Bulletin



Vol. 59 - No. 23

RHIC Science Celebrated at RHIC & AGS Users' Meeting

Continuing concern over tough budget projections

This year's Relativistic Heavy Ion Collider (RHIC) and Alternating Gradient Synchrotron (AGS) Annual Users' Meeting featured a celebration of RHIC science, particularly the most recent, compelling "perfect liquid" results — complete with "RHIC serves the perfect liquid" coffee mugs. There were also expressions of concern about tough U.S. budget projections for future funding of nuclear and high-energy physics research.

The five-day meeting, June 20-24, featured several topical science workshops on Monday and Tuesday, followed on Wednesday by a full day of working-group and plenary discussions on "RHIC Science: The Next Phase," and plenary sessions on Thursday and Friday. The Friday session featured RHIC workshop summaries and findings, plus talks on non-RHIC research, including AGS experiments E787/E949, KOPIO, the Accelerator Test Facility, and the National Aeronautics & Space Administration Space Radiation Laboratory at BNL.

During the main plenary session on Thursday, June 23, the morning-session speakers presented the latest RHIC results from operations and the detectors, in both heavy-ion (coppercopper) and polarized-proton collisions. Brant Johnson, the RHIC & AGS Users' Executive Committee (UEC) Chair, opened the afternoon session by introducing BNL Director Praveen Chaudhari, whose first task was to announce this year's thesis winners: Abigail Bickley, University of Maryland, and Christian Klein-Bösing, University of Muenster. Bickley's thesis was



Pictured outside Berkner Hall at the Plenary Session of the RHIC/AGS Annual Users' Meeting on Thursday, June 23, are: Samuel Aronson, BNL; Gabor Veres, Eotvos Lorand University; Praveen Chaudhari, BNL; Brant Johnson, BNL; Dennis Kovar, DOE's Office of Nuclear Physics within the Office of Science; Abhay Deshpande, Stony Brook University; Fulvia Pilat, BNL; Vicki Greene, Vanderbilt University; Mei Bai, BNL; William Christie, BNL; Brad Keister, National Science Foundation (NSF) Nuclear Physics Program; Michael Sivertz, BNL; Stephen Sanders, University of Kansas; Gary Westfall, Michigan State University; Randal Ruchti, NSF Elementary Particle Physics Program; and Gene Van Buren, BNL.



Praveen Chaudhari with thesis award-winner Abigail Bickley

on "Charged Antiparticle to Particle Ratios Near Midrapidity in d+Au and p+p Collisions."

"One of the most rewarding parts of my thesis experience was the opportunity to work with the members of the PHOBOS collaboration," said Bickley. "Each institution contributed both to the experiment and to the education of all of the students, regardless of their affiliation."

Klein-Bösing's thesis was on



Chaudhari with thesis awardwinner Christian Klein-Bösing

"Production of Neutral Pions and Direct Photons in Ultra-Relativistic Au+Au Collisions."

"It's always been great to work in such a large collaboration; this way one can profit from the experience of so many people with different backgrounds," said Klein-Bösing. "I'm extremely grateful to the RHIC community and the PHENIX collaboration that did a lot of hard work my thesis could build on."



Peter Bond with poster session winner Carla Vale

Chaudhari conveyed his pride in RHIC's latest result — the "perfect liquid." "The science that has come out of RHIC has been plain beautiful," he said. On the subject of RHIC's future he was optimistic, but stressed that the fight is far from over. "Be prepared to go every year to your district and share with your elected officials what you've done," he emphasized. "Let their imaginations take over from there."

Dennis Kovar, Director of the Office of Nuclear Physics within DOE's Office of Science, magnified these themes. "You are in the middle of glorious things," he said, but quickly moved on to the key issue — the budget. In light of the President's FY 2006 budget request, which cuts nuclear physics funding, he said, "We were clearly not able to make the case for the priority of the research we're doing. Our community needs to articulate in a much better way — in a way that policy makers and the public can understand — what the benefits are of high-energy and nuclear physics research. If we can't communicate the excitement of RHIC science, we will not be supported in the future. It's that simple."

Brad Keister, National Science
Foundation (NSF) Program Director for Nuclear Physics, described the impact of the budget on his program. Randal Ruchti, the NSF Program Director for Elementary Particle Physics, discussed some of the projects his program has a hand in, including the Rare Symmetry Violating Processes (RSVP) experiment that, if funded, would be based at the AGS.

Peter Bond, Interim Deputy Laboratory Director for Science & Technology, took the stage next to announce the poster session winner: Carla Vale of Iowa State University (ISU). Vale's poster was on "Elliptic Flow in Au+Au Collisions at 200 GeV per Nucleon Pair."

Samuel Aronson, Associate Laboratory Director for High Energy & Nuclear Physics, presented an overview of the future of (continued on page 2)

Suffolk County Gift To Brookhaven Lab — A Global Positioning System For Educational Programs



Jeremy Feinberg (left, front), a biologist working at BNL, discusses the global positioning system (GPS) donated to BNL by Suffolk County with: (from left) M. Ehi Ayewoh, Hofstra University; Mary Daum, BNL; Melanie Walker, Hempstead High School (HHS) student; Jim Daly, Long Island Geographic Information Systems Users Group; Kendra Walker, HHS student; Maria Perez-Lent, Suffolk County Executive's Office; and Maurice Allen, HHS student. GPS help in locating rare animals makes it easier to protect them.

