

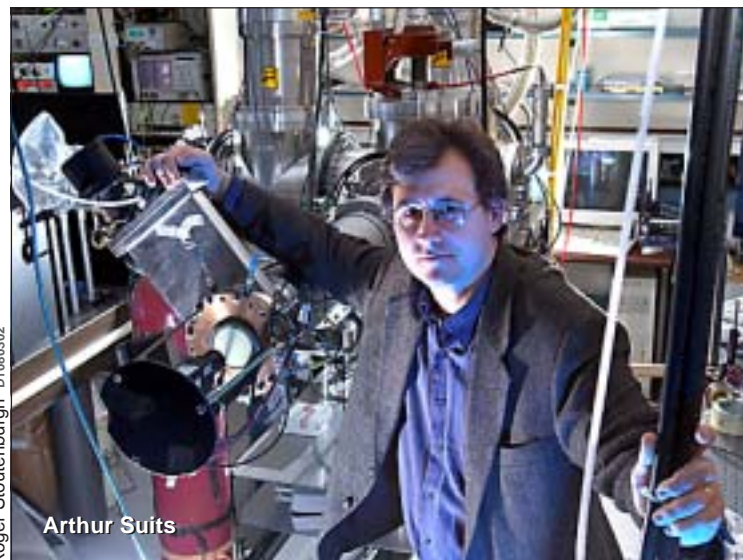
## Brookhaven Spotlights

*Issued periodically, Brookhaven Spotlight puts some of the latest newsworthy developments at BNL in the limelight. The spotlight in today's Bulletin is on research that Lab scientists presented at the 225th American Chemical Society meeting, March 23-27, 2003. Last week's Bulletin featured a talk given at that meeting by Hua Gen Yu, Chemistry Department. The series continues with the following three briefings.*

**Save the Date!**

**Friday, May 2  
Reception  
for  
New Director  
Praveen Chaudhari**

### Combining Techniques To View Chemical Reactions



Roger Stoutenburgh D1760302

To obtain a detailed picture of chemical reactions involving hydrocarbons, a team of scientists led by Arthur Suits, Chemistry Department, has combined a method using lasers and molecular beams, called a crossed molecular beam method, with a successful imaging technique that determines the velocity of the reaction products.

"The crossed molecular beam method is the most powerful means of obtaining detailed insight into elementary reaction dynamics, and imaging methods have achieved tremendous advances in velocity resolution," Suits says. "So we have combined both methods to explore the

detailed dynamics of the reactions of oxygen with alkanes, which are hydrocarbons such as natural gas and fossil fuels."

Using this approach, Suits and his colleagues made unexpected observations. For example, by comparing the dynamics of the reaction when using excited and non-excited oxygen atoms, they saw that the products were spatially distributed in two different ways.

"The results show dramatically contrasting dynamics," Suits says, "with backward-side-ways scattering dominating the reaction with non-excited oxygen and forward scattering for the reaction with excited oxygen. In both cases, the products

### Running as Fast as Radicals

A team of scientists led by Christopher Fockenberg, Chemistry Department, has constructed an apparatus that detects chemical-reaction products as they form. These reactions involve radicals, which are highly reactive molecules present in the combustion of fossil fuels.

"Reactions between radicals are challenging to study," Fockenberg says, "because they lead to more reactions and products than those expected from the reaction of interest alone. Now, we can detect even 'unexpected' products generated during the reaction with a time resolution never achieved before."

With their apparatus, Fockenberg and his colleagues successfully identified the reactants and products in the reaction of methyl radicals with oxygen atoms. To their surprise, the scientists noticed the formation of not only formaldehyde and hydrogen atoms, but also a significant amount of carbon monoxide with hydrogen molecules and atoms.

The researchers next plan to investigate reactions involving other radicals, which may help scientists devise ways to reduce atmospheric emissions of pollutants.

— Stories on this page are by Patrice Pages.



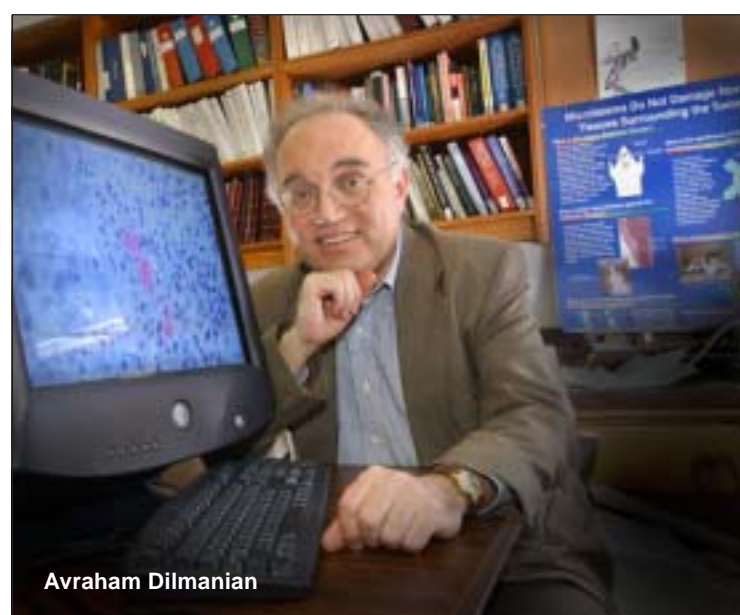
Roger Stoutenburgh D1830303

### Developing Microbeam Radiation Therapy

Despite the considerable recent progress in radiation therapy, radiation treatment of brain tumors is often associated with side effects due to damage to normal brain tissue. But scientists working at the National Synchrotron Light Source at BNL are developing a promising radiation therapy technique that is effective in destroying tumors in animal models, while sparing normal tissues.

Called microbeam radiation therapy (MRT), this technique, which uses parallel, microscopically thin slices of synchrotron-generated x-rays, preferentially kills tumors in part by acting on blood vessels.

"The way it probably works," says Avraham Dilmanian, Medical Department, who is MRT's principal investigator and a member of the team that developed the therapy, "is that the endothelial cells, which line the inner walls of blood vessels, survive in the regions between the microbeams. So, they can replace the endothelial cells killed by the micro-



Roger Stoutenburgh D1760303

beams. But this repair process somehow fails in the tumor's capillaries because they are very different from those of normal tissues. As the tumor's capillaries are destroyed, they cannot feed the tumor any more, and it eventually dies."

