

## Stand Down Heightens BNL's Security Awareness



George Malosh, DOE

Last Tuesday, August 3, the day of the security stand down for close to 400 employees, an early-morning e-mail message was broadcast site-wide about "continuing external attacks" on Brookhaven's computer network.

It was a timely reminder that security means more than safeguarding nuclear secrets.

BNL handles little classified material and most research is published. Some areas of research, however, involve sensitive technologies and proprietary information, and these require a heightened awareness of responsibility.

Therefore, the big message delivered on that Tuesday was: Be aware of the level of security protection that applies to the work you do and adapt your actions accordingly.

The day of security presentations was ordered by Energy Secretary Bill Richardson and DOE Director of Security and Emergency Operations Eugene Habiger. Russell Reaver, Manager of BNL's Safeguards & Security Division (S&SD), organized the program at BNL.

In Berkner Hall, Level 1 and 2 managers and employees with Q and L clearances attended the first ses-

sion, which began at 8:30 a.m. and ended at 3:30 p.m. Department and division administrators, security representatives, computer security representatives, personal computer liaisons, and a senior manager for each department and division attended in the afternoon, from 1 to 4:30 p.m.

The two groups overlapped each other to watch two videos supplied by DOE. The first, narrated by Habiger, outlined DOE's commitment to im-

minded those who work with classified materials of the special procedures that must be followed in classified areas.

Speaking on security for unclassified computers, Stuart Kern, Information Technology Division, told the audience that BNL is constantly subject to intrusions, as are all DOE labs, and that BNL is taking more and more steps to prevent such attempts from being successful.

Kris Dahms, S&SD, then presented basic information on how to protect nuclear materials in transport, storage or use.

In reminding employees that export controls apply to everyone at the Lab, Greg Fess, the Lab's General Counsel, explained that any sharing of technology information with foreign nationals may actually be an export of U.S. technology, and

thus subject to control by the U.S. Department of Commerce.

Reaver pointed out that every individual who sponsors a foreign national at the Lab must complete appropriate documentation, including what is called the indices check, which is akin to doing a general background check.

Further information from S&SD personnel was given by Leonard Butera, who outlined the BNL operations security program; Alfred Berretta, who summarized the responsibilities of the Lab police; and Joe Musorrafti, who discussed the Lab's physical security system.

Most of the Tuesday presentations have been posted on the S&SD Web page at <http://www.bnl.gov/S&SD/slides.html>.

### What's Next

The stand down was the beginning of a Lab-wide effort to heighten security awareness. By the end of August, each department and division is to address its own employees to increase their awareness of safeguards and security concepts and issues.



Deputy Director Thomas Sheridan

### 'Greater Expectations' Yellow Beam Makes At Least 128 Turns, Is to Be 'Captured'; Blue Beam Is Ramped

As the Bulletin's layout was being completed on Wednesday, August 11, severe thunderstorms were dampening the day's efforts to continue commissioning the Yellow Ring, one of the two accelerators making up the Relativistic Heavy Ion Collider (RHIC) and the second to be put into operation.

Though at 2:30 p.m. on Sunday, August 8, a gold-ion beam made at least 128 laps around the Yellow Ring, RHIC's accelerator physicists do not consider the Yellow Ring to be commissioned yet.

Given the experience that they have gained from their success with the Blue Ring (see Brookhaven Bulletin, July 23), "We have changed our definition of success for the Yellow Ring — we have greater expectations now," explains Steve Peggs, who heads RHIC's Accelerator Physics Group.

For the Yellow Ring, victory will be declared not only when the beam is circulating for multiple turns, but also when the beam is "captured" and stored by the radio-frequency (rf) system, that is, the rf system is able to maintain the beam in a tight bunch as it circulates readily. The latter effort is being undertaken by Michael Brennan and his RF Systems Group.

Whenever work has to pause on the Yellow Ring due to equipment adjustments, the effort to ramp the Blue Ring, that is, to accelerate the beam to higher energy using the rf system, continues.