Thanks to Suffolk County, the Long Island Geographic Information Systems Users Group (LIGIS), the Rauch Foundation, Hofstra University, and BNL, about 75 ethnically underrepresented middle school and high school students from Freeport, Hempstead, Roosevelt and Uniondale school districts have had a unique, hands-on educational opportunity. They have learned how to use a global positioning system (GPS) to map

out the habitat and movements of rare animals on the Lab's 5,300-acre site.

The students are part of Hofstra University's Science & Technology Entry Program (STEP), a New York State-funded program that aims to interest minority students in scientific, technical, and health-related fields. With the aid of Jeremy Feinberg, a biologist and herpetologist working at the Lab, the students located "mock" animals

using radio-telemetry, a technology that sends radio signals from a device carried by the animal.

After pinpointing the animal's location, the students used GPS units to obtain precise coordinates of the location. They then entered the coordinates into a geographic information system (GIS) and developed a computerized map that showed the animal's travel range.

"It is exciting that the technologies we could only dream

Nanoparticles' Magnetic Behavior Defies Accepted Physics Laws

Scientists from the National Institute of Standards & Technology (NIST) and George Washington University (GW), and a scientist at BNL have discovered that a class of magnetic nanostructured materials — tiny magnetic particles of about a billionth of a meter in diameter — display behavior that defies accepted, conventional laws of physics and backs up a well-known theory.

BNL physicist Richard Watson and his colleagues Edward Della Torre and Lawrence Bennett, both of NIST and GW, followed the magnetic behavior of the particles down to very low temperatures, and noticed an unexpected surge in the magnetism. This finding reinforces the "Bose-Einstein condensation theory," which predicts that at very low temperatures atoms can become indistinguishable from one another, forming a new state of matter known as a Bose-Einstein condensate.

The new finding could prompt a reassessment of test methods used to predict technologically important properties of ferromagnetic materials. The results also could point the way to marked improvements in the performance of microwave devices. Magnets are integral to these devices, used in a variety of communication and defense technologies.

For more information on this work, see press releases issued by NIST and GW, available from links at www.bnl.gov/bnlweb/pubaf/pr/PR_display.asp?prID=05-X8.

about when we were school children are now everyday realities in the classroom," said Suffolk County Executive Steve Levy. "I'm pleased that Suffolk County could find an educational use for this GPS equipment, and I hope that it spurs the intellectual curiosity of many Long Island students."

Mary Daum of BNL's Environmental Services Division, a member of LIGIS, along with Jim Daly, LIGIS Chair, initiated the negotiations for the GPS equipment, which had previously been used in Suffolk County's Stop-DWI Program. In addition, the Rauch Foundation lent their support to (continued on page 3)

The Bulletin July 1, 2005

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 Recreation Bldg. and at the laundry, both 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 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/.

Mondays & Thursdays: Kickboxing \$5 per class. Noon-1 p.m. in the gym. Registration is required. Christine Carter, Ext. 5090.

Mon., Wed., & Fri.: Tai Chi Noon-1 p.m., Brookhaven Center North Room. Adam Rusek, Ext. 5830 or rusek@bnl.gov.

Tuesdays: Welcome Coffee

10-11:30 a.m., Rec. Hall. First Tuesday of every month is special for Lab newcomers and leaving guests. Meet in the gazebo in the apartment area. Cindy Ottemann, 849-2646.

Tuesdays: BNL Music Club

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

Tuesdays: Jiu Jitsu Club $6{:}30\mbox{-}7{:}30$ p.m. in the gym. All levels, ages 6 and above. \$10 per class. Tom, Ext. 4556.

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/toastmstrs/default.htm.

Tues., Wed. & Thurs: Rec Hall Activities 5:30-9:30 p.m. General activities, largescreen TV, ping pong, chess, games, and so-cializing. Christine Carter, Ext. 5090.

Wednesdays: On-Site Play Group

10 a.m.-noon. Rec. Hall. An infant/toddler drop-in event. Parents meet while children play. Meet in in the apartment area playgroup. Kati Petreczky, 821-4131.

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

Wednesdays: Yoga

Noon-1 p.m., Brookhaven Center. Free. Ila Campbell, Ext. 2206, ila@bnl.gov.

Thursdays: Reiki Healing Class Noon-1 p.m., Bldg. 211 Conference Rm. Nicole Bernholc, Ext. 2027.

Fridays: Family Swim Night

5-8 p.m. at the BNL Pool. \$5 per family.

Fridays: BNL Social & Cultural Club

6-9 p.m., North Ballroom, Brookhaven Ctr., dance lessons, 9-11:30 p.m. general dancing. Rudy Alforque, Ext. 4733, rudy@bnl.gov.

- WEEK OF 7/4 -

Mon.-Tues., 7/4-5

Lab Closed for Independence Day

The Lab will be closed on July 4 and 5to honor Independence Day. No Bulletin will be published on 7/8.

Tuesday, 7/5

BERA Sponsors Trip to Culinary Institute of America

8 a.m. Brookhaven Center. Luxury coach up Hudson Valley to Hyde Park. After great three-course luncheon in the Ristorante Caterina de' Medici, tour \$42 includes all. Buy from BERA Store, 9 a.m.-3 p.m.