The therapy has not yet been tested in humans and is years away from clinical appli-

cation, but Dilmanian's results are encouraging. "MRT has proven highly effective in the treatment of certain experimental rat brain tumors, with minimal impact on adjacent normal brain tissue," he says. "Our results support the idea that MRT could offer control of brain cancer with fewer deleterious side effects."

### 2003 NSLS Annual Users' Meeting and Workshops

**Monday-Wednesday, May 19-21**  
**Registration on all days: Berkner Hall, Room D**

#### MONDAY, MAY 19

- Workshop 1 - *Frontiers in Powder Diffraction*  
Bldg. 555, Hamilton Seminar Room
- Workshop 2 - *Spectroscopy in High Magnetic Fields: ESR, etc.*  
Bldg. 463, Biology Seminar Room
- Workshop 3 - *Applications of Synchrotron Radiation: A Pathway, etc.*  
Bldg. 911A, Snyder Seminar Room
- Vendor Exhibit

#### TUESDAY, MAY 20

- 2003 NSLS Annual Users' Main Meeting  
Berkner Hall
- Vendor Exhibit

#### WEDNESDAY, MAY 21

- 2003 NSLS Annual Users' Meeting and Workshops
- Workshop 4 - *Bio-Matters: From Infrared to X-rays*  
Bldg. 911A, Snyder Seminar Room
- Workshop 5 - *High Pressure Mineral Physics Using Synchrotron Radiation*  
Bldg. 563, Biology Seminar Room
- Workshop 6 - *EXAFS Under Extreme Experiments Conditions, etc.*  
Bldg. 555, Hamilton Room

For more information, go to  
<http://nslsweb.nsls.bnl.gov/nsls/users/meeting/>



Roger Stoutenburgh D0186032



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 Chris Carter, Ext. 2873.
- Additional information for Hospitality Committee events can be found at the Lollipop House and the laundry in the apartment area.
- The Recreation Building (Rec. Bldg.) is located in the apartment area.
- Contact names are provided for most events for more information.
- Calendar events flagged with an asterisk (\*) have an accompanying story in this week's Bulletin.

— EACH WEEK —

**Weekdays: Free English for Speakers of Other Languages Classes**  
Beginner, Intermediate, and Advanced classes. Various times. All are welcome. Learn English, make friends. See [www.bnl.gov/esol/schedule.html](http://www.bnl.gov/esol/schedule.html) for schedule. Jen Lynch, Ext. 4894.

**Mondays: BNL Gospel Choir**  
5:15-7 p.m. Berkner Hall. All faiths are welcome. [www.bnl.gov/bera/activities/choir/](http://www.bnl.gov/bera/activities/choir/).

**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. Ext. 5923.

**Mon., Thurs., & Fri.: Tai Chi**  
Noon- 12:45 p.m., Brookhaven Center North Room. Adam Rusek, Ext. 5830 or [rusek@bnl.gov](mailto:rusek@bnl.gov).

**Mondays: BNL Dance Club Ballroom, Latin & Swing Practice**  
5:30-7 p.m. North Ballroom, Brookhaven Center, except Lab holidays. Jean Logan, [jlogan@bnl.gov](mailto:jlogan@bnl.gov) or Ext. 4391.

**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: BNL Music Club**  
Noon, North Room, Brookhaven Center. Come hear live music. Joe Vignola, Ext. 3846.

**Tuesdays: Singles Club**  
12:30-1:30 p.m., Berkner Hall. Contact: Jean, Ext. 4391.

**Tuesdays: BNL Dance Club Individual & Couples instruction**  
5-11 p.m. North Ballroom, Brookhaven Center. Ron Ondrovic, [ondrovic@bnl.gov](mailto:ondrovic@bnl.gov) or Ext. 4553.

**Tuesdays: Toastmasters**  
1st and 3rd Tuesday of each month, 5:30 p.m., Bldg. 463, room 160. Guests, visitors always welcome. [www.bnl.gov/bera/activities/toastmasters/default.htm](http://www.bnl.gov/bera/activities/toastmasters/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. Ext. 5923.

**Wednesdays: On-Site Play Group**  
10 a.m.-noon. Rec. Bldg. An infant/toddler drop-in event. Parents meet while children play. Svetlana Agafonova, 205-5065.

**Wednesdays: Science Education Forum**  
Every other Wednesday, Noon-1 p.m., Bldg. 438. Join a discussion on interesting and timely issues in science education. Refreshments will be provided. Bring your own lunch. Brian Murfin, Ext. 7171.

**Wednesdays: Weight Watchers**  
Noon-1 p.m., Brookhaven Center South Room. Ext. 5923.

**Wednesdays: Yoga Practice**  
Noon-1 p.m., Brookhaven Ctr. Free. Ila Campbell, Ext. 2206.

**Wednesdays: Open Chess Night**  
5-8 p.m., Rec. Hall. Christine Carter, Ext. 5090.

**Wednesdays: Exercise 101**  
5:15-6 p.m., Rec. Bldg. \$4 per class or \$35 for 10 classes. Stretching, low-impact aerobics, and other exercises. Pat Flood, Ext. 7886.

**Wednesdays: Dance Club Group Lessons**  
6-9 p.m. North Ballroom, Brookhaven Center. Series 4 lessons start 4/9 (see listing). Marsha Belford, [belford@bnl.gov](mailto:belford@bnl.gov) or Ext. 5053.

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

**Fridays: BNL Social & Cultural Club**  
8-11:30 p.m., Brookhaven Ctr., social. Rudy Alforque, Ext. 4733, [rudy@bnl.gov](mailto:rudy@bnl.gov).

**Saturdays: BNL Dance Club Monthly Ballroom Dance Social**  
8-11:30 p.m. Ballroom, Latin & swing dancing, North Ballroom, Brookhaven Center. April social on 4/12, Marsha Belford, [belford@bnl.gov](mailto:belford@bnl.gov) or Ext. 5053.

**— TODAY —**

**Friday, 4/18**

**\*Employee Noontime Tour**  
Noon, Berkner Hall lobby. Meet to take a bus to BNL's test-bed facility, where radiation-detection equipment is tested. The group will return to Berkner Hall by 1 p.m. All are welcome. Elaine Lowenstein, Ext. 2400. See also page 4.

**THIS WEEKEND —**

**Saturday, 4/19**

**Earth Day 4-Mile Run**  
Run begins at 9:30 a.m. Race-Day registration and check-in will be held from 7:30 to 9:15 a.m. For more information contact Peter Pohlott, Ext. 5660, or see [www.bnl.gov/bnlweb/eday/](http://www.bnl.gov/bnlweb/eday/).