Commissioning will continue through 6 a.m. on Monday, August 16, and, after a scheduled shutdown to attend to hardware and software problems brought to light during the initial commissioning, it will resume around December 1.

In the meantime, all are invited to a Lab-wide party on Monday to celebrate RHIC's commissioning successes (see box on page 4). — Marsha Belford



Close to 400 employees attended the security stand down in Berkner Hall on Tuesday, August 3.

merge employees throughout the department's complex in security education and training.

The second video, hosted by Jim Hickok, a safeguards training manager at DOE's Nonproliferation & National Security Institute, showed situations in which sensitive or classified information could be compromised.

### Staff Presentations

For most of the day, BNL staff spoke and answered questions on a range of topics.

Joseph Indusi, Department of Advanced Technology, gave a brief description of classified non-proliferation work done at the Lab and re-



Russell Reaver, Safeguards & Security Division

To that end, Thomas Sheridan, Deputy Director for Operations, requested plans from all departments and divisions as to how they intended to meet that deadline. At a minimum, given that few employees handle classified material, the two videos and a presentation on unclassified computer security will be presented to all.

A week after the stand down, S&SD reported that most of the departments and divisions have submitted plans and numerous calls have come in to borrow copies of the DOE videos.

Said Sheridan, "Several people have told me that they found the stand down useful and important. I'm also pleased to see the departments and divisions respond so quickly in planning how to share this information with their staff. These activities at Brookhaven will help DOE in carrying out sweeping security reforms across its entire complex." — Mona Rowe

## 50 Years of Service to BNL

# Irving Feigenbaum, Alternating Gradient Synchrotron Department

When the news got around that Irving Feigenbaum, a senior technical associate in the Alternating Gradient Synchrotron (AGS) Department, was going to retire on June 18 after 50 years at the Lab, he received a number of phone calls. Many calls were made to wish him well, but a number of callers wanted to find out one thing: What was he doing with his desk?

"That's because I have a desk that's a desk," emphasized Feigenbaum. "It originally belonged to Philip Morse, first Lab Director. It's large, beautifully made of walnut with a leather top, and everyone who sees it wants it!"

The desk came to Feigenbaum through Norris Glasoe, who had been an assistant director when Leland Hayworth took over as the second BNL Director in 1948 and who wanted to use his own desk. "Hayworth gave Glasoe Morse's desk, and Glasoe brought it with him when he came to join us at the Tandem Van de Graaff" — where Feigenbaum had worked from the first days of the Tandem's conception.

"We had become friends, so, when Glasoe left the Lab, he gave the desk to me. I'd take it with me, if it were possible. It's a great desk," Feigenbaum said.

The story of the desk is just one of the many memories that Feigenbaum has stored over the years.

Arriving at BNL on May 9, 1949, he found that most buildings on site were movable Army barracks. One of the few brick buildings was the original bowling alley, which was constructed by the U.S. Army in 1944, when Camp Upton was destined to be a rehabilitation center for returning soldiers.

"The old bowling balls were still around, and they were kept in the gym," remembered Feigenbaum. "If you were in a bowling league, you could borrow a ball for as long as you liked."

One day, whoever was in charge of tracking the balls must have got tired of this task, Feigenbaum thought, because a memo came around, stating that if you paid 50 cents, you could keep the ball you had. "I suppose everyone bought their ball, because no more appeared after that," he said.

As has everyone who was at the Lab in the early days, Feigenbaum commented on how much fun it had been. "We worked very hard, and we played hard," he recalled. "There were fewer people and fewer outside amusements, so we had group picnics, beach parties, and evening get-togethers.

"To give a flavor of the atmosphere then," Feigenbaum continued, "there was a concert grand piano at the back of the Director's Office. If you asked, you'd be given a key and could go to use the piano any evening or weekend. Similarly, at times when the Research Library was closed, you could get a key and work all night or all weekend. Because everyone knew everyone well, many more informal arrangements were possible."