Friday, 7/8

Visit New QCDOC Supercomputer

Noon. Berkner Hall lobby. Meet at noon to join a group going to learn about the RIKEN BNL Research Center's stupendous new 10-teraflop, \$5-million supercomputer, to be used mainly for physics, but also biology and materials science research. Return to Berkner by 1 p.m. No reservations are

Saturday, 7/9

*Hospitality Bus Trip to NYC

9 a.m. Rec. Bldg. in apt. area. Luxury bus departs on Hospitality Committee "do-as-you-like" bus trip to Manhattan. Bus will leave the city at 6 p.m. The cost for adults is \$10, children 2-12, \$5; payments must be made in advance (cash only please). To make reservations and arrange payment, e-mail Hanna Herman at hania herman@yahoo.com or phone 631-849-2249. See page 3.

Lab Demonstrates Good Road-Safety Practices

The importance of remembering safe practices at home and at work, as well as on the roads, where so many accidents occur, has become part of BNL's culture. Says Patricia Williams, Manager of the Safety & Health Services Division, "It's encouraging to see that many employees and guests are taking an active role in improving traffic safety for themselves and their families. This is evident in feedback that I have received, especially during the recent safety-awareness events on bicycle safety, rollover simulation/seatbelt safety, and the enrollment of more than 250 persons in the four Defensive Driving courses held on site between March and June."

To organize the Rollover Simulator demonstration on June 21, $\frac{8}{5}$ Gerry Shepherd (center) of the Safety & Health Services Division 2 worked with: (from left) BNL Security Training Instructor Chris Congemi and Security Police Officer Don MacKay, both of the Safeguards & Security Division; and New York State Police Troopers Frank Bandiero and Ray Jackson.



Drivers — Be Safe, Buckle Your Seat Belt

As part of the contributions to highlighting National Safety month, Gerry Shepherd, Safety & Health Services Division, arranged for a visit on June 21 to **BNL** by New York State Police (NYSP) Troopers Frank Bandiero and Ray Jackson who brought with them NYSP's Vehicle Rollover Simulator. The unit is designed to simulate the dynamics of an actual rollover crash. When activated, two lifesize dummies are placed in the unit without a seatbelt. The entire unit then rotates at a speed of 35 revolutions per minute, simulating a vehicle rolling over at 25 miles per hour resulting in serious consequences. Employees, students, visitors, and



quest onlookers were also provided copies of vehicle and traffic safety literature available through the National Highway **Traffic Safety Administration** (www.nhtsa.gov). Said Shepherd, who coordinated the event with the NYSP, "This demonstration has been found to be one of the most effective tools in helping educate the motorina public about the importance of proper safety belt and child seat use. The feedback from the crowd was very positive. W were pleased to promote this aspect of traffic safety through the interagency cooperation between BNL, DOE, and local law enforcement agencies such as the NYS Police Troop L."

Reminder — Helmets Are Mandatory For Cyclists Riding on Site

(cont'd.)



RHIC, AGS Annual Users' Meeting

nuclear and particle physics at the Lab, and agreeing with the importance of RHIC scientists' communicating the compelling nature of RHIC research to the general public, to Congress, and

to funding agencies. Next, Abhay Deshpande of Stony Brook University (SBU) and Jim Miller of Boston University gave talks on the "Scientific Case and Perspectives for eRHIC/RHIC II" and "Scientific Case and Perspectives for RSVP," respectively.

Finally, Johnson announced the UEC election results. This year, voters approved changes to the UEC charter, which increased the total number of elected regular, appointed, and student/postdoctoral representatives to the UEC, and made them effective immediately.

John Hill (ISU) is the new UEC Chair-Elect. The new UEC members elected for three-year terms are Deshpande; Matthias Grosse Perdekamp, University of Illinois at Urbana-Champaign; and John Lajoie, ISU. Julia Velkovska, Vanderbilt University, was elected for a twoyear term; James Sowinski, Indiana University, was elected for a one-year term; and Sevil Salur, Yale University, and Vale were elected as student/postdoctoral representatives for one-year terms. — Laura Mgrdichian See the plenary session at www. bnl.gov/video. The agendas and links to the talks are at www.bnl.gov/ rhic_ags/users_meeting/.



During Bicycle Safety Week, May 15-20, BNL's Safeguards & Security Division (SSD) arranged a display of materials on bike safety, including leaflets on road regulations for bikes and motor vehicles, and also, tips on getting the correct size for a bike helmet. As Security Police Officer (SPO) Mark Opisso of SSD, who dispensed information at a booth in Berkner Hall on Thursday, May 19, reminded visitors to the booth, it is now mandatory at BNL to wear a helmet while riding a bicycle on site. "People found riding without a helmet can receive a summons," he warned. "An accident can happen in a moment, and a helmet gives protection from some of the most dangerous injuries." With SPO Opisso at the booth are Judy Wilson (left) and Debby Doyle of the Plant Engineering Division. Said Opisso, "A good crowd of people visited the booth to learn how to recognize a properly fitting helmet and check out the materials we had on display." During the summer, the population on site is considerably larger, and more people, both drivers and cyclists, are hesitant because they are unfamiliar with the roads and building numbers. "It's important that everyone understands and abides by the rules of the road and also takes the time to allow for some mistakes," he concluded. "That way, we'll avoid accidents."