# BNL Hosts 200-Plus Science Students From Historically Black Colleges, Universities



Roger Stoulenburgh D2140203

More than 200 science and mathematics students from historically black colleges attended the 60th joint annual meeting of the Beta Kappa Chi Scientific Honor Society, the National Institute of Science, and the Brookhaven Semester Program. Hosted by BNL, the four-day symposium at the Melville Marriott was held to stimulate interest among diverse students in careers in science, health, and technology. The students presented their scientific research results in a competition, vying for cash prizes and the attention of graduate schools and potential employers. Volunteers from BNL, Hofstra University, the State University of New York at Farmingdale, Stony Brook University, and Suffolk County Community College judged the

students' papers in numerous areas of science. The event was planned and coordinated by a committee chaired by Renée Flack, Office of Educational Programs (OEP), and included Patrick Ametewee, Diversity Office; Patricia Durcan, Human Resources & Occupational Medicine (HROM) Division; Kathy Einfeldt, HROM; Florence O'Brien, HROM; Elaine Lowenstein, Community Relations; Brian Murfin, OEP; Cathy Osiecki, OEP; and Jeanne Marie Petschauer, Community Relations. "The theme for the conference was the Lab's motto — 'a passion for discovery' — and I believe these students have that passion. Their enthusiasm and the quality of their presentations was inspiring," Flack said. "I'd like to thank Brookhaven

Science Associates for funding this important event that not only promotes science, but diversity in science as well. Thank you, also, to the many volunteers who helped to make the symposium a success, from the judges to the tour guides." On March 28, the students and faculty from the participating schools (pictured above outside Berkner Hall) had a chance to tour BNL. At a gathering in Berkner Hall, the visitors were entertained by the conference choir, led by Frances Ligon, Business Systems Division, and composed of BNL employees and retirees, and their family members. BNL's former Interim Director Peter Paul, now Deputy Director for Science & Technology, addressed the students, explain-

ing the multidisciplinary nature of the Lab's scientific research and the need for future scientists. The students also had a question-and-answer session with three BNL physicists, all from the Physics Department: Ketevi Assamagan, Mark Harvey, and Carol Scarlett. Paul joined in the discussion with the physicists and students, which included questions about types of research done at the Lab, technology transfer and scientists' royalties, postdoctoral research, competition in the scientific community, and the proposed Center for Functional Nanomaterials. Said Paul: "I have rarely seen Berkner Hall filled to capacity as it was for this event. The audience was clearly engaged and not shy in asking pertinent questions about doing research at Brookhaven when challenged by the panel of three BNL scientists. This was a great and spirited event and a success for BNL. The last time we hosted this event was in 1992, just about a decade ago. It was good to do it again this year. I am grateful to all who put this interesting program together." Other highlights of the conference included talks by Otto White Jr., Manager, Safety & Health Services Division; Peter G. Shelds, Georgetown University; and Wally Amos, a motivational speaker and founder of Famous Amos cookies, who currently has a new Long Island-based business, Uncle Wally's Muffins. — Diane Greenberg

**Fidelity Investment Counseling, 5/8**

A Fidelity Investment representative will be at the Lab on Thursday, May 8, to hold sessions with individual employees interested in learning more about their retirement-savings and investment options. Schedule one of the 45-minute appointments by calling (800) 642-7131.

**Money Talks Workshop, 5/14**  
**Staying On Track in a Market Downturn**

Join representatives from TIAA-CREF at noon in Berkner Hall on Wednesday, May 14, when they present "Staying On Track in a Market Downturn." Representatives will discuss initial reactions to market functions, remembering positive opportunities during downward movements, and other factors that can affect your wealth building. Check your mailbox for registration forms. For more information, contact Joyce Wund, Ext. 7516.

## Information and Guidance on SARS

Laura Sbarra, Manager of the Occupational Medicine Clinic, has provided the following information and guidance on SARS. Anyone with questions or concerns about SARS should contact Sbarra at Ext. 3665, [sbarra@bnl.gov](mailto:sbarra@bnl.gov); or OMC staff physician Joseph Falco, Ext. 3666, [falco@bnl.gov](mailto:falco@bnl.gov).

Q. What is SARS?

A. SARS, which stands for Severe Acute Respiratory Syndrome, is a new disease that was first reported last fall among people in Asia. It is an apparently severe form of pneumonia.

Q. What are the symptoms of SARS?

A. In general, SARS begins with a fever greater than 100.4 degrees F (38 degrees C), coughing, and shortness of breath. It can progress to a severe generalized illness. There are no tests to diagnose the disease at this time. The incubation period can range from one to eleven days with an average of 5 days, although this is variable. Persons may be infectious during the incubation period when they have no symptoms.

Q. Where are people getting sick?

A. SARS has been reported in China, Hong Kong, Vietnam, Indonesia, Philippines, Singapore, Thailand, and Canada. The most current information on which countries have been involved in disease outbreaks is available from the World Health Organization at [www.who.int/csr/sars/en/](http://www.who.int/csr/sars/en/).

Q. What does Brookhaven Lab advise?

A. The Lab's Occupational Medicine Clinic (OMC) has issued information and guidance for all on-site personnel regarding SARS.

- Anyone returning from foreign travel MUST contact OMC by phone prior to his/her return to work for a phone interview with an OMC staff member. The number to call is (631) 344-3665.

- If you experience fever and respiratory symptoms AND you have recently traveled (or arrived from an area) outside the U.S., especially in areas where the disease has been observed, DO NOT come on site. Notify OMC by phone of your condition.
  - If you have been in contact with a SARS patient, DO NOT come on site. Notify OMC by phone.
- Q. What can I do to reduce my chances of getting SARS?
- A. Because of the possibility of travel-related SARS and its potential for transmission to close contacts, the Laboratory recommends the following:
- Limit Laboratory foreign travel as much possible.
  - Consider limiting personal foreign travel.
  - If you have a fever and respiratory symptoms, contact your personal healthcare provider for evaluation and medical care, whether or not you have recently been on foreign travel.
- Q. What is being done about visitors to the Lab, especially ones from areas of the world affected by SARS?
- A. We have asked the department/division offices to notify foreign nationals who are planning to come to the Lab that they must first call the clinic at (631) 344-3665 before coming to the site. Individuals who have no symptoms are not barred from site access at this time. Those with fever and respiratory symptoms AND who have traveled from at-risk countries OR who have come in contact with SARS cases will be advised by the clinic not to come on site and will be followed up accordingly.
- Q. Where can I get more information on SARS?
- A. For more information on SARS, go the Centers for Disease Control and Prevention website: [www.cdc.gov/ncidod/sars/](http://www.cdc.gov/ncidod/sars/).