Feigenbaum had been in industry before joining BNL, working for Sperry Gyroscope and Republic Aviation. "From the start, people had totally mistaken ideas about the Lab," he commented. "The only thing people there knew about BNL was wrong: they called it 'the atomic-bomb Lab.' They also warned me to watch out or I might become sterile. They needn't have worried: I have five children!"

When Feigenbaum was first hired as a technician in the then Proton Synchrotron Division, he knew he would be working on building the Cosmotron. "I went to the main library in Brooklyn, where I was living



Irving Feigenbaum, Alternating Gradient Synchrotron Department

at the time, to find out as much as possible in advance," he said. "But in those days, there wasn't much — just that cyclotrons are a type of accelerator. So I learned on the job."

Feigenbaum learned that the Cosmotron, which was located in the old bowling-alley building, Bldg. 902, was going to be the world's highest energy accelerator of its day, the first to produce particles at energies in the billion electron volt (GeV) region. It was also to be the first synchrotron with an external beam of particles for experiments outside the accelerator.

As Feigenbaum witnessed, the Cosmotron started up in June 1952, reaching its full design energy of 3.3 billion GeV in January 1953. He could have continued on the operations team, "But that didn't interest me. I like to build a machine and see it working, then go on to something else."

Feigenbaum heard that he would be able to join a small group that was going to build a very small — 18-inch — cyclotron. "There were only five of us, and we designed it, built it with our own hands, made it run, and did some nuclear physics experiments on it. That was very satisfying," he said.

The next thing that happened is familiar to all long-term BNLers — the funding for the 18-inch cyclotron stopped. "A new proposal had been approved to build a Tandem Van de Graaff — two accelerators aligned in tandem which can also work separately — and I was assigned to that group," he said.

The Tandem became Feigenbaum's

lifework at the Lab.

"The late Harvey Wegner led the project — he was a very dynamic individual, very brilliant," said Feigenbaum. "First, he took about six of us with him around the country to see other such machines and ask the people running them how they would change the design or how it was built. Each evening, we'd get together to tape our comments of the day, and then we sent them back to be typed up. We used that information in designing our own tandem and tandem building."

The Tandem was completed in 1970, the same year that Feigenbaum was named Technical Supervisor, and, for years, it was the world's largest electrostatic accelerator facility. Like many other machines on site, it was one of the places visited by the public on BNL open days in the 70s.

"We heard that we were one of the star attractions," recalled Feigenbaum. "That was because, on open days, we all wore the same jump suits with 'Tandem Van de Graaff' printed on them in very bold letters, and we took people around and explained everything. It was Harvey's idea, and it worked. Visitors remembered us."

Feigenbaum himself often went visiting on behalf of BNL. "I've been all over the U.S. and around the world for the Lab," he said. "I must have been in Germany about six times, and I went to England, Belgium, Canada, France, Holland, Israel, Italy, and Japan. Sometimes I attended a meeting, or I'd check out a vendor, or observe tests

on some material or process, or learn a technique.

"In the U.S.," he continued, "we'd very often go somewhere to dismantle a completed experiment and use the components at BNL. That's true of many pieces of government equipment: they're used as many times as possible."

For example, Feigenbaum said, the gas storage tanks and valves in the Tandem came from the helium storage systems at the old Weymouth Naval Air Station in Massachusetts.

"Dismantling that equipment was the dirtiest job I have ever had," he recalled. "It was very hot, so the first day we wore ordinary khakis, but we got so dirty that the second day, we wore overalls. When my wife saw them, she wouldn't wash them and said they'd be better thrown away!"

The Tandem was used principally to study nuclear reaction mechanisms and the structure of compound nuclei. In 1984, however, attention shifted to the study of heavy-ion particle collisions. For this, the Tandem's low-intensity, direct-current beams needed to be changed to totally new, high-intensity pulsed beams that had never before been obtained with tandem accelerators — a challenge that once again satisfied Feigenbaum.