Have a Great, Safe Fourth

Fireworks have become a traditional way to celebrate the July 4 Independence Day holiday. In NewYork State, it is illegal to light fireworks at home, except for certain types of sparklers, and most families have a great time going to see town or village displays. However, at a big gathering shared with friends and neighbors, it is not unusual to find jumping firecrackers, some larger fireworks, or sparklers that may be made by unlicensed factories with limited safety standards. Even legal sparklers can reach 1,000 degrees Fahrenheit and ignite clothing.

A recent article noted that, nationwide, emergency departments treat nearly 8,000 firework-related injuries each year, with the majority of injuries affecting eyes, hands or fingers. In New York State, as a result of public education and seizures of illegal fireworks by police and fire marshals, the number of New Yorkers injured by fireworks has been dramatically reduced – for example, from 30 in 2002 to 15 in 2003. Of those 15, 11 were burned children. Also, last year, 225 fires in NYS that destroyed more than \$3.54 million in property were directly related to the illegal use of fireworks, which, in addition, caused many vehicle fires and outdoor and brush fires.

Fireworks are exciting, beautiful, and dangerous. Take care and enjoy July Fourth safely.

The Bulletin July 1, 2005

Get Ready for Summer Sundays!

BNL Open to Employees, Public on Summer Sundays, 7/10 - 8/21

re you looking for some free family fun this summer? And Are you interested in learning about some of the tremendous discoveries that are being made around you at the Lab? Then Summer Sundays at BNL is tailor-made for you. You can try out interactive exhibits, see an entertaining science show, and each week, tour a different facility and meet a scientist who will tell you in nontechnical terms about part of BNL's forefront research.

Summer Sundays will run from July 10 through August 21. No reservations are needed. Visitors, and, of course, anyone from the Lab community, may arrive at any time between 10 a.m. and 3 p.m. All visitors age 16 and over must bring a photo ID.

Every Sunday, the educational and entertaining "Whiz Bang Science Show" will be staged at 10:30 a.m., noon, 1:30 p.m. and 3 p.m. Visitors may test their creative and problem-solving skills at the Brain Teasers exhibit, which features a wide array of mindboggling puzzles for enthusiasts of all ages. Artifacts from Camp Upton — the U.S. Army base that occupied the Lab site during World Wars I and II — will be on display. The Summer Sunday schedule of facilities to visit follows:



- 7/17 Life Sciences: Investigate the living world of biological and biomedical research.
- 7/24..... Chemistry and Nanoscience: Bring chemistry to life, learn to think small, and make "slime!"
- 7/31 Science Museum: Learn how to play with science.
- 8/7..... National Synchrotron Light Source: See with invisible light, learn about discoveries impacting everyday life.
- 8/14..... Celebration Sunday: See the Einstein & Beyond Magic Show, Blues/Jazz Concert, Camp Upton history, much more.
- 8/21 Relativistic Heavy Ion Collider (RHIC): Probe matter thought to have existed at the beginning of the universe.





Joseph Rubino D0570205

Visit Giant New QCDOC Supercomputer, 7/8

All the Lab community is welcome to meet at Berkner Hall lobby at noon on Friday, July 8, to be taken on a visit to the RIKEN BNL Research Center's stupendous new 10-teraflop, \$5-million supercomputer, to be used mainly for physics, but also biology and materials science research. You will return to Berkner by 1 p.m.

BNL Food Drive Needs More Food

Share your summer well-being with others less fortunate. Please replenish the BNL Food Drive bins in each building.

One-on-One Retirement Counseling

Hospitality Bus Trip

to Manhattan, 7/9

tee invites all BNLers and

their families to join a bus

trip to Manhattan on Satur-

day, July 9, for a "do-as-you-

like" trip. The luxury bus will

leave from the Recreation

Building in the apartment

area at 9 a.m. and will leave

the city at 6 p.m. The cost

for adults is \$10, children 2-

12, \$5; payments must be

made in advance (cash only

please). To make reservations

and arrange payment, e-mail

Hanna Herman at hania

herman@yahoo.com or

Arrivals & Departures

phone 631-849-2249.

The Hospitality Commit-

A TIAA-CREF consultant will visit BNL on Wednesday, July 6; Monday, July 11; Wednesday, July 13; Thursday, July 14; and Tuesday, July 26; to answer questions about financial matters, such as: understanding the importance of protecting assets against inflation, finding the right allocation mix, learning about TIAA-CREF retirement income flexibility, and comparing lifetime income vs. cash withdrawal options. To schedule an appointment, call Kathy Murphy, (866) 842-2053, Ext. 4625. (Not the on-site Ext. 4625.)

Suffolk County Gives GPS to BNL



possible at the Lab.

"This program was a great opportunity to show these students how their classroom learning can be applied to real world research projects," said Kenneth White, Manager of BNL's Office of Educational Programs. "In addition to the STEP program, which had included lessons in physics and biology as well as environmental science, we plan to use the GPS

make the Hofstra STEP activities equipment this summer for ninth-graders from Suffolk County and inner-city outreach areas in our Minority High School Apprenticeship Program and for tenth and eleventh grade students from Suffolk County in our Community Summer Science Program."

