peter Pohlot outlined his plans at a Management Council Meeting held on January 19.

Bldg. 490, where many departments store items not needed on a daily basis, will be both the pilot project and a model, Pohlot explained during his presentation. A member of the Lab's Environment Protection Division and coordinator of the Pollution Prevention Council, he also noted that this is a "learn-as-we-go" process and that the housekeeping standard (see <http://intranet.bnl.gov/safety/housekeeping.asp>) will be revised as lessons are learned.

According to the current housekeeping project, department members will assess and label supplies and materials that should continue to be kept in storage.



Members of the housekeeping team (from left): Joy Haskins and Chris Harris, both of Medical; Peter Pohlot of Environment, Safety & Health (ES&H); Cheryl Burns, Kim Wehnt, and Don Olsen, all of Radiological Control; and Bob Colichio of ES&H.

Roger Stoulenburgh D0740210

Subsequently, a housekeeping team — consisting of a building manager; an Environment, Safety & Health coordinator; a safety representative; and an environmental compliance representative — will work with Procurement & Property Management and the Facilities & Operations Division to

dispose of any leftovers. Representatives from Waste Management and Facility Support, as well as an industrial hygienist, will be included as they are needed.

A total of \$40,000 has been approved to dispose of what is cleaned out of Bldg. 490. Under Pohlot's supervision, appropriate

items will be reused or recycled. A recent example is laboratory glassware that was found in Bldg. 490. A Lab glassblower was contacted, and, after his review, a substantial amount of lab glassware was transferred to his area.

As cleanup in Bldg. 490 continues, revisions already proposed to the housekeeping standard include restricting the number of years that labeled and dated equipment can be stored, requiring approval from a departmental head to store materials for up to seven years, and approval from an associate or assistant lab director to store materials for more than seven years.

Once Bldg. 490 has been successfully cleaned out, results will be documented, summarized, and presented at a monthly Building Manager meeting. A housekeeping team of different individual members will then be established, based on the next prioritized building, and the next cleanup project will begin.

— Joe Gettler



Alex Reben

High-Density Concrete Used In NSLS-II Construction

The NSLS-II ring building has been taking shape since the concrete-pouring process for the new, world-class facility began in July. Once complete, the 400,000 square-foot building will house the accelerator ring, the largest component of the machine.

In total, the ring building will require about 40,000 cubic yards (a little more than one million cubic feet) of concrete, which will take about 18 months to pour. Much of...

See *NSLS-II Concrete* 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 may be found at www.bnl.gov/hospitality/calendar.asp.
- The Recreation Building #317 (Rec. Hall) is located in the apartment area.
- 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 <http://www.bnl.gov/esol/schedule.asp> for schedule. Jen Lynch, Ext. 4894

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 & Thursdays: Kickboxing
\$5 per class. Noon-1 p.m. in the gym. Pay as you go. Ext. 2873.

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

Tuesdays: Zumba
Tuesdays, noon-1 p.m. Gym. Registration is required. Ext. 2873.

Tuesdays: Knitting Class
2-4 p.m. Rec. Hall. All levels of skill. Free. Ext. 5090 for information.

Tuesdays: Toastmasters
Two monthly meetings: 1st & 3rd Tuesdays, 5:30 p.m., Bldg. 463, Rm 160. Guests and visitors welcome. <http://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: Aqua Aerobics
5:30-6:30 p.m., Pool. Registration is required. Ext. 2873.

Wednesdays: On-Site Play Group
10 a.m.-noon. Apartment area playground. Infant/toddler drop-in event. Parents meet while children play. Ext. 2873. See also <http://www.meetup.com/BNL-Playgroup/>

Wednesdays: Ballroom Dance Class
Classes at 5:15, 6:15, and 7:15 p.m., based on experience. North Ballroom, B'haven Center. Donna Grabowski, Ext. 2720.

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
5 p.m., Brookhaven Center. First Thurs. of month. Tim Devine, Ext. 2350.

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

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.

Fridays: Family Swim Night
5-8 p.m. BNL Pool. \$5 per family. Ext. 2873.

Fridays: Family Gym Night
5-8 p.m. Family gym activities. Free. Ext. 2873.

NSLS-II Concrete from pg. 1

...this extraordinary amount of concrete is needed to form the building's massive concrete tunnel and experimental floor, and to meet requirements for radiation shielding and vibration reduction. The work is being done by Torcon, Inc., a New Jersey firm with many projects in New York State.

— Kay Cordtz

TIAA-CREF One-on-One Retirement Counseling

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

Science, Engineering INCREASE Program Expands to BNL's CFN

The Interdisciplinary Consortium for Research and Educational Access in Science & Engineering (INCREASE) sponsored its first Center for Functional Nanomaterials (CFN) workshop January 11-12. Organized in collaboration with the CFN and the Office of Educational Programs (OEP), the two-day workshop attracted 12 participants — including many Historically Black Colleges and Universities (HBCU) and Minority Serving Institutions' (MSI) faculty members interested in becoming CFN users.