The success of this project meant that, by 1986, in addition to fueling other experiments, the Tandem began a new career as the injector for the Alternating Gradient Synchrotron (AGS), permitting research with high-energy heavy-ion beams. The next endeavor, as every BNLer knows, is to collide those heavy ions in the Relativistic Heavy Ion Collider (RHIC), in which new horizons of nuclear physics will open.

"As is everyone, I'm looking forward to seeing RHIC working," said Feigenbaum. He was involved in making the stripper foils needed to strip electrons off atoms, which are then sent as ions from the Tandem for acceleration into the AGS, then into RHIC, so he has an extra personal interest in this new machine.

Besides having more time with his family, Feigenbaum admits that he will be playing three or four games of golf a week, not just two, now that he's retired.

But one day a week, he'll be up on site. As he explained, "If they were to start building a new machine, I'd be right there to help them, if I could." However, he agreed to donate time on one condition: for as long as he continues to work at BNL, he gets to use *the* desk. — Liz Seubert

### Money Talks

## Achieving Financial Success

**On Tuesday, August 24, from noon to 1 p.m., representatives from American Express Financial Advisors, Inc., will be in Berkner Hall to present a seminar on "Achieving Financial Success." Some of the topics to be discussed include: assessing financial needs, protecting assets, investing, and education planning.**

**To attend, complete and return the bottom portion of the green Money Talks flyer recently sent to all employees to Joyce Wund, Bldg. 185, by Tuesday, August 17.**

## Defensive Driving

A six-hour defensive driving course will be offered on Saturday, August 21, 9 a.m.-3:30 p.m., in Berkner Hall.

The course will be taught by a Metropolitan Life instructor and is open to BNLers, visitors, and their families. The course will be limited to 72 people and costs \$23 per person.

Completing the course entitles par-

ticipants to a 10 percent discount on vehicle collision and liability insurance, and to have up to four points deducted from their driving records.

To register, send a check made out to Empire Safety Company to Scott Zambelli, Metropolitan Life, 145 Pinelawn Road, 3rd floor, Melville, N.Y. 11747. For more information, call Zambelli, 249-3000, Ext. 5877 (not the on-site Ext. 5877).

## Y2K Microsoft Update

Beginning January 1, 2000, Windows 95, 98 and NT, and Microsoft Office products will no longer work perfectly — unless certain software patches are applied.

These fixes must be installed by Ralph Wiedmann of the Information Technology Division (ITD), or another technically qualified person.

To avoid the rush anticipated at the end of the calendar year, ITD recommends that all Microsoft Windows and Office users call the Help Desk, Ext. 5444, to schedule patch installations or software upgrades. When calling, know the computer's bar code and whether the computer is considered BNL essential, department essential, or nonessential.

For more information on the impact of Y2K on Microsoft products, go to [www.microsoft.com/technet/year2k/product/product.asp](http://www.microsoft.com/technet/year2k/product/product.asp).

## Diversity Visa Lottery

The Office of Scientific Personnel (OSP) has received information regarding the Diversity Visa Immigrant Program for the year 2001 (DV-2001), which is designed to benefit natives of what are known as low-admission countries.

To be eligible for the program, a foreign national must be a native of a designated country and must also have at least a high-school education or its equivalent, or have worked at least two years in an occupation requiring two years of training or experience.

Applicants for diversity visas are initially chosen through a random computer-generated lottery drawing.

Visas are apportioned among six geographic regions, with a greater number of visas going to regions with lower rates of immigration, and no visas going to countries from which more than 50,000 immigrants have come to the U.S. in the past five years.

No one country may receive more than 7 percent of the available diversity visas in any one year.

For the purposes of the DV-2001 program, immigrants from the following countries are excluded: Canada, China — excepting Hong Kong S.A.R. — Colombia, Dominican Republic, El Salvador, Haiti, India, Jamaica, Mexico, the Philippines, Poland, South Korea, Taiwan, the United Kingdom — excepting Northern Ireland — and its dependent territories, and Vietnam.

Entries for the DV-2001 program must be received only between noon on Monday, October 4, and noon on Wednesday, November 3, 1999.