Summer Student

Talent Show, 7/21

All are invited to attend the

Office of Educational Program's

(OEP) Summer Student Talent

Show on Thursday, July 21, at 7

p.m. in Berkner Hall. See stu-

dent mentors and other BNL

staff perform with this year's

summer students, as students

compete for cash prizes at this

unteers to assist in event plan-

ning and organization as well as

BNL participants. If you would

like to assist, or have questions,

then contact Tabatha Wyche,

OEP is currently seeking vol-

free public event.

Ext. 2890.

— Diane Greenberg For more detail, see www.bnl.gov/ bnlweb/pubaf/pr/PR_display.asp? prID=05-66.

Getting Ready for Retirement' Talk, 7/7

On Thursday, July 7, from noon to 1 p.m. in Berkner Hall, a TIAA-CREF representative will present "Getting Ready for Retirement," a workshop sponsored by the Human Resources & Occupational Medicine Division. All are welcome to attend.

The workshop will answer some important questions for developing a sound financial strategy for retirement. For example: How much income will you need? Where will it come from? Is there a shortfall? How will you pay yourself in retirement to meet your needs? The representative will also discuss systematic withdrawal and other income options; web tools and individual retirementcounseling options; the importance of examining asset allocation; taxation and avoiding penalties; and lifetime income.

Farmer's Market **Vendors Wanted**

BERA is looking for new vendors to participate in this year's Farmer's Market at BNL. The market is held every Wednesday from mid-July to mid-November, 11:30 a.m.-1:30 p.m., on the lawn in front of Berkner Hall. Homemade pies, cakes, cookies, and breads; potted flowers, vegetables and herbs; as well as crafts are available. If you, or someone you know, would like to participate, call Joanne Rula, Ext. 8481.

Fire Hydrant Flushing Week of July 11-15

To improve the quality of BNL water delivered to the consumer's tap by eliminating "rusty" water, the Lab's fire hydrants will be flushed Monday through Friday, July 11 through 15, as follows:

- Mon. 07/11: Rutherford and Lawrence Drives
- Tue. 07/12: Upton Road through the apartment area
- Wed. 07/13: Cornell Avenue and its
- Thu. 07/14: Brookhaven Avenue
- Fri. 07/15: Bell Avenue

Before drinking or using water during and after hydrant flushing, run the water in the sink, fountain, or shower to flush discolored water from the tap. In some places, you may have to run the faucet for 5 to 10 minutes until the water runs clear.

To make sure that discolored water is not used for washing clothes, the laundries in the apartment area and in Curie and Cavendish Houses will close at 8 a.m. on Tuesday, July 12. The laundries will reopen on Wednesday, July 13, at 10 a.m., at which time the washing machines will be ready for use with clean water.

For more information, contact Bill Chaloupka, voice pager 0552.

Calendar

(continued)

*Start of Summer Sundays

Sunday, 7/10

10 a.m.-3 p.m. BNL invites all employees and the general public to visit the Lab on Summer Sundays. As well as the Whiz-Bang Science Show, artifacts from Camp Upton, and the Brain Teaser exhibit in Berkner Hall, visitors will be taken on tours of different facilities each week, starting on 7/10 with the National Weather Service. See a tornado simulator, Doppler radar, and computer tracking. A weather balloon will be launched at 3:30 p.m. All are welcome. Visitors age 16 and over must bring a photo ID. See also page 3.

WEEK OF 7/11 —

Friday, 7/15

Great Adventure!

7 a.m. - about 10 p.m. \$30 per person includes bus fare. Sold out. Ext. 3347.

Sunday, 7/17

Summer Sundays: Life Sciences

10 a.m.-3 p.m. Berkner Hall. See also 7/10. Visit and learn about selected research in BNL's Life Science program: DNA sequencing, the Scanning Transmission Electron Microscope, determining a molecule's structure, and detecting heavy metals in soils.

- WEEK OF 7/18 -

Wednesday, 7/20

Noon Recital: Pianofest

Noon. Berkner Hall. Pianofest Director Paul Schenly returns with soloists from the Pianofest workshop in the Hamptons. All are welcome. Visitors to the Lab of 16 and over must carry a photo I.D.

All Employee Meeting

1:30-3:30 p.m. Berkner Hall. Lab Director Praveen Chaudhari calls an all-employee meeting. All are

Thursday, 7/21

*Summer Student Talent Show

7 p.m. Berkner Hall. Sponsored by the Office of Educational Programs (OEP), student mentors and other BNL staff will perform with this year's summer students, with students competing for cash prizes. All are welcome at this free public event. Visitors to the Lab of age 16 and older must carry a photo ID. To help in planning or to volunteer as a participant, call Tabatha Wyche, Ext. 2890.

Sunday, 7/24

*Summer Sundays: Chemistry, Nanoscience

10 a.m.-3 p.m. Learn about BNL research on addiction, ultra-fast chemical reactions, the study of materials one-billionth of a meter small. And create your own chemical reaction make slime! See notice above, left.

- WEEK OF 7/25 -

Wednesday, 7/27

BSA Noon Recital

Noon. Berkner Hall. Paul Galbraith. Guitarist, will perform. All are welcome at this free public event sponsored by BSA. Visitors to the Lab of age 16 and older must carry a photo ID.