Good Listeners Wanted

BNL Advocacy Council needs three new members

The nominating committee of the Brookhaven Advocacy Council (BAC) is looking for three candidates who represent the Lab's diverse workforce to become members of BAC.

You need to be a good listener who can: maintain confidentiality, remain impartial, base your judgment on fact rather than emotion, be interested in establishing an atmosphere of trust between BNL management and its employees, and be willing to devote time and energy to ensure that everyone enjoys equally the quality of life that BNL has to offer.

BAC is a key component of BNL's system of justice. The members advise and make recommendations to the BNL Director on resolving employee, guest, and user concerns or issues that are brought to BAC's attention. BAC has the authority to receive and respond to employee, guest, and user concerns or issues; analyze and research data; and propose resolutions. Members have access to all pertinent, uncensored information, within BNL's guidelines regarding confidentiality, to assist them in resolving these concerns or issues. Membership responsibility consists of regular participation in the monthly Council meetings for three years. BAC functions independently of the Human Resources Division, reporting directly to the Laboratory Director.

If you are interested in becoming a candidate, contact a nominating committee member by Friday, May 2. Include: your name, extension, e-mail address, department/division, and position. The committee will recommend candidates to the Laboratory Director, who makes the final decision and appoints the members. Nominating committee members are: Vincent Castillo, Ext. 3772, Castillo@bnl.gov; Joe Gisondo, Ext. 4567, psych@bnl.gov; Grace Webster, Ext. 3227, gwebster@bnl.gov; and Corene Wood, Ext. 5070, wood1@bnl.gov. Be sure to contact a member by Friday, May 2.

Hispanic Heritage Club Seeks New Members

The Lab's Hispanic Heritage Club invites all BNLers and their families to become club members. The club seeks to develop a stimulating and supportive network for all, with the goal of developing activities and cultural events that bring an awareness and aesthetic appreciation of Hispanic culture to the BNL community. For more information, contact: Carmen Narvaez, Ext. 3254, or narvaez@bnl.gov; or Yvette Malavet-Blum, mala vet@bnl.gov.

Retirement Income Planning Talk, 5/8

On Thursday, May 8, in Berkner Hall at noon, Fidelity Investments representatives will talk on "Planning Your Retirement Income." You will learn how to identify strategies that could help in making your income meet expenses in retirement, determining appropriate distribution options for you, and investing appropriately before and after retiring.

Check your mailbox for registration forms. For more information, call Joyce Wund, Ext. 7516.

WalkAmerica

On Sunday, April 27, join the BERA team as a walker or a contributor to the annual WalkAmerica to raise funds that will help improve infant health. Registration forms and sponsor sheets are available at the BERA Sales Office, weekdays 9 a.m.-3 p.m.

Tennis Anyone?

Tennis Reservations:

Two tennis-court reservation systems will be in effect weekdays from Monday, April 21 through Friday, October 31: 11:30 a.m.- 2 p.m., and 4:30-7 p.m. The rules for court use are posted on the bulletin board on the West Side of the courts.

Under the advance reservation system A, three of the courts (courts 1, 2, and 3 on the south side of the wall) may be reserved for weekday play the day before play. If two players are not on the court within 15 minutes of the reserved time, the court reservation is forfeited and the reservationist loses his or her right to reserve courts for one week. In other words, it is incumbent upon the reservationist to cross out his/her name and make the court available for others if he/she cannot play. For this system, lunchtime play is limited to one hour for both singles and doubles.

For system A, reservations must be made on sign-up sheets posted at the tennis courts, no sooner than noon on the day before play. Monday play may be reserved on the previous Friday. The person who signs up must be one of the intended players and must include a legible last name and phone number. No-one playing on a reserved court at noon may reserve a court until after 1 p.m., thus providing a one-hour window of opportunity for non-players to reserve a court. Also, no one may reserve a noon court on two consecutive days. Persons reserving a noon court for Friday may not reserve a noon court for Monday.

The on-court scheduling system B offers the two remaining playable courts to players who sign the blackboard at court side at the time of play, first come, first-served. Under this system, lunchtime play is limited to 1 hour for both singles and doubles.

System A can be used only by Group I of the priority players listed below. System B may be used only by groups 1 and 2. Groups 3 and 4 may play during non-reservation times only:

Group 1 - Lab employees, including those with visiting and guest appointments, and BNL retirees.

Group 2 - Lab employees playing with family members or personal guests.

Group 3 - Immediate family members of Lab employees.

Group 4 - Personal guests of Lab employees.

Tennis Ladder:

The Preliminary Competition Ladder started on Sunday, April 6, and will run until Saturday, May 31. As last year, the preliminary ladder, in which any player may challenge any other player to a match, regardless of current ladder position, will determine starting positions for the normal and cumulative ladders.

The Normal Competition Ladder and the Cumulative Competition Ladder will start on Sunday, June 1, and run until Saturday, October 25.

The ladder sign-up sheet is in the BERA Sales Office in Berkner Hall. The fee is \$3. Sign up weekdays between 9 a.m. and 3 p.m.

Under the modified ladder scheme to be tried this year, players will be demoted one position when they exceed their must-play-by date and then one more position for every additional seven days that they exceed their must-play-by date. As happened last year, players receive seven exempt days for every match played, win or lose, subject to a maximum accumulation of 21 exempt days. All players will begin the normal/cumulative ladder competition with 21 exempt days.

For more information call Joe Carbonaro, Tennis Committee Chair, Ext. 5139, Frank Stubblefield, Tennis Ladder Coordinator, Ext. 4165, or Ken Perkins, Ext. 2147.

RHIC, AGS Users' Meeting, May 15-16

The Relativistic Heavy Ion Collider (RHIC) and Alternating Gradient Synchrotron (AGS) Annual Users' Meeting will be held at BNL on Thursday and Friday, May 15-16, 9 a.m.-5 p.m.

The meeting will feature reports from BNL management, the Department of Energy and the National Science Foundation. An American Physical Society representative will give a tutorial on how to speak to politicians and the general public about scientific issues.