INCREASE, formed at BNL in 2007, recently received funding from the National Science Foundation (NSF) through the Southern University of New Orleans' (SUNO) HBCU undergraduate program grant to create workshops that educate faculty from minority groups about the opportunities available at national laboratory facilities. The funding was awarded after INCREASE held three successful National Synchrotron Light Source (NSLS)-sponsored workshops. The workshops have been a direct outcome of the DOE Faculty and Student Team program at BNL.

"This is a very good collaboration for HBCUs because it brings together all of the faculty members from those campuses that do not have the big equipment and resources found at national laboratories," explained Joe Omojola, one of the founding members of INCREASE and a mathematics and physics professor at SUNO. "This benefits both faculty and students through ad-



BNL and visiting participants in the first INCREASE-sponsored Center for Functional Nanomaterials workshop

vancing the research capabilities of faculty members, who then train the students."

The workshop was designed to increase awareness about CFN facilities and expand the variety and diversity of projects at BNL by providing partnerships and opportunities with different universities. These partnerships, in combination with access to first-rate research equipment, result in significantly more competitive research grant applications for the underserved faculty members.

During the workshop, visiting professors presented their own research interests before touring the CFN and NSLS, where they heard brief research presentations from CFN staff scientists. On the second day, participants wrote proposals for research time at the CFN and were informed about the overall application process. The workshop ended with one-on-one networking time for participants and staff, which resulted in the

formation of new collaborations. At least five proposals for CFN equipment time were expected by the January 31 close of the proposal cycle.

"The presentations leveled out the playing field for understanding each other's research and starting collaborations," said workshop participant Michele Manuel, an assistant professor in the Department of Materials Science & Engineering at the University of Florida, who was studying the effects of nanostructures in metal alloys. "I would never have had the connections if it weren't for this workshop. We've already started communicating with and e-mailing CFN staff members."

The new collaborations also benefited CFN scientists. In addition, staff gained a rare opportunity to be involved in CFN's public outreach efforts and learn about research outside of the Lab.

CFN director Emilio Mendez expects the workshop to increase

the number and diversity — both social and geographical — of user participants.

"It is our goal and expectation that participants first learn something about CFN facilities and then disseminate the information," Mendez said. "The effect of multiplication is very important. We expect to do this again next year."

The number and diversity of INCREASE workshops also have growth potential. Creative combinations of user facility workshops and expansion to the entire DOE complex could be in store for the future.

"Attracting a talented pool of minority scientists from academia and expanding INCREASE workshops to other facilities beyond NSLS are good indicators that the INCREASE program can be a successful model for meeting DOE's mission for workforce development and diversity," said Noel Blackburn, a BNL Educational Programs Administrator.

Omojola has high hopes for continued collaboration and development of the program due to the new funding. He foresees the potential for including undergraduate and graduate students some time in the future.

"The program started as a small thing and it is growing rapidly," Omojola said. "I don't see any limits with it because the numbers of participants and users of this facility will grow. Eventually, some of our faculty and students may become employees here. The proportion of minority students working in these areas will only keep growing." — Tianna Hicklin

BNL Music Club Donates Concert \$\$\$ To Charities for Haitian Relief

The successful "Gathering of the Slides" blues concert sponsored on January 23 by the BNL Music Club made a modest profit, which, together with other Music Club funds, the club is donating to three charities involved with the Haitian relief effort. Americares, Doctors Without Borders, and the Neges Foundation will each receive \$250.

Avoid Burning Your Dollars — Lunchtime Tour on Fuels, Fuel Technology, 2/19

All employees, guests, and retirees are invited to join Tom Butcher and Chris Brown as they "show and tell" about their research in today's alternative fuels and the fuels and technology of the future. The Employee Lunchtime Tour will visit the researchers on Friday, February 19. Meet the group at Berkner Hall upper lobby at noon, return to Berkner by 1 p.m. No reservations are needed.

See Ludlam on pg. 2

...physicists at RHIC found such a state of matter, and discovered that it behaves like a "perfect" liquid.

"The RHIC program has been — and continues to be — a wonderful adventure," Ludlam said. "I am grateful to have been a part of it from the beginning and honored to be recognized in this way by the AAAS." — Diane Greenberg

Kao from pg. 1

...community of scientists to address scientific opportunities that he has identified. He also undertook major upgrades to the scientific programs and experimental facilities at the NSLS. In addition, he developed potential science programs for NSLS-II, Brookhaven's new light source that is currently under construction.

"I am honored to receive this distinction from the AAAS," Kao said. "It is a privilege to work with the talented and dedicated staff of the NSLS, and I am looking forward to continuing our productive scientific programs at NSLS-II."

— Diane Greenberg

Daum from pg. 1

...and temperature on the Arctic tundra by conducting controlled temperature and carbon dioxide-enhancement experiments. Much of the carbon in the tundra remains inactive because it is captured in the permafrost, but if the area continues to warm, a large amount of carbon could be released to the atmosphere, which could potentially accelerate a rise in the global temperature.