Entries received before or after these dates or sent to the wrong address will be disqualified.

For more information, contact Brenda Kirk, OSP, Bldg. 185A, Ext. 5877.

## Balloon Festival Tickets Available

The Waldbaum's Balloon Festival is this weekend, Friday through Sunday, August 13-15, at Calabro Airport in Shirley. Some tickets for this festival remain on sale at the BERA Sales Office in Berkner Hall, Tuesday through Friday, 9:30 a.m. to 1 p.m.

The cost is \$8 for adults and \$4 for children age 4 to 12; the cost at the gate is \$15 for adults and \$10 for children those ages.

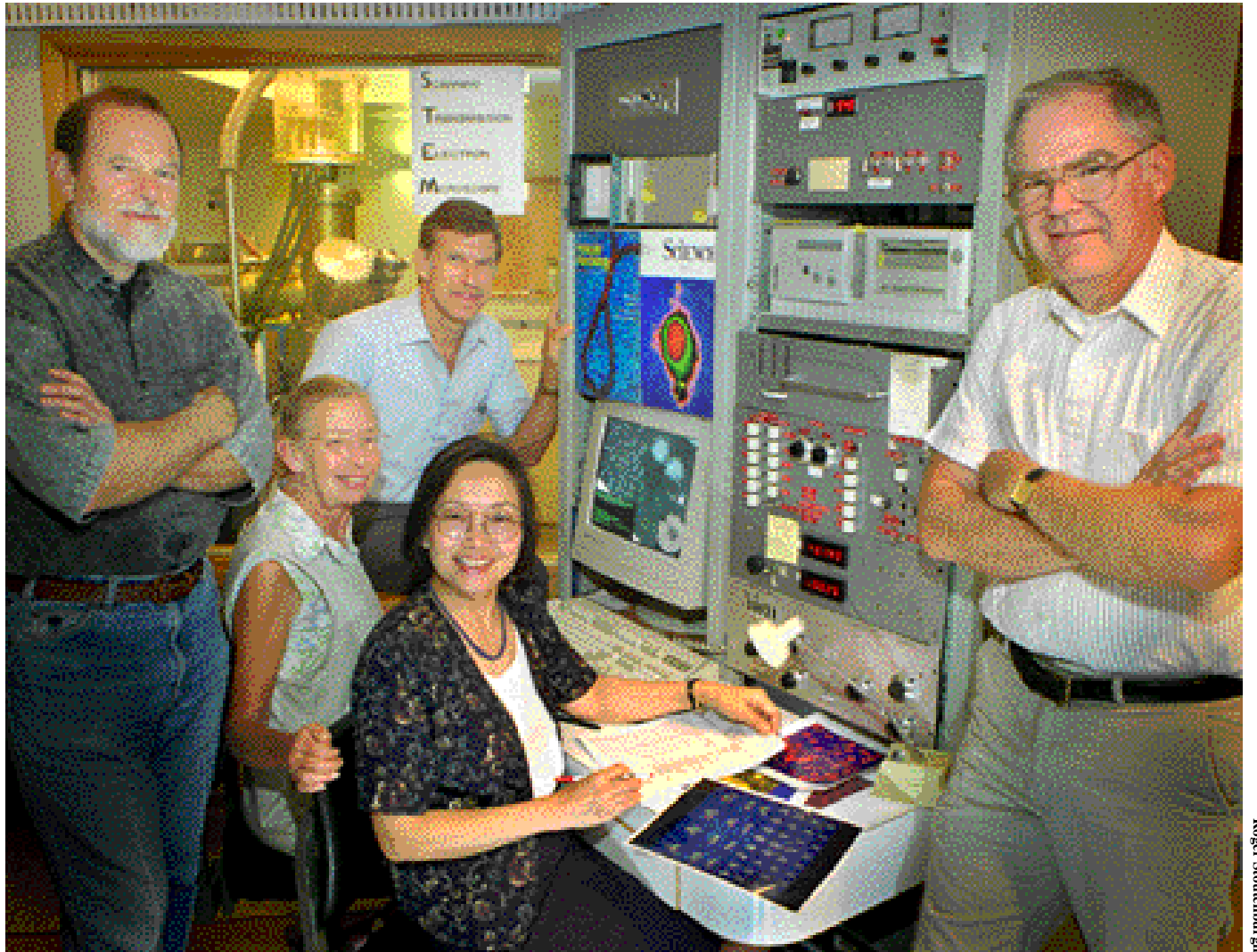
The schedule for the Balloon Festival is:

day	date	time
Fri.	Aug. 13	1-9 p.m.
Sat.	Aug. 14	6 a.m. - 10 p.m.
Sun.	Aug. 15	6 a.m. - 7:30 p.m.

Tonight, Gary U.S. Bond and Chuck Berry will be in concert at the festival. Saturday night will feature Hootie and the Blowfish, and Grucci fireworks. On Sunday, KC and the Sunshine Band will perform. The festival also features stunt shows, a petting zoo, skydiving Elvises, and much more.

## Summer Sundays Continue Through August 29

# Biology Department Is This Sunday's Featured Facility



**STEM (background) and the group that operates this magnificent microscope: (from left) Jim Hainfeld, Martha Simon, Frank Kito, Beth Lin, and Joe Wall.**

Summer Sunday visitors to BNL will find a fascinating tour scheduled for them this Sunday, August 15, when the Biology Department opens its doors to display some of the world-class research being done here by biologists from BNL and other institutions.

For example, every year, at least 60 visiting biologists come to join BNL colleagues and do their experiments at the Scanning Transmission Electron Microscope known as STEM (shown above). This powerful instrument is one of only three in the world that can image single atoms by magnifying samples ten millions times their original size.

Results from some of the unique investigations that BNL biologists are conducting in the National Human Genome Project will also be on view, and visitors will be able to learn how DNA can be sequenced or copied. Then, in the Biology greenhouses, visitors will see forefront research flourishing on plant oils and growing cotton with longer, stronger fibers. And, during a visit to the fish house, they can learn about

research on skin cancer and melanoma.

In addition to touring Biology, visitors may take the guided bus tours of the Lab site that will run continuously throughout the day, participate in the Whiz Bang Science Show, and view the Camp Upton Historical Collection.

Fun for children of all ages, the Whiz Bang Science Show is a lively, interactive demonstration of basic scientific principles. It will be presented at 10:30 a.m., noon, 1:30 p.m. and 3:30 p.m. in Berkner Hall.

Housed in a former Camp Upton chapel, the Camp Upton Historical Collection contains the history of the site during its pre-Lab days as a U.S. Army camp during World Wars I and II.

Organized by the Museum Program of the Community Relations Office, BNL's Summer Sunday tours run from 10 a.m. to 5 p.m., but visitors must arrive before 3 p.m. The tours are free and open to the public, and no reservations are needed.

## Robot Built by William Floyd Students With Help From BNL



**Watching as the William Floyd High School (WFHS) robot is put through its paces are: (from left) Dennis Fidotta, WFHS Technology Director; Louise Hanson, Office of Educational Programs, who coordinated the volunteer effort; BNL retiree and volunteer robotics consultant Donald Gardner; Chris Ryon, WFHS science teacher; Rory O'Fee and JoAnna Cohen, who are two of the dozen WFHS students who participated in the robotics project; and Michael Whelan, a WFHS technology teacher.**

William Floyd High School students and their physics teacher were joined by BNL retiree Donald Gardner in Berkner Hall this April, when they demonstrated how their hand-built robot can lift objects as high as eight feet and carry them to a specific destination (see Brookhaven Bulletin, April 16, 1999).

With technical help and encouragement from Gardner, the students designed and built the robot according to the specification for a national robotics contest that is sponsored annually by the nonprofit foundation called For Inspiration & Recognition of Science and Technology, or FIRST.

As one of 336 teams from high school from across the U.S. which competed in regional contests, the William Floyd team did not win the contest, but its members did develop their interest in science and technology in the process.