Sunday, 7/31

*Summer Sundays: Science Museum

10 a.m.-3 p.m. See notice, top, left. Explore fun-filled interactive exhibits at BNL's Science Museum. New this year, a 3-D visualization theater will show fascinating scientific images. Also, the Long Island ScienCenter will feature a hands-on exhibit on the physics of toys, and the Goudreau Math Museum will offer stimulating math games. A science magician will uncover the science behind the tricks.

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.

Arrivals Krassimira Alexieva-Botcheva..... Lim-Seok Chang Env. Sci. **Departures** Nancy Concadoro Chemistry

Danielle Delosh Medical

Lanfa Wang C-A

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.

The following positions have been exempted from the freeze by the Deputy Director:

OPEN RECRUITMENT - Opportunities for Laboratory employees and outside candidates.

MK3335 POSTDOCTORAL RESEARCH ASSOCIATE - Requires a Ph.D. in plant biochemistry, a publication record in international journals and expertise in two or more of the following areas: plant biochemistry. central metabolism, kinetic modeling of meta bolic networks, metabolic control analysis, flux balance analysis, statistical multivariate analysis of expression data and mass spectrometry. Work on metabolic flux analysis in plants, with emphasis in developing seeds. For more information see Nature 432: 779-82, 2004; Current Opinion in Plant Biology 7: 309-17, 2004; JBC 278: 29442-53, 2003. Under the direction of Jörg Schwender, Biology Department.

MK3741. POSTDOCTORAL RESEARCH ASSOCIATE POSITIONS - The Chemistry Department (http://www.bnl.gov/chemistry) and the Center for Functional Nanomaterials (http://www.cfn.bnl.gov/ default.asp) (http://www.bnl.gov) seek several postdoctoral research associates to investigate photocatalytic water oxidation reactions on metal-oxide semiconductors modified to absorb solar light. The successful candidates will conduct basic research in experiment or theory toward the development of such semiconductor materials and catalysts, the investigation of their physical and chemical properties, and a mechanistic understanding of their water oxidation chemistry. The candidates must have a Ph. D. in chemistry or a related field, with experience in one or more of the following areas: preparation and characterization of metal-oxide thin films and nanoparticles, electrochemistry, photochemistry, mechanistic and kinetic studies in solution, time-resolved spectroscopy, radiation chemistry, techniques for surface and materials characterization (PES, STM, AFM, TEM, ATR-IR, XRD, XANES/EXAFS, etc.), DFT and/or quantum chemistry calculations, and modeling of solid/liquid interfacial processes. A strong background in physical inorganic chemistry is a plus. Positions are available immediately and applications will be accepted until the positions are filled. Successful candidates will work with the team of researchers: Etsuko Fujita, Sergei Lymar, James Muckerman, José Rodriguez, Peter Sutter, Radoslav Adzic, Carol Creutz, and Marshall Newton. Chemistry Department.

NS2646. PROCUREMENT COMPLIANCE & POLICY MANAGER (M-1) - Require a BA in business administration or in a related field (MBA and/or professional acquisition certification desirable), extensive experience in the Federal contracts environment and detailed knowledge of the Federal Acquisition Reaulations (or equivalent in DEAR or DFAR). Must possess exceptional commuand interpersonal relationship management skills and operate with a high degree of customer orientation. Procurement experience in a large technical/scientific organization is highly desirable as is experience within the DOE complex. The position is responsible for monitoring the Acquisition Management System for compliance with BSA's prime contract, applicable laws and regulations, internal policies and procedures, and sound business practices. Responsibilities include maintaining procurement documentation, coordinating procurement selfassessment activities, developing training requirements, focal point for procurement audits and reviews, and liaison with DOE contracting officer on procurement issues. Procurement & Property Management Division.

NS2740. SENIOR GRAPHIC DESIGNER -Under minimum supervision and with considerable latitude for the exercise of initiative and judgment, plans, coordinates and produces graphic design, layout and artwork, for use in Laboratory technical publications, administrative documents, forms, presentation graphics, and the full range of printed public information products. Must possess

considerable knowledge of the entire production process. Must have extensive knowledge of typography and its usage, and the use of computer-assisted design The term "computer-assisted design" refers to the use of hardware and software for graphic design and excludes video editing, web page design and computer programming. Must be familiar with photographic, printing, binding, finishing, and mailing processes and operations. Provides technical and artistic guidance to Laboratory personnel and contractor representatives as required. Must possess excellent people skills, and be able to effectively interface with customers, production personnel and supervisors in coordinating production and estimating job costs. Must be able to work within tight production schedules. Production Services Office/

TB2645, SR. CONTRACTS SPECIALIST (A-8) - Requires a BA in business administration or equivalent experience, knowledge of Federal Acquisition Regulations particular to cost type and fixed price contracts and 10 years related experience including experience with high tech and electronic equipment. Must be well versed in all aspects of procurement in a government contract environment including drafting RFPs, proposal evaluation, cost and price analysis, negotiation, drafting of contracts and modifications and contract administration. Must have excellent written and oral communication skills, familiarity with Microsoft Word, Excel and a customer service orientation. Demonstrated experience teaming with technical requestors and quality assurance personnel in a scientific or high tech environment is desirable. Under minimal supervision, will be responsible for obtaining desired equipment and services through contractual agreements. Procurement & Property Management Di-

TB3666. BIOLOGY ASSOCIATE IV (P-1, Term Appointment) - Requires a BS degree in biology and experience in at least two of the following areas: GC/MS, HPLC, NMR spectroscopy. Experience with plant tissue culturing and a MS degree are desirable. Duties will be to refine culture techniques used for stable isotope labeling of growing seeds as well as perform analysis of labeled metabolites by GC/MS and NMR spectroscopy. For more information see Nature 432: 779-82, 2004; Current Opinion in Plant Biology 7: 309-17, 2004; JBC 278: 29442-53, 2003. Biology Department.