Daum earned a B.S. in chemistry from Drexel Institute of Technology in 1965, and a Ph.D. in chemistry from Michigan State University in 1969. He was on

Cooling RHIC from pg. 1

...tiny random fluctuations in the position of the beam with devices that send this information to a location ahead of the speeding particles. There, electric fields are generated to "kick" the charged particles back toward their ideal positions.

Although this approach has been used in specialized, low-energy accelerators, BNL physicists were the first to make it work at high energy with tightly bunched beams. The first demonstration of the technique occurred two years ago, as RHIC

the faculty of Northern Illinois University from 1969 to 1980, and visiting professor at the University of North Carolina at Chapel Hill, from 1978-1979. He joined BNL in 1980 as a chemist in the Atmospheric Sciences Division, and he served as head of that division from 2000 to 2008. In January 2008, he became acting chair of ESD, and he was promoted to senior scientist in October 2008.

Daum's scientific work at BNL has focused on the effects of energy-related pollutants on the atmosphere. His principal areas of study have been smog, acid rain,

beams were cooled in the longitudinal direction to compensate for the tendency of bunches to lengthen as they circulate. It's predicted that combining the new transverse cooling system with longitudinal cooling in both rings — along with some additional equipment — could increase collision rates overall by 500 percent.

"Stochastic cooling is going to have a real impact on the experimental program, allowing for a much more detailed examination of rare processes involved in the early universe," said Wol-

and the climate effects of aerosol. Daum has been a lead scientist in several major field studies, including an investigation in 2008 of the microphysical properties of marine stratus clouds off the coast of Chile. He has served on numerous scientific review panels, and is currently a member of the Department of Energy Atmospheric Sciences Implementation Team and the National Science Foundation Facility Review Panel. Daum received the Southampton College Environmental Leadership Award for his research in atmospheric sciences in 2002.

— Diane Greenberg

fram Fischer, head of the Accelerator Division in the Collider-Accelerator Department.

This effort, part of the RHIC-II science program, also is quicker and an order of magnitude cheaper than the system that was originally proposed to increase collision rates — electron cooling. That project was estimated to cost about \$95 million, compared to about \$10 million to implement stochastic cooling.

The full stochastic cooling system is scheduled to be in place by 2011. — Kendra Snyder



Some of the BNLers from the Community, Education, Government, & Public Affairs Directorate, one of several groups whose members contributed to the Food Drive at their holiday party

'Tis Still a Season for Giving Food

In lieu of traditional gift swaps, BNL employees in several departments embraced the giving spirit of the holiday season by bringing canned food to give away instead of the more traditional exchange of gifts.

Staff members of the Collider-Accelerator Department; Business Systems Division; Community, Education, Government, & Public Affairs Directorate; and Light Source Directorate contributed approximately 400 pounds of food for the BNL Food Drive during their annual holiday parties. Nearly \$150 was also collected —

100 percent of which was used to purchase more food for the food drive.

In 1988, the BNL Food Drive was started by the Lab in partnership with the American Physical Society to provide food for people in need in the Town of Brookhaven.

In a memo to the many BNL contributors, co-chairs of the BNL Food Drive Linda Rundlett and Linda Greves wrote, “We are pleased and grateful for the recent generous contribution to the BNL Food Drive — it is donations such as this that enable us to help many people

in Brookhaven Township, especially those who suffer in silence in our own backyard.”

Year round, the BNL Food Drive accepts financial contributions and donations of non-perishable food, such as canned goods, cereal, pasta, soup, sauces, and cookies. Drop-off boxes for food are located in most buildings on site, including the Bldg. 400 lobby and Bldg. 179 near the Mail Room and U.S. Post Office. For more information about the BNL Food Drive, call Linda Rundlett, Ext. 3333, or Linda Greves, Ext. 3750.

— Steven Deitz

Defensive Driving Course: Two Parts, 2/22 & 25

The next six-hour Defensive Driving (Point & Insurance Reduction) course will be held in two parts on Monday and Thursday: February 22 and 25, in the Brookhaven Center South Room, 6 p.m.–9:15 p.m.

The course is open to BNL, BSA, and DOE employees, facility-users, and their families. The cost is \$38 per person. Preregistration is required. To register, call Ed Sierra, 821-1013, and leave a message. Or, take a New York DMV approved course online at <http://www.lidrivsafe.com/>.

Adult Swim Lessons On Site

American Red Cross-certified swim lessons will be offered on Wednesdays starting March 3 until April 21 from 5:30 until 6:30 p.m. at the pool (Bldg. 478). The class is open to all employees, guests, users, retirees, and their immediate family members, who are at least 18 years old. \$80 per person, learn more at www.bnl.gov/bera, or call Ext. 2873.

BERA Updates

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

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

Discount Ski Day: Saturday February 20. Offered by Port Jeff/ Bridgeport Ferry to BNLers. \$95 includes round-trip on ferry and coach bus to Jiminy Peak, Mass., with full-day lift ticket. Rentals are \$33/day. Boat leaves 6 a.m. from Port Jeff. Return on 8 p.m. ferry arriving Port Jeff at 9:15 p.m. To go, call 473-5138, say you are from BNL.