## Arrivals & Departures

### Arrivals

Jan L. Chaloupka ..... Chemistry  
Peter E. Raitch ..... Rad. Control

### Departures

John P. Donohue ..... AGS  
Ming Xiong Liu ..... Physics  
Lorraine Solomon ..... NSLS

# BROOKHAVEN BULLETIN

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## BNL Cycletrons Host Annual Family Picnic

Mark your calendars: Saturday, September 11, is the day of the BNL Cycletrons' second annual Family Picnic, which will be held from noon until sundown around the gazebo at the BNL ball field. The rain date is Saturday, September 18.

Activities for the day will include bike games, horseshoes, volleyball, softball, relays, three-legged races, and water play. Bring favorite CDs and tapes, outdoor equipment, games — and a towel!

All are invited. While children of 12 and under will be admitted free, the fee of \$5 entitles participants to hamburgers, hot dogs, salads, sodas, and more. Purchase tickets by September 1 from: Chuck Baldwin, Ext. 4688; Rich DiFranco, Ext. 3868; Frank Dusek, Ext. 2022; or Charles Gardner, Ext. 5214.

## Equipment Demo

Janel Incorporated and Wilson Industries will demonstrate the Luxo microscope on Wednesday, August 18, 11 a.m.-2 p.m., in Berkner Hall.

Janel will also display electronic products, including Kester solder, Desco and Charleswater products, and Excelta and Zuron tools.

For more information, call Sandy Fernandez, 1-800-782-4487.

## BERA Bus Trips

*BERA offers bus trips that include round-trip transportation on a fully-equipped coach bus, and admission to the advertised event. All trips leave from the Brookhaven Center; if requested, an extra pickup will be made at the park and ride at L.I.E. exit 63.*

*Tickets are sold first come, first served. To make paid reservations for one or more of the following trips, go to the BERA Sales Office, Berkner Hall, Tuesday through Friday, 9 a.m. - 1:30 p.m. For more information, call Andrea Dehler, Ext. 3347, or M. Kay Dellimore, Ext. 2873.*

### To Shea Stadium on August 24

On Tuesday, August 24, BERA is going to Shea Stadium in Queens, to see the New York Mets play the Houston Astros in an evening baseball game. During the game, participants should keep their eyes on the scoreboard, as BERA/Brookhaven Lab will be announced. In addition, each participant will receive a gift, courtesy of the Mets.

Participants are to arrive by 4:15 p.m., the bus will leave promptly at 4:30, the game starts at 7:30 p.m., and the bus will leave the stadium at approximately 10:30 p.m. to return to the Lab. The cost is \$45 per person.

### To Yankee Stadium on Sept. 10

A few seats remain for the bus trip on Friday, September 10, when BERA is going to Yankee Stadium in the Bronx, to see the New York Yankees play the Boston Red Sox at 7:30 p.m.

The bus will leave the Brookhaven Center at 4:30 p.m. sharp, so passengers must arrive by 4:15 p.m. The game ends at approximately 10:30 p.m., at which time the bus will depart for BNL. The per-person cost is \$33.

### To Radio City on December 5

On Sunday, December 5, BERA is going to the newly refurbished Radio City Music Hall in New York City, to see the annual Christmas Show. This year, the show features some new costumes and sets.

The cost is \$85 per person, which includes orchestra or front mezzanine seats, as well as transportation. The bus will leave at 11:30 a.m.; return to the Lab will be at approximately 9:30 p.m. In the city, there will be free time — for seeing the Rockefeller Center tree, browsing 5th Avenue, and/or window-shopping the holiday decorations.