In addition, the meeting will focus on:

- latest physics results from RHIC & AGS experiments
- plans for upgrades and future experiments
- recent theoretical developments.

A poster display will explore the diversity of projects at RHIC & the AGS. Students and post-docs are encouraged to submit posters, and a prize will be awarded to the best student/post-doc poster.

For more information, go to www.bnl.gov/userscenter.

'Take Our Children to Work' Day, 4/24

On Thursday, April 24, BNLers are invited to bring their children of age 10 to 15 to the Lab, to participate in the national "Take Our Daughters and Sons to Work Day" sponsored by the Ms. Foundation for Women.

During the morning, children will spend time with their parent at the parent's workstation. Parents who work in areas which minors may not safely visit should try to arrange for "host parents" to stand in for them. If they cannot arrange this, they should indicate the problem when they register. Hosts are also needed for the boys and girls from Little Flower School in Wading River, invited by BNL to join in the day's activities.

Following lunch in the cafeteria with their parents, the children will be welcomed by Lab

Director Praveen Chaudhari in Berkner auditorium, and a career specialist and a scientist will give brief, lively talks to help the children consider if a career in science is in their future. Buses will then take the children to various locations, including the science museum, the firehouse, photography & graphic arts, a science facility, and an ecology walk. The children will be returned to Berkner by 4:45 p.m., when parents may meet them and take them home.

To register your child for the day, complete and return the coupon at the bottom of a flyer sent to all employees to Susan Foster, Human Resources Division, Bldg. 185, or print a form from the link on BNL's Web homepage. For more information, contact Susan Foster, Ext. 2888.

Volunteers Needed

Normal, healthy volunteers who are at least 20 years old are needed to participate in medical-imaging studies conducted by BNL's brain-imaging program. The aim of these studies is to understand the function of the normal human brain.

Results from the imaging of normal individuals' brains will then be compared to results from studies of people with diseases such as alcoholism, drug addiction, obesity, and degenerative diseases. A fee will be paid, and participants' confidentiality will be maintained. For more information, call Pam Betti, (631) 344-5015.

Outlook Class Rescheduled

The Outlook Level 1 class, listed in last week's Bulletin as scheduled for July 7, has been rescheduled for July 14.

NCBI Training

On Thursday, May 22, the National Center for Biotechnology Information will present "A Field Guide to GenBank and NCBI Molecular Biology Resources at BNL," a one-day workshop on the use of databases and search engines, e.g., Entrez, Blast, and related resources. All are welcome. To register, contact Sean McCorkle, mccorkle@bnl.gov. For workshop schedule, locations, see http://protein.nsls. bnl.gov/news/getnews.jsp. For workshop content, see www.ncbi.nlm.nih.gov/Class/FieldGuide/.

Recital

Opera Scenes, 4/23 Don Giovanni

At the BSA noon recital in Berkner Hall on Wednesday, April 23, the Stony Brook Opera will present scenes from Mozart's Don Giovanni. This popular opera fascinates audiences for its juxtaposition of comedy and high tragedy.



David Lawton, Professor of Music and well-known opera conductor, will present and discuss important features of the

music and the drama, using singers and players from the production scheduled for the Staller Center at Stony Brook University on Friday, 4/25, 8 p.m.; and Sunday, 4/27, 2 p.m. The international cast members are all advanced graduate voice majors studying with Stony Brook Performing Artists-in-Residence Elaine Bonazzi and Richard Cross.

Admission to the BNL recital is free; a bag lunch may be brought into the auditorium.

Arrivals & Departures

Arrivals

Stacey Koslosky ..... Medical  
Meng Yue ..... ES&T

Departures

Dong Wang ..... C-A  
Mary Wood ..... OMC

Calendar

(continued)  
Sunday, 4/20

Hospitality Committee Easter Egg Hunt

11 a.m., Recreation Hall. All are welcome. Each child should bring at least 15 plastic eggs filled with candy. (No hard candy please.) Program includes craft-making and a pinata. Bring a dessert to share. Monique de la Beij, 399-7656.

— WEEK OF 4/21 —

Tuesday, 4/22

Product Demonstration

10 a.m.-2 p.m., Berkner Hall. Precision Metals Corp. will demonstrate custom sheet metal and machined products including cabinets and enclosures. Basler Electric will demonstrate standard and custom transformers including high-voltage applications.

Earth Day Office Swap

11:30 a.m.-1:30 p.m., Berkner Hall. Clean out your office, conference room, supply closet. All supplies not swapped will be donated to a local nonprofit agency. For more information, see www.bnl.gov/bnlweb/eday/.

Wednesday, 4/23

\*Noon Recital, Scenes from Opera

Noon-1 p.m., Berkner Hall. Preview of Stony Brook production of Don Giovanni, presented by Stony Brook University Professor David Lawton.

Thursday, 4/24

\*Take Your Children to Work Day

Lab employees' children of ages 10-15 are invited to participate in the national Take Our Daughters and Sons to Work Day sponsored by the Ms. Foundation for Women. To register your child, contact Susan Foster, Ext. 2888 or foster2@bnl.gov.

Saturday, 4/26

\*Asian Cultural Program

6-7 p.m., Berkner Hall Lobby: arts & crafts, display, and demonstration.  
7-9 p.m., Berkner Hall Auditorium: music and dance from the various Asian cultures of China, Japan, India, Korea, the Philippines, and more. Buy tickets, at \$10 for adults and \$5 for students with a valid student I.D. and for children age 12 and under, at the BERA Sales Office, weekdays, 9 a.m.-3 p.m., or from Beth Lin, Ext. 3372, or Susan Wong, Ext. 7988.

— WEEK OF 4/28 —

Monday, 4/28

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.

Tuesday, 4/29

Environmental Stewardship Awards

3:30 p.m., Berkner Hall. BNL will award employees who have demonstrated an outstanding effort in pollution prevention, waste minimization, and conservation. All are welcome.

'Your Environment' Art Awards

3:30 p.m., Berkner Hall. The Lab will recognize students for their outstanding effort in creating posters that relate to the Long Island environmental protection theme. All are welcome.

Wednesday, 4/30

Science Education Forum

Noon-1 p.m., Bldg. 438. All are welcome to join a discussion on science education. Refreshments will be provided. Bring your own lunch. Brian Murfin, Ext. 7171.