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

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

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

Dance With Us!

Why? Laugh, smile, have fun, meet new people, change your routine, get some exercise.

Do I need a partner? No!

*I'm not sure...*New people may try it out for two weeks for free.

Dance what? Beginner East Coast Swing, 5:15-6:15 p.m.

Intermediate Waltz 6:15-7:15 p.m.

Intermediate Merengue 7:15-8:15 p.m.

When? For six Wednesdays, starting February 17

Where? Brookhaven Center North Ballroom

How much? \$35 for the six-week series

Who? BNL employees, retirees, official BNL visitors and their immediate families (spouse and children). Each BERA member may bring a partner, but a partner is not necessary to participate.

For more information contact: Kathleen Tuohy, Ext. 3845; Donna Grabowski, Ext. 2720; Mike Hanson, Ext. 2947; John Millener, Ext. 3853; or Kerry Mirabella, Ext. 2632.

Service Anniversaries

The following employees celebrated a service anniversary during November 2009:

— 40 Years —
Morris Strongson..... Physics

— 35 Years —
Carol Ogeka..... S&H Svcs.
Hubbard Harris, Jr. ..Site Services
Joseph Buscemi.... Maint. & Fabr.
Richard Spitz C-AD

— 30 Years —
Gregory MackBus. Systems
Ellen Fredrickson..... EENS
Peter Kohut..... ES&T
John Lara..... Biology
Roger Davis C-AD
Craig Woody..... Physics
Diana VotrubaMagnet
Sandra Asselta C-AD

— 25 Years —
Edward Carley Maint. & Fabr.
Dhruba Ghimiray..... PPM
Kerry Bonti..... Medical
RobertChanda Maint. & Fabr.

— 20 Years —
Joseph Mileto Maint. & Fab.
Steven Savatteri C-AD
Michael Kindya Energy & Utils.

— 10 Years —
Holly Olsen..... Waste Mngmt.
Tyler Rovig Rad. Control
Lee Hammons..... C-AD
Eileen Papa..... Info. Tech
Salvatore Polizzo Physics

Pick a 2010 Summer Student

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

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

AdoptaPlatoon Needs Hot, Instant Cereals

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

Arrivals & Departures

— Arrivals —

Paula Callejas-Lynn..... NSLS II
Corey Churnside..... NSLS II
Vasily Goncharov.....Chemistry
Yongjian Gu..... NSLS II
Viktor Kilchyk..... Comp. Sci.
Robert Rainer NSLS
Liu YangChemistry
Shaoqing Yang..... Biology
Joonah Yoon..... CMP&MS
Shengliang Zhao.....Chemistry

— Departures —

Stefan Bathe..... Physics
Carl Costantino....En. Sci. & Tech.
Mirko Milas CFN
Jangho Park..... CMP&MS
Keeseong Park CMP&MS
Jorge Romero HROM
Ralph Rinello..... HROM
John Riordan Physics
Thomas Smith..... C-AD

CALENDAR

— WEEK OF 2/8 —

Wednesday, 2/10

Stony Brook Energy Workshop

9 a.m.-4 p.m. Small Business Development Center, SBU, workshop theme: “Solar and Wind.” Among the panelists: BNL's Vasilis Fthenakis and Mark Toscano. Registration (free) starts at 8:30 a.m. For more information, contact Leslie Rurup, 632-9837 or leslie.rurup@stonybrook.edu.

— WEEK OF 2/15 —

Monday, 2/15

President's Day Holiday

BNL will be closed for President's Day. No Bulletin will be issued on Friday, 2/19.

Wednesday, 2/17

*BNL Blood Drive

9:30 a.m.-3 p.m. Brookhaven Center. Today is “Random Kindness” Day — your kindness in donating blood will be much appreciated. For more information on requirements and making an appointment, see pg. 4.

455th Brookhaven Lecture

4 p.m. Berkner Hall. Vadim Ptityn of the Collider-Accelerator Department will talk on “Challenges in Accelerating and Colliding Polarized Beams.” All are welcome to this free lecture, open to the public. Visitors to the Lab of 16 and over must carry a photo ID.

Friday, 2/19

*Employee Lunchtime Tour

Noon-1 p.m.. Berkner Hall lobby. Meet for a group visit to learn about BNL's fuel technology and alternate fuels research. See notice on pg. 2.

— WEEK OF 2/22 —

Monday, 2/22

Talk: Hypertension & Heart Disease

Noon. Berkner Hall. Kathleen-Strergopoulos, Director of Inpatient Cardiology Consultation at Stony Brook University School of Medicine, will talk on “Hypertension & Heart Disease: Taking Charge of Your Health.” Registration is requested for this free talk; contact Michael Thorn, mthorn@bnl.gov, Bldg. 490.