Motor Vehicles & Supplies

04 JEEP GRAND CHEROKEE LAREDO granite gray, trailer hitch, mint cond. 25K mi. \$17,900/neg. Pam, 737-3453.

03 HONDA PILOT-EX - 4wd, nav. sys., multi-CD, abs, priv. glass, cust. bumper, running brds, alloy whl. 29K mi. \$23,900. 586-5452. 03 MERCEDES-BENZ C240 4-MATIC WAGON - V6, 2597cc, pwr. s/roof, http://usr. v7.com/ts/. 21K mi. \$25,565/neg. Ext. 8408. 01 HYUNDAI ACCENT - hbk., 5-spd., excel. mileage, excel. cond., am/fm, cass., a/c, 56K mi. \$5,000. 321-604-1183.

00 TOYOTA ECHO - a/t, a/c, CD/cass, Small gas-efficient car. 88K mi. \$6,000/neg. Davide, Ext. 5879 or 510-717-9926.

00 NISSAN MAXIMA - a/t, p/l, p/w, c/c, cd, alarm, good cond. 95K mi. \$7,850. Steve, Ext. 4719 or 751-8240.

00 CHEVROLET EXPLORER LTD SE - Hi-Top/Blue, V8, 14" tv, vcr, grnd effect pkg, much more. 66K mi. \$16,800/neg. 889-5302. 98 FORD F150 - V6. a/t. 4wd. a/c. p/s. abs. am/fm/cass, new tool box, strong truck, more. 52K mi. \$10,200. Ext. 7430 or 286-6492.

98 COLEMAN BAYSIDE POP-UP - stoves. hot wtr, frig, slide out, sleeps 6+, new top, floor, more. \$4,200. Ext. 7978 or 744-9308. 98 FORD CONTOUR SE - 4-cyl., 4dr., a/t, am.fm, c/c, p/w, p/l, new batt., excel. cond. 87K mi. \$3,800/neg. Yiqun, 395-5474.

97 TOYOTA COROLLA DX - 4 dr., a/c, p/l, p/w, c/c. 106K mi. \$4,200/neg. 252-2578. 96 HARLEY DAVIDSON SOFT TAIL - cust.,

many acc., 10" Riser hndl. bars, Vans & Hines ex, chromed out. \$13,500/neg. 286-4819.

96 CHRYSLER CIRRUS LXI - 4-cyl, a/t, a/ c, abs, c/c, p/w, leather, good cond, recent insp. 75K mi. \$2,800/neg. Mark, Ext. 2247. 95 BUICK LESABRE - . 120K mi. \$900/ neg. John, Ext. 4203.

94 TOYOTA COROLLA-good cond. manual, 4dr., a/c, am/fm . 150K mi. \$1,200/neg. Hiroyoshi, Ext. 3805.

RADAR LASER DETECTOR - Escort Passport 8500, like new, \$150. George, 725-4068. TIRE - Goodyear Wrangler RTS 225/75/R15. 1 available, new, never used, \$45, Ext. 3973. TIRES - P225-50R-16, set of 4, on low-pro-

file alloy rims from a Ford Probe. \$30/ea. or \$100 for set, neg. Ext. 3288 or 872-8972.

Boats & Marine Supplies

20' MARATHON 2100 - 1984, w/trailer, new motor. \$4,200/neg. John, Ext. 2788.

31' LARSON CABRIO 310 - '96, twin fwc Merc 5.7, lo hrs, rec. risers, manifolds, wtr. htr 04 new elex radar \$43,000, 369-3098

39' TOLLYCBAFT CRUISER - aft cabin w/ cockpit, '90 twin Cummins, 370 diesls. & 9KW gen inst '97 loaded low price 473-8426

Furnishings & Appliances

AIR CONDITIONER - 6000 and 12000 Btu window units, used many seasons, good cond, price neg. 744-6962.

AIR CONDITIONER - GE, 52,000 Btu, only used 1 season. Ask \$50. John, 929-5054. ANTIQUE TABLE - 42" tiger oak pedestal w/ 9" leaf & 4 Rosewood chairs w/cust. cushions, \$850. Barbara, Ext. 2585 or 929-1981. BED - Twin Captain's bed with drawer underneath. Made by Workbench. \$75 obo.

BEDROOM SET - Queen bed w/mattress, dresser/mirror, drawer w/hutch, desk hutch, chair, table, stand (all-oak). \$850. 331-0300. BEDROOM FURNITURE - dresser, mirror, chest, nightstands, queen bedframe w/hd. bd & ft. bd. Pics available. Ext. 6270.

Stephen, Ext. 3822 or 929-6527.