Thursday, 5/1

BSA Distinguished Lecture

4 p.m., Berkner Hall. Lecture on "String Theory and the Fabric of Spacetime," by Brian Greene, Columbia University.

Friday, 5/2

Reception for BNL Director

4-7 p.m. Reception for new BNL Director. Place to be announced. All are welcome.

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.



## Asian-Pacific Cultural Event, 4/26

BERA's Asian Pacific American Association will sponsor a cultural event on Saturday, April 26, in Berkner Hall. Arts, crafts, displays, and demonstrations will be shown in the lobby, 6-7 p.m. Then, in the auditorium, 7-9 p.m., music and dance from China, Japan, India, Korea, the Philippines, and other Asian countries and cultures will be featured. Tickets, at \$10 for adults, \$5 for children of 12 and under and students with ID, may be bought at the BERA Sales Office, or from Beth Lin, Ext. 3372, or Susan Wong, Ext. 7988.

*For a complete listing of Asian Pacific American Heritage Month events, see [www.apaa.bnl.gov/apahm.htm](http://www.apaa.bnl.gov/apahm.htm).*

### Mother's Day Candles Help Diabetes Research

"Candles for a Cure" is an American Diabetes Association (ADA) fund-raiser that raises money for ADA research and advocacy. This year, for Mother's Day on May 11, the ADA will sell Yankee candles and Mother's Day bears, which may be purchased together for \$20, or separately for \$15 each. Make paid orders for candles and bears to benefit ADA at the BERA Sales Office, 9 a.m.-3 p.m.

### Yankees, LI Ducks Tickets Available

Yankee tickets are here. Games available are all on Friday evenings: June 13, vs. St. Louis; August 8, vs. Seattle; and September 12, vs. Tampa Bay. The luxury coach bus will depart from the Brookhaven Center at 4 p.m. and leave Yankee Stadium no later than 11 p.m. Tickets are \$55 per person and nonrefundable. Some LI Ducks tickets also remain. For more information, visit the BERA Sales Office, weekdays, 9 a.m.-3 p.m.

## 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](http://www.bnl.gov/HR/jobs/default.htm).

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

**MK2800. ASSOCIATE LABORATORY DIRECTOR — LIFE SCIENCES (M-5)** — Will have line responsibility for a multi-departmental program, including the Biology and Medical Departments plus the Imaging Programs in the Chemistry Department. Position reports to the Laboratory Director. Applicants must have a Ph.D. or M.D., an international reputation, and the breadth and scope to promote a stimulating research and development environment across the range of life-science activities in a federal funding environment. The candidate must be able to interact effectively with scientists and staff, program managers at the DOE and other federal agencies, and the public, and facilitate strong working relationships with the State University of New York at Stony Brook and Cold Spring Harbor Laboratory. The Life Sciences Directorate at BNL involves programs with funding of \$32 million from DOE, NIH, and NASA. The present research organization consists of 145 employees, including 65 scientific staff. The research programs in the Life Sciences Directorate are focused

on the relationship between genes, protein structure and function, human health and disease, and includes the DOE Genome-to-Life Program. At the heart of the program is an interdisciplinary approach which integrates gene sequencing, structural biology, molecular and cellular biology in animals and plants, gene engineering, pre-clinical behavioral and pharmacological studies, radioisotope and radiotracer research, molecular imaging, and therapeutic studies. Neuroscience applied to addiction and aging, cancer, radiobiology and plant biology are major research activities. An array of PET and MRI facilities, cryo- and transmission electron microscopes, the National Synchrotron Light Source, the Center for Functional Nanomaterials as well as the NASA Space Radiation Laboratory at BNL are major research tools. Applications and nominations should be sent to Dr. Peter Paul, Brookhaven National Laboratory, Building 460, P.O. Box 5000, Upton, New York 11973-5000.

**MK2829. ASSOCIATE CHEMIST (S-2)** — Requires a Ph.D. in an appropriate field, significant hands-on experience using short-lived radioisotopes to measure plant nutrient transport, experience with imaging techniques including PET and phosphor plate exposure, nuclear counting techniques as well as experience in kinetic modeling of plant transport. Research will be in the Plant Imaging Program which relies on measuring plant responses to environmental stimuli using a suite of short-lived positron emitting radioisotopes in combinations with PET and positron imaging techniques. Under the direction of R. Ferrieri, Chemistry Department.

**MK2613. POSTDOCTORAL RESEARCH ASSOCIATE** — Requires a Ph.D. in physics or electrical engineering and experience in the fields of x-ray detector development and related integrated circuit design to take an active role in the development of advanced detector systems for synchrotron radiation applications. Will work closely with the Laboratory's Instrumentation Division and will be expected to follow through each project from initial concept to operation at the beam line. Under the direction of P. Siddons, National Synchrotron Light Source Department.

**NS2730. PUBLIC AFFAIRS REPRESENTATIVE (A-4, ERAP eligible - \$1K)** — Requires a bachelor's degree in journalism, English, science or a related field and a background in science and science writing. Master's degree in science writing will be considered as a substitute for experience. Excellent communications skills are

necessary, including writing, interviewing and reporting. Must be able to communicate complex issues to a general audience and to develop multiple projects simultaneously. Computer literacy a must; experience with desktop publishing highly desirable. Will be assigned halftime to the Media & Communications Office and halftime to the National Synchrotron Light Source Department. CEGPA Directorate.

**TB3096. SR. STATIONARY ENGINEER** (term appointment) — Under minimum supervision operates, maintains and repairs any heat generation equipment, facilities, and auxiliary and related equipment. May be required to assign, direct, or check the work of other personnel in connection with assigned responsibilities. Plant Engineering Division.

### Motor Vehicles & Supplies

**00 RANGER** - 4x4 ext. cab, V6, 5-spd., 27K mi., am/fm CD player, step-side bed liner, much more, \$15,000, Ext. 4639.

**98 HONDA CIVIC DX** - black, 2-dr., 5-spd., a/c, 66K mi., new tires, brakes & exhaust, CD player, \$6,900. Lloyd, 664-6768.

**98 HONDA CIVIC HX** - 5-spd., alloy wheels, alarm, 37 mpg, excel., 69K mi., \$7,000. George, Ext. 4453 or 924-6105.

**96 CHEVROLET ASTRO VAN** - all power, hi-top conversion van, 4 captain chairs, bed, alarmed, CD, TV, VCR, transferable warranty, 65K mi., \$7,995. Lou, 474-7036.