IBEW Meeting

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

Wednesday, 2/24

BSA Noon Recital

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

— WEEK OF 3/1 —

Tuesday, 3/2

BSA Distinguished Lecture

4 p.m. Berkner Hall. Economist Robert J. Shiller, Yale University, will talk on “Animal Spirits: How Human Psychology Drives the Economy and Why It Matters for Global Capitalism.” All are welcome to this free talk, open to the public.

On-Site Playgroup Update

Through the QOL/BERA/Recreation office and with BSA support, the on-site playgroup for infants and toddlers has developed a Meetup.com group, where it will post meeting information, play dates, a calendar of events, and more. For more information, visit <http://www.meetup.com/BNL-Playgroup/> or contact Chris Carter, at Ext. 5090 or ccarter@bnl.gov.

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 12.

E-mail your 15 – 20 word “love note” to bulletin@bnl.gov with “For Valentine's Day” in the subject line by Tuesday, February 9. If you use interoffice mail, send your note to Liz Seubert at Mail Stop 400C. 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.

Classified Advertisements

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

OPEN RECRUITMENT – Opportunities for Lab employees and outside candidates.

SCIENTIFIC STAFF POSITION (Assistant/Associate/Scientist) (Electronic Nanomaterials) – Requires a Ph.D. in physics, electrical engineering or materials science, a minimum two years of postdoctoral experience and significant experience with innovative semiconductor device design, fabrication, and electrical/optical measurement. Will demonstrate an ability to lead an original research program with a focus on nanostructured electronic devices for energy conversion, consistent with the central CFN mission and in synergy with existing Electronic Nanomaterials group research efforts in nanostructured photovoltaic devices, photocatalysts, and batteries. Collaboration is an essential aspect of the CFN scientific model, and candidates must provide a vision for building a research program well suited to both internal and external interactions. The CFN is a user-oriented research center with a scientific focus on energy-related themes and with state-of-the-art facilities in materials synthesis, nanofabrication, and structural and functional characterization. The level of the position will be based on the background and experience of the selected candidate. Under the direction of C. Black, Center for Functional Nanomaterials. Apply to Job ID #15197.

POSTDOCTORAL RESEARCH ASSOCIATE (Ultrafast Laser Techniques) – Requires a Ph.D. in chemistry, physics or a related field. Demonstrated expertise in the application of ultrafast laser techniques to chemical physics problems. Experience in ultrahigh-vacuum surface science and in the study of interfacial phenomena relevant to energy-related heterogeneous catalysis. This appointment will be part of a unique effort in Chemical Imaging focused on investigating electron and molecular ultrafast dynamics at the nanoscale. Experiments involve ultrafast-laser excitation of surfaces and nanostructures probed with a low-temperature ultra-high vacuum STM. The work is performed in collaboration with the Brookhaven Center for Functional Nanomaterials. Interested candidates are encouraged to submit a brief (less than one page) statement of research interests in addition to their curriculum vitae, and a list of three references (in one document). Under the direction of N. Camillone, Chemistry Department. Apply to Job ID #15194.*

POSTDOCTORAL RESEARCH ASSOCIATE (Synthesis and Characterization of Transition Metal Complexes) – Requires a Ph.D. in chemistry or related field, and a strong background in synthesis and characterization of transition metal complexes, with experience in one or more of the following areas: handling air-sensitive solutions, photochemistry, mechanistic and kinetic studies in solution and at interface, time-resolved spectroscopy such as flash photolysis and pulse radiolysis, electrochemistry, and maintenance of NMR equipment. Will work collaboratively with a few other scientists including theoretical chemists owing to the interdisciplinary nature of our work. Will explore the production of solar fuels using transition metal complexes in solution and on surfaces of semiconductors or electrodes. Will also conduct basic research toward the development of such catalysts including the investigation of their physical and chemical properties, and a mechanistic understanding of their reactions. The position is available immediately and applications will be accepted until the position is filled. More information on the Chemistry Department can be found at <http://www.bnl.gov/chemistry> or our general website at <http://www.bnl.gov>. Under the direction of E. Fujita (fujita@bnl.gov), Chemistry Department. Apply to Job ID #15195.*

POSTDOCTORAL RESEARCH ASSOCIATE (Accelerator Physics / Plasma Physics) – Requires a Ph.D. in physics. Experience in accelerator physics and/or plasma physics is also required. Knowledge of heavy ion beam production, including electron beam ion source (EBIS), laser ion source (LIS) and/or other ion sources is desired, as is experience in design of space charge dominated beam transport lines and/or linear accelerators. Research will involve development of laser ion sources, ion sources for primary ion injection into an Electron Beam Ion Source (EBIS), and development of EBIS. Under the direction of J. Alessi, Collider-Accelerator Department. Apply to Job ID #15196.*

CONSTRUCTION SAFETY ENGINEER (P – 9, two-year term) – Requires a bachelor's degree in safety management or related field, and a

minimum of ten years of progressively responsible related work experience in construction safety programs. Broad knowledge of OSHA regulatory requirements and experience in developing and implementing programs related to Confined Space, LOTO, structural steel erection, roof work, exterior architectural work, rigging/materials handling safety, implementing a fall protection program and excavation safety is required. Broad knowledge of proper construction safety work practices, tool usage, and equipment operations is also required. Certification as a Safety Professional and or Certified Industrial Hygienist is highly desired. Will develop, implement and administer the NSLS-II Construction Safety Program, including plans, goals and strategies for improved safety performance at the construction site. Will provide subject matter expertise and direction on: health and safety best practices, industrial hygiene monitoring, regulatory issues, interpretations of standards and codes, and incident investigations. Will be responsible for auditing contractor implementation of safety programs and compliance; analyzing construction site safety performance; participating in investigations, and enforcing safety requirements and procedures. Environment, Safety, & Health NSLS - II. Apply for Job ID #15200.