## Lab Director Invites Everyone (Including You) To Celebrate Beginning of RHIC Operations

**On Monday, August 16, the entire Laboratory community is invited to Berkner Hall between 4 and 7 p.m., to celebrate the end of construction and the beginning of operations of BNL's Relativistic Heavy Ion Collider (RHIC).**

**This invitation is extended by Laboratory Director John Marburger, in appreciation of everyone's support and effort on behalf of RHIC since its conception through to its commissioning today (see box, page 1). "RHIC's success is the Lab's success, so we want to celebrate the Project's commissioning with everyone," says Marburger.**

**The celebration will feature hors d'oeuvres, beverages, and a band — the Isotope Stompers. Everyone — employees, retirees, RHIC experiment collaborators, other facility-users, and visiting researchers — is invited to attend.**

## Hot Summer Jam

Tonight at 6 p.m. be there at the Rock Hill Country Club, off Clancy Road in Manorville, for BERA's Hot Summer Jam party.

The cost of \$5 will cover hors d'oeuvres and entertainment, including music by DJ Alex; a cash bar will be available. The party is open to all BNL employees and their guests who are over 18 years of age, and no reservations are required.

For more information, call Charles Gardner, Ext. 5214, or Lou Nieves, Ext. 4897.



### 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 complete list of all job openings; use a TDD system to access job information by calling (516) 344-6018; or access current job openings on the World Wide Web at <http://www.bnl.gov/JOBS/jobs.html>.

**LABORATORY RECRUITMENT** - Opportunities for Laboratory employees.

NS8745. PLANNER/ESTIMATOR, ELECTRICAL - With minimum supervision, performs work requirement analysis, job layout and equipment selection, and applies performance measurement standards to produce operating estimates for all types of plant maintenance and repair. Requires a minimum of five years' electrical experience, considerable construction experience, and proven ability equivalent to that of a craft supervisor. Plant Engineering Division.

DD8749. OFFICE SERVICES POSITION - (term appointment) Requires a high school diploma or equivalent, knowledge of basic office procedures, and some relevant work experience. Under direct supervision, will provide varied clerical support to Division administrative office and other groups as needed. Experience with IPAP/JCARS highly desirable. Plant Engineering Division.

**OPEN RECRUITMENT** - Opportunities for Laboratory employees and outside candidates.

RDA8322. ASSOCIATE LABORATORY DIRECTOR, BASIC ENERGY SCIENCES - Reporting to the Laboratory Director, will provide overall scientific and managerial leadership for the science programs of several major research and facility sectors: chemical sciences, material sciences, the National Synchrotron Light Source (NSLS), and the High-Flux Beam Reactor (HFBR). Areas of scientific focus are now complex materials and chemical catalysis. In the facilities sector, the focus will be on maintaining and expanding the capabilities of the NSLS, by expanding applications to biological sciences, and developing the technology for an x-ray free electron laser. Also seeking to enhance the program in neutron scattering at BNL at the HFBR and the emerging spallation neutron sources. Requires a Ph.D. and a distinguished research career in the chemical and/or material sciences with proven experience in the management of a midsize research effort. Will develop internationally recognized programs that are aligned with the mission of DOE, and, at the Director's level, will participate in Lab-wide planning for new programs and user facilities. Will have line responsibility for the safe and environmentally sound operation of science programs and the facilities. Director's Office.

NS7217. PUBLIC AFFAIRS POSITION - Requires a bachelor's degree in an appropriate field, a minimum of 3-5 years' relevant community relations background, and excellent writing skills. Will develop and implement community-involvement and outreach programs; assist with the coordination of community requests and responses; and organize and facilitate meetings between BNL management and members of the community, primarily for the Brookhaven Graph-

ite Research Reactor Decommissioning Project. Will also develop presentations, Web pages, brochures, and other communications documents. Community Involvement, Government & Public Affairs Division.

DD7380. FACILITY SAFETY ENGINEER POSITION - Requires a BS degree in engineering or related science, and experience in reactor-systems safety, design and engineering analyses, calculations, and computers. Responsibilities will include generating and reviewing safety evaluations (USQD) and safety analyses. Will assist in revising HRBR and BMRR SAR/TSR review, implementing DOE orders/regulations, and generating and checking calculations related to reactor-worker and environmental safety. Excellent communication skills and experience with industry and DOE requirements also required. Reactor Division.