**96 FORD T-BIRD** - V6, loaded, black, grey leather, new tires, new brakes, hwy. mi., mint, \$5,500 neg. Keith, 827-2275.

**96 TOYOTA CAMRY** - black, all power, sunroof, new belts, cat conv., battery, am/fm/CD player, 135K hwy. mi., \$5,000. Ed, Ext. 5360 or 477-8117.

**95 FORD ESCORT** - a/t, a/c, p/s, 92K mi., excel. cond., new tires & timing belt, \$2,800. Rachel, Ext. 8331 or 399-2417.

**95 FORD T-BIRD** - V8, all power, 121K mi., suntop, good cond., \$3,900. Jamal, 804-2959.

**95 YAMAHA BLASTER** - atv, runs well, FMF pipes, new grab bar, ITP rims on rear. Kevin, 369-1977.

**94 MERCEDES BENZ C-220** - red, 148K mi., v.g. cond., \$6,500. Linda, Ext. 7187.

**94 NISSAN SENTRA** - ltd. edition, beige, 94K mi., a/c, auto., cruise, am/fm/cass., all power, sunroof, garaged, good cond., runs well, \$2,500 obo. Tony, Ext. 8450.

**93 LINCOLN TOWNCAR** - fully loaded, garaged, leather, 63K mi., mint cond., \$5,500. Daly, 447-5377.

**92 FORD CROWN VICTORIA** - all power, 150K mi., 4 wheel, ABS, dual front airbags, am/fm/cass., well maint., just inspected, \$2,000. Gianluigi, Ext. 5336 or 360-2775.

**89 HONDA ACCORD LX** - 5-spd., p/s, p/b, p/w, 178K mi., runs well, \$700. Ext. 5437.

**84 CHEVY Z28 CAMARO** - T-Top, Rally wheels, V8, needs motor, \$250. Rich, Ext. 4201 or 589-9103.

**80 HONDA TWIN STAR 200** - 11K mi., great cond., good for beginner, runs well, \$800. Ext. 2023 or 289-6765.

**FIBERGLASS CAP** - fits '99-'03 Chevy/GMC full size short-bed pickup, flush w/ top of cab, frameless side glass, excel. cond., \$500. Lawrence, Ext. 7460.

### Boat & Marine Supplies

**17' CANOE** - fiberglass, w/all accessories, \$700. 758-5592.

**JETSKI** - '97, Kawasaki 750zxi, motor needs work, incl. trailer, \$1,000 obo. Tom, Ext. 7805.

### Tools, House & Garden

**LADDER EXTENSION** - 24', alum. type-1, heavy duty industrial, 3" tread, extremely stable, maximum load, 300 lbs., excel. cond., \$150. 473-6546.

**RIDING LAWNMOWER** - Sears, 1 yr. old, under warr., all cutting attach., elec. start, excel. cond., \$700. Hank, 744-9812.

### Free

**BUNNY** - cage, food & water bottle. Thomas, Ext. 4556 or 744-5393.

**CAT** - black & white, 4 yr. old indoor cat, neutered & immunized, will supply food. Carol, 744-8632.

**FREEZER** - upright, 10.1 cu. ft., old, but runs well, you p/u. Bob, 928-1806.

**ROOSTER** - Rhode Island, red, friendly, great pet. Ext. 7406.

### Carpool

**MIDDLE ISLAND** - need volunteer to be a backup ride to Lab. 8:30 a.m. and 5 p.m. Jennifer, Ext. 7300 or 345-3425.

**PORT JEFF.** - Bridgeport, Boston (leaving Friday evening 7 p.m. ferry), Boston-Bridgeport-Port Jeff. each w/end. 216-2464.

### Wanted

**ADVICE OR LAWN SPECIALIST** - organic/chemical-free gardening advice or expert for lawn-loving husband & nervous new mom. Davis, Ext. 3670 or 928-6955.

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

**ROOMMATE** - 2-bdrm cottage, Stony Brook, by the water, walking distance to SBU, all furnished except bedroom. JF, Ext. 4986 or 764-0889.

**SUMMER SITTER** - two children, 7 & 4, my home or yours, M-F, 7:45 a.m. to 4:45 p.m., \$40/day neg., well behaved & fun. Tammy, Ext. 5864 or 399-6491.

### For Rent

**BELLPORT VILLAGE** - lg. 2nd. floor studio apt., priv. ent., wood & ceramic floors, heat, elec., water, digital cable, w/d., nr. golf, marina, beach, Dave Carlson, 776-0794.

**BROOKHAVEN HAMLET** - 2 bdrm, l/rm, full bath, kitch., new, off private road, near Sunrise & William Floyd, \$1,300/mo, 2 mo. sec. Lisa, 732-1260.

**CENTEREACH** - lg. room in house shared w/ 4 grad. students, util. not incl. (approx. \$50), 30 min. to Lab, laundry, kitchen, avail. until 7/31, \$440/mo. Ext. 3897 or 827-6004.

**CENTER MORICHES** - share 3-bdrm house, priv. bath, lg. l/rm., full kitch., dishwasher, laundry, cable internet, 10 mi. to Lab, \$630/ mo plus util. Thomas, Ext. 8335 or 804-2959.

**CENTER MORICHES** - brand new, 1 bdrm apt., parking, private ent., \$1,000/mo includes all, no smoking/pets, 2 mo. sec. & ref. required, 11 mi. from Lab. Fran, Ext. 3177.

**COMMACK** - bright basement, 1 bdrm, full bath, l/rm., kitch., a/c, cable, separate ent., no smoking/no pets, avail. immed., \$850 util incl. Mark, 208-2910.

**EAST MORICHES** - 4-5 bdrm., park-like prop., 8 mi. to Lab, excel. schools, short/long term, non-smokers, refs., sec., \$2,000/mo. Nick, Ext. 4979, Anna, 878-3352, Ext. 103.

**EAST MORICHES** - share big house on quiet short block w/professional, own lg. bdrm w/phone & cable, 300 ft. to water, 10 mi. to Lab, single, nonsmoker. 744-8386.

**EAST SETAUKET** - 5-bdrm., 3-level house, sliding door leading to wraparound deck, cul-de-sac, all hardwood floor, 2 1/2 car garage, 3-VSD, excel. neighborhood. 689-6495.

**MASTIC** - 3 bdrm. ranch, \$1,300/mo plus util., 2 mo. sec., ref., credit check. 968-8189.

**PATCHOGUE** - 1 bdrm., furnished, d/rm, kitch., l/rm, private deck, immaculate, \$1,100/mo & electric. Damon, 289-7166.