STAFF ENGINEER (P-5, reposting) – Requires a bachelor's degree in human factors, industrial engineering or similar field with a minimum of three years' related work experience in the field of human factors engineering. Specific experience in the human factors of complex fields is desirable. Responsibilities include conducting human factors projects and delivering project-specific products and services to customers in accordance with contractual requirements; identifying opportunities for expanding programs and identifying the best technical approach to human factors programs. Energy Sciences & Technology Department. Apply to Job ID #14206.

TECHNOLOGY ANALYST (I-4) – Requires a bachelor's degree or equivalent work experience, good organization and communication skills and at least one year of experience in an information technology field. Should have experience with Microsoft Windows XP/Vista and Microsoft 2003 Server and should also be proficient in use of Microsoft Outlook, Word and Excel. Familiarity with Linux, Legato Networker, simple scripting and database recovery procedures a plus. Capability of demonstrating knowledge of TCP/IP configuration, security, permissions and resource sharing. Possess the skills for fundamental analysis and troubleshooting in a networked Windows server environment. Understand the differences between VTL, DAS, NAS and SAN and understand the basics of firewalls, databases and backup / recovery methodologies. Must be proactive and able to independently resolve problems and issues. Responsibilities include backup and recovery of 200+ Enterprise Windows Servers, ensuring completion of daily backup jobs and the timely communication of problems, continual attention to maintaining and testing backups and recoveries of entire environment, maintaining backup hardware and software currency. Networker client installations for Windows Servers and Unix/Windows workstations, working with other BNL groups and technicians as well as software vendor support and create and maintain system backup and disaster recovery procedures. Requires some overtime and after-hours support. Information Technology Division. Apply to Job ID #15190.

PLUMBER A (Term) – Under minimum supervision, lays out, constructs or installs, repairs, and maintains water and gas distribution systems, related facilities and auxiliary equipment and equipment utilizing water, gas and heat distribution services. Requires six years' total experience composed of four years' apprenticeship plus two years' experience, or six-to-eight years of total experience composed of formal trade school plus minimum two years' experience, or eight years' total experience preferred. Maintenance & Fabrication Division. Apply to Job ID #15193.

*NOTE: BNL policy states that Research Associate appointments may be made to those who have received their doctoral degrees within the past five years.

Motor Vehicles

09 NISSAN ALTIMA 2.5 S – 2.5K mi. new cond,CVT trans, am/fm/cd w/6 spkr's, 8 way pwr dvrs seat, 7yr/70M bumper to bumper ext warr. \$20,500 neg. 404-7009.
06 DODGE CHARGER – 72K mi. Orig owner. no accids. V. clean. Dk slate metallic colr. 3.5 v6 ps, pb tilt pw, excel MPG.. \$9,750 neg. 872-8966, eastnder@bnl.gov.
04 CHEVY SUBURBAN – 69.5K mi. 4X4, Rem start, Leather, Pwr all.,cd/satt.,c/c, New tires, low mi., excel.cond,Well maint. warr. \$18,000. 513-6067.

03 FORD ESCORT – 47K mi. '03 Ford Escort. a/c, p/s, am/fm/cd a/t, great cond, grey w/dark grey inter. \$3,900 neg. AL, Ext. 7859 or farland@bnl.gov.

98 TOYOTA CAMRY – 100K mi. 4cyl, manual tranny, 31mpg on h'way, multi cd/radio, avail 2/26. \$3,000 neg. Ext. 3488.
97 MERCURY TRACER – 127K mi. Station wgn. 4 cyl., 4 dr., a/t, P/S, P/W, am/fm, A/C. New parts.,but... engine seized after tming belt failure. \$800 neg. 757-0160.
87 BMW 635CSI – 196K mi. w/pics! An icon! well cared for, runs well, needs only sm fixes,pics: <http://tinyurl.com/ydsesph>. \$3,100 neg. 926-5516 or jpomaro@bnl.gov.
MAZDA 3 ACCESSORIES 05/09 – oem all wther mat set frt/rear/\$40; 3 chrome lic plate frmes set/\$20; cust sun shade/\$20; cargo mat/\$30, all 1yr old. 467-2691.

Boats

14' STARCRAFT FALCON RUNABOUT – '68 w/Evinrude eng, new batt, recent refurb, paint/chrome/etc, excel cond, runs well, trailer incl. 917-843-1433.
12' SEAWAY SKIFF – 12.5' fiberglass skiff, gd for lake of flats fishing, outboard capable or can be rowed, gd cond, no papers. \$80. Scott, Ext. 7313, 561-9796.

Furnishings & Appliances

CHINA CABINET – Lg, 2-pc, approx 8 ft h x 4 ft w. Glass drs, bottom drawers for storage. Excel cond. Ext. 3903, 286-0037.
MICROWAVE CABINET – on wheels, solid wood, 18" d, 52.5" h, 25" w w/towel rack, drawer, cabinet storage, photo avail, \$50/obo. Jane, Ext. 2198, 591-1183.
MOVING SALE – 6 mo. old light beige Microfiber couch & loveseat \$500; It wood 3-leaf table w/mtchg hutch \$325 or b.offer. 275-2972 or pichs@bnl.gov.
MOVING SALE – King sz mattress w box sprg \$300, 2 love seat \$30/ea, computer desk \$10, 6 wood chairs \$4 ea, carpet \$30, much more, pics avail. Wadud, Ext. 4269.
OFFICE/TASK CHAIR – adjustable armless task chair, blue fabric/\$25. Jane, Ext. 2198, 591-1183 or lysik@bnl.gov.
SOFA BED – Sofa bed with slip covers and all cushions. Opens to approx 4 by 6 feet. Good condition. Bob, 286-0037.
STOVE – elect smooth top, clean, ask/\$150. Albert, Ext. 8233, 375-2980.

Audio, Video & Computers

52" RCA TV – Projection Screen. On wheels, excel cond, 3 yrs. old. \$500/neg. Ext. 7216, 445-4027 or minter@bnl.gov.
CAMERA – Canon XSI EOS Rebel 450D Digital SLR 12MP 18-55 lens, extra batt, 2 memory cards, lens filter, like new/in box, \$495. Rich, Ext. 7294, 839-5831.
EPSON SYLUS 800 COLOR INKJET PRINTER – incl parallel cable/\$5; new tricolor ink cartridge for above \$10. Ext. 2159 or askinazi@bnl.gov.
IBM THINKPAD T43P 2668 – pentium m 1.86GHz, 2GB ram, 60GB hd, 14.1" 1400x1050, ATI fireGL, wifi, bt, 9cell battery, winxp pro, dvd-ram. \$600. Ext. 3488.
XBOX 360 CONSOLE – XBOX 360 with 20GB Hard drive. Good working condition. \$60. Steve, Ext. 2897.

Sports, Hobbies & Pets

ADOPT A PET – Star, lovable 4-yr-old female cat, long-haired Maine-Coon/Tabby mix; black, smoke grey/brown/tan; neutered & de-clawed. Ext. 7582 or lange@bnl.gov.
BADMINTON RACQUET – new APACS NANO 9900, 4U (84-86gm), grip G2, strung, 25lbs, Ashaway, 673mm long, HM graphite, midflex, pic avail, \$40. 401-218-2344.
BOWFLEX MOTIVATOR – w/lat pulldown & leg extensions, excel cond, photos avail, \$450. Dave, 902-5453.
EXERCISE BICYCLE – Schwinn 120 upright, 12 preset programs, like new \$200. Henry, Ext. 5370.
HOME GYM – Tuff Stuff AXT-5 Pro Style, see at tuffstuff.net. New, is \$3,500, ask/\$2,000. I'll pay for disassemb & assemb, pics avail, serious offers only please. 332-3639.

Miscellaneous

14 KT GOLD BRACELET – Like new/orig box, (hugs and kisses/xoxo)14kt yellow gold, \$200/obo. Ext. 2198, 516-817-0999 or ilady007@optonline.net.
DIAMOND RING – 1.29 Ct. platinum setting, round, brilliant stone, S12 clarity, F color grade, all certifications. Appraised over \$10K, asking \$5K obo. 830-3254.
ELECTRONIC DRUM SET – Yoki DD502 digitl contrller w/215 voices, 50 songs,20 kits,3 toms, snare & kick drum w/pedal,2 cymb,ls,1 hi-hat w/pedal, \$299/neg. Ext. 3246.
STAINLESS STEEL SHELIVING – COST-CO heavy duty unit w/swivel casters 47x18x77; pd/\$100, ask/\$65/obo. Ext. 2198, 516-817-0999 or lysik@bnl.gov.
UGG BOOTS – Two prs brand new Cardy Classics: Ladies sizes: 7 (brown), 8 (dusty rose). \$70 ea. Ext. 6135 or jessie@bnl.gov.