**RIDGE** - on the border of Shoreham, 1-bdrm apt., new kitch. & bath, 5 min. to BNL, quiet development, \$850 w/util. Greg, Ext. 2278.

**ROCKY POINT** - 1 bdrm cottage, l/rm, kitch., bath, suit. for single, no pets, \$995/ mo. plus util., 1 mo. sec. Claire, 744-5282.

**SHIRLEY** - big 2 bdrm, close to Lab, rent depends on number of occupants, incl. heat & electric, no pets, no smokers, \$1,100 - \$1,500/mo. Ext. 7448.

**SOUND BEACH** - 1 bdrm apt., avail. 5/1, incl. lg. l/rm, bdrm, new carpet, stall shower, patio storage, no pets/no smoking, \$900. 744-0459.

**SOUTH SETAUKET** - 4-bdrm Colonial, 2 1/2 bath, 2-car gar., 3-Village schools, no pets/smokers, \$2,000/mo plus sec. & util. Peter, 765-1137.

**ST. CROIX, VI** - Timeshare, Divi Carina Bay, 1 bdrm, sleeps 4, 5/10 to 5/17, new upper unit, overlooking ocean, private pool, casino, top rated, \$700. Bill, 732-9102.

**VIRGINIA BEACH, VA** - oceanfront suite, priv. balc., king bed, jacuzzi, half kitch., fitness, tanning, massage, rooftop pool, bar, tennis, 3rd wk. Aug., \$1,500/wk. Ext. 4743.

### For Sale

**PORT JEFFERSON** - mint 2-bdrm., 2.5 bath townhouse, fireplace, jacuzzi, finished basement, central a/c, gar., quiet, 20 min. to BNL, \$349,000. Matthew, 476-4631.

**SHIRLEY** - house, lg. property, 5 rooms, \$210,000. Fernando, Ext. 3499.

**SHIRLEY** - Tangiers, prime location, low taxes, 3 bdrm, WL ranch, new roof, driveway, landscaping, custom den., w/wood stove, \$219,000. Pete, 281-3858.

**SHOREHAM** - ranch, priv. half acre, cul-de-sac st., lg. country kitch., 4 bdrms, 2 baths, fin. bsmt. w/3 fin. rms, workshop, SWR SD, \$348,500. Lynn, Ext. 3479 or 495-9770.

**FT. LAUDERDALE, FL.** - vacation village at Bonaventure, Gold Crown resort, golf/fitness ctr, 3-bdrm layout unit, sleeps 8, RCI trades for 2 wks/one maint. fee, \$7,500. Ken, 281-5565.

**OCALA, FL.** - one-acre land in prime development, must sell, \$12,000 neg. Judy, Ext. 5263 or 744-2545.

**ST. AUGUSTINE, FL.** - timeshare, 1 bdrm, red floating week, \$8,000.706-663-4744 or e-mail amedeck@bellsouth.net.

**HILTON HEAD, SC** - beautiful, 2-bdrm house on lagoon in gated Moss Creek Plantation, 2 priv. golf courses, club restaurant, tennis, nature trails, biking & pools. 286-3833.

**STOWE, VT** - Trapp Fam. Ldg. Guest Houses, interval Int'l 5 Star rating, 2 bdrm, 2 baths, slp. 6, nr. Mt. Mansfield, in/out swim pools, 2 float weeks, \$3,099/ea. Ext. 4028 or 298-4117.

**ST. CROIX, VI** - timeshare, Divi Carina Bay, 1 bdrm, sleeps 4, week 19 (May), new upper unit on ocean, priv. pool, casino, 32 yrs. remain, top rated, \$8,500. William, 732-9102.

### In Appreciation

A heartwarming "thank you" to my friends and co-workers of the International Safeguards Project Office (ISPO) for their kind support following the loss of my father.

—Stephen Gushue & Family

*Ads omitted due to lack of space will appear in next week's Bulletin. Service ads are available on the Web, address below.*



## Wanted: Litter Collectors

Volunteers are needed for the William Floyd Community Cleanup Day on Saturday, April 26. Anyone who would like to help collect litter along streets in Mastic, Mastic Beach, Shirley and Moriches may pick up gloves and bags outside the William Floyd High School Library from 9 a.m. to 3 p.m. on the day of the cleanup. For more information or to volunteer, contact Jeff Williams, Ext. 5587 or [jwilliams@bnl.gov](mailto:jwilliams@bnl.gov).

This cleanup effort, initiated by Williams, Environmental Services Division, is sponsored by BSA's Volunteers in Partnership (VIP) program. VIP can help BNL community volunteers in a variety of ways. For more information, see [www.bnl.gov/community/vip/body.htm](http://www.bnl.gov/community/vip/body.htm).

## Reminder: RHIC Site Is Posted As Controlled Area

Lab employees, visitors, and guests are reminded that they must comply with the controlled area postings associated with operations at the Relativistic Heavy Ion Collider (RHIC) complex scheduled to continue through the end of May.

During this operating period, the entire RHIC complex, including the inner ring road, is posted as a controlled area, with the exception of the Collider Center, Bldg. 1005; the adjacent parking lot; and the approach road to Bldg. 1005. In addition, the northern portion of Thompson Road is posted as a controlled area and closed to routine traffic.

Unescorted access requires up-to-date general employee radiation training and facility-specific training. To arrange escorted access, contact Ann-Marie Luhrs, [luhrs@bnl.gov](mailto:luhrs@bnl.gov) or Ext. 7007. For more information, contact Asher Etkin, [etkin@bnl.gov](mailto:etkin@bnl.gov) or Ext. 4006.

### BERA Golf Association

The BERA Golf Association is accepting applications for its 2003 season. All employees, Lab guests & retirees are welcome. Jeff Williams, Ext. 5587.

## Get to Know Your Lab! Homeland Security Facility Tour Today

All are invited to join today's tour to visit the Lab's new test-bed facility, where radiation detection equipment is tested as part of the Lab's homeland security effort. Meet in Berkner Hall upper lobby at noon today, Friday, April 18. A Lab bus will transport participants to the test-bed facility, where Carl Czajkowski of the Energy Sciences & Technology Department will explain how detection equipment is tested. The group will return to Berkner by 1 p.m. For more information, call Community Involvement's Elaine Lowenstein, Ext. 2400.