Wanted

CARPENTER/CABINET MAKER – To design & create cust. cabinet/desk systm in my kitchen, Pt Jefferson area. Ext. 4532.
DONATIONS OF DOG/CAT FOOD – for pets of struggling families/elderly. Donations to be given to LI Cares which distributes to the pantries on LI. If you can help by placing a bin in your bldg, pls call. Kathleen, Ext. 3161 or kratto@bnl.gov.
NEW/GENTLY USED CLOTHES – Tots to adult, also linens, small household items,

Giving Blood: Priceless

Here is a true story from an BNLER who personally knows that giving blood saves lives:

I left BNL one Friday looking forward to an especially pleasant weekend — my daughter with her new baby was coming to visit. Early on Saturday, my daughter felt very ill and collapsed. I called 911. The local ambulance arrived within minutes and took her to the hospital. A morning of tests showed extreme anemia, and over the next 12 hours, she was given three pints of blood. Two days later, she was able to come home, look after the baby, and even go back to work within another 24 hours.

How wonderful that blood was available in the hospital.

Who gave that blood? We'll never know, but it was a caring Long Islander, somewhere.



Joseph Rubino DT 1881 12/20/05

Donating Blood for More Than 50 Years

Here at BNL, we know people who generously give blood — and thus, life. In particular, Peter Bond, Senior Advisor to the Director, has given blood steadily for as long as he has been at the Lab, and before that.

“I started as a blood donor about 50 years ago when I was in college,” says Bond. “Then I kept it up. Of course, there have been gaps and times when I wasn't able to donate, but I have tried to donate regularly.”

Bond joined BNL's Physics Department in 1972 as an assistant physicist. In the following 38 years, he has served the Lab in many roles, which have ranged from Physics Chair to Interim Lab Director, Deputy Director for Science and Technology, and more — a demanding schedule. But, to this day, he has always found the time to give blood.

“It's not just a question of finding the time, of course,” said Bond. “I know that some people are afraid to give blood, which is understandable. They believe it may be painful, which it is not, or that they might feel sick, which is rare, and in those instances there are nurses around who are ready to help. But as anyone who gives regularly knows, there's a satisfaction to helping others in this way. It's worth the effort.”

As Bond knows personally, the need for more donors is even greater now, because there are more restrictions on donors than there used to be. For example, taking certain medications and a visit to Europe several years back delayed his being able to give blood until those restrictions no longer applied.

The many acknowledgements Bond has earned over the years as a constant blood donor are a reminder of the many unknown people who are alive because of the efforts of donors like him.

If you can, please add a pint of your blood to the Long Island Blood Bank supply. When it's needed, nothing else will do.

— Liz Seubert

BNL Blood Drive, 2/17

BNL's next blood drive will be held on Wednesday, February 17, 9:30 a.m.-3 p.m. in the Brookhaven Center. Donors must be 17 to 75 years of age, in good health and weighing over 110 lbs. Restrictions may apply to some from the UK 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.” If you do not have access to a computer, call Liz Gilbert, Ext. 2315.

toys/books which will be donated to 76 families living in 1 local shelter. Thank you. Kathleen, Ext. 3161 or kratto@bnl.gov.
SLOT CARS – and parts, HO 1/64. Richard, 516-779-3116 or rlagattolla@bnl.gov.

Lost

X-COUNTRY SKIS & POLES – lost near the intersection of E 5th and Railroad around Jan 14th. Laurence, Ext. 3811.

For Rent

CENTER MORICHES – 2 1/2 rm studio; 2nd fl; pvt entr/parkg. no smkg/pets. Nr stores & transp. Heat incl. Suitable single. 1 mo sec, refs/credit ck re. \$800/mo. 375-7264.
HOLTSVILLE – 2 bdrm Condo Thouse, full bath, walk-in shwr only, eik, l/r; newly renov, furn, all appli, util not incl, 1 yr. lease/neg, 1 mo sec, \$1,500/mo. 744-2628.
MASTIC – 1 bdrm, eik, full bath, den, own ent/drway, 10 min to lab, 1 mo sec, no smkg/pets. \$850/mo. Giuseppe, Ext. 3499, 219-7241.

MIDDLE ISLAND – apt in Lake Pointe Ct, 1 bdrm + den, 1st flr, bright unit, quiet comm, Sublease time:03/01-09/30/2010, orig lease/\$1,360; Sublease/\$1200. 775-6711.
MILLER PLACE – Share furn lg col hse w/prof in prof resid area 8 mi to BNL, full kit, own bdrm, int/tv/heat/ac incl, responsible non-smkr. \$675/mo. 744-8386.
N. PATCHOGUE.– 1 bdrm bsmt apt, Canaan Lake area, l/r kit, full bath, spacious rms, priv prkg/ent, own thermostat for heat & a/c, cable & int, 1 mo sec, avail Mar 1. \$850/mo. 654-0579.
PATCHOGUE – 1 bdrm (loft style) 1 bth apt, perfect for one, priv yd/patio/drway, l/r, kit, w/d & util incl, 1/2 mo sec. \$900/mo. Beth, Ext. 2852, 758-0830.
PORT JEFFERSON STATION – Col, 3bdrm, 1.5 bath, fin bsmt w/possible 4th bdrm, l/r, d/r, eik, gas heat, fen yd, no smkg, yng families on block, sec deposit req'd. \$1,800/mo. 413-5012.

See Classified Ads on pg. 3