COFFEE TABLE - w/2 side tables, carved wood, glass top. \$250; Krupps Coffee Maker \$15. 331-0030.

COMPUTER HUTCH - 64x29.5x23 oak finish w/2 pull-out trays, file cabinet, and more, like new. Ask \$70. Jayne, 929 5054. DINING TABLE - kitchen dining set, carved cast iron base w/glass top and 4 chairs. \$400; Calif. KIng mattress, \$45. 331-0030. ENTERTAINMENT CENTER - oak finish w/stereo rack, storage cabinets, will hold 30" TV. \$75. Mike, Ext. 3498 or 886-1380. FREEZER - upright, 16.1 cu. ft., 5 shelves, \$75; beige couch, gd. cond., \$100; rocker, \$50; cd storage, \$1. Corinne, 654-3697. FURNITURE - household: upright piano; master bedroom; sofas; love seats; desk; dining room buffet; oak dinette set. 473-5092. FURNITURE - Kid's bed set. =\$700. & wood rocker, \$50; outdr. furn. \$800; love seat & sofa, \$100; study/office furn. \$750. 331-0030. LANE CEDAR HOPE CHEST - from the 30's, \$50; Hi-Riser frame, \$15. Corinne, 654-3697. MOVING SALE - bookcase (tall black IKEA) \$20: toaster oven \$10: books (scifi, baby, misc.) Come see in Shoreham. 821-1325. REFRIGERATOR - Samsung. Used, Currently at Cavendish room 83. Asking \$40, wooyoung@mit.edu. Woo Young, Ext. 8336. TIKES TABLE - Kids little tikes table w/two chairs. \$20. Farhat, 331-0030.

Audio, Video & Computers

COMPUTER - 500Mhz P3 CPU, DVDROM drive, 128Mb RAM, 8.6Gb HD, kybrd/mouse, 17" mon., Win2K, MS Off., \$125. Ext. 7237. COMPUTER - AMD Athlon 2.2Ghz, 1GB RAM, 300GBHDD, DVD+DVD burner, WinXPPro, Off2K3Pro, more. 335-4078.

COMPUTER - 550 MHZ PIII, 256MB RAM, 6Gb HD, CD-ROM, Ethernet/mdm. 14" Monitor. Clean Win2K install. \$100. 312-3205.

COMPUTER STUFF - IEEE 1394 (Firewire) PCI card \$10; SCSI PCI card \$10; AGP graphics card \$10; more, 929-6571.

MONITOR, - 17" CRT, high resolution, used one year, \$10. Ext. 4844.

Sports, Hobbies & Pets

2005 HONDA TRX400 - adult-driven quad w/11 hrs., ext. 42-mo. warr., includes helmet and cover, mint cond. \$5,400. 516-924-4303. AIR HOCKEY TABLE - \$80, basket ball hoop w/stand, \$90; kid's bike, \$20; fish tank, wood frame w/stand, \$75.331-0030.

AIR HOCKEY TABLE - full size, digital score keeper, perfect cond., only 6 months old. \$150. Denise, Ext. 5055 or 929-7225. BICYCLE - Land Rider, 17", auto-shift (as seen on TV), orig. \$480, like new, \$250. 725-4068.

BIKE - lady's 10 spd., \$50; new covered cat litter box, \$5. Corinne, 654-6397.

NORDIC TRACK - 20 yr anniv. ed. w/electronic mon., \$250; Browning compound bow w/sight pins and soft case, \$100. 589-3992. TRAMPOLINE - 13 ft., good cond., kids too old. You pick up, \$25. Joyce, Ext. 4229.

Tools, House & Garden

10" RADIAL ARM SAW - w/base, carbide tipped blade incl. \$75 neg. Mike, Ext. 3498 or 886-1380.

BISTRO SET - cast iron, sm. round table, 3 chairs, green patina, hole for umbrella, extra legs. Ask \$75. Linda, Ext. 2733 or 395-6784. MOVING - patio umbrella w/base \$21: dropspreader, like new \$12; infl. pool, inner diam ~6 ft. x 3 ft. deep \$11. 821-1325.

Miscellaneous

BIKE RACK - for 2 bicycles, fits 2 inch trailer hitch, Reese Adventure System. \$50. 589-3992

MASTER BDRM. - \$400; blk./chrome 4-lug Amer. Racing rims, \$125; white daybed w/ finals, \$125, all obo, Ext. 7007 or 473-9678. MORSE SEWING MACHING - w/pattern & fabric selector, & makes button holes, \$75, 476-5424.

PIANO - console, Yamaha, 1971, M1, \$900. Barry, 941-9115.

PLAY STRUCTURE - high-end, from Wood Kingdom, swings, bars, slide, rock wall. Pd \$2.000. best offer. Ext. 7787 or 474-8715. TICKETS - Patchogue Theatre. One ticket for each matinee, center D113, for Aida 7/14 & Full Monty 8/25. \$20/ea. Ext. 2906 or 929-6189.

STORM WINDOWS - alum, triple track w/ screens. Chris, Ext. 2024 or 395-6112.

BNL Wins Soccer Trophy Join In — Soccer Team Needs More Players

On Fathers' Day, June 19, the BERA Soccer League hosted the cup-finals and all-star game for the Suffolk Men's Soccer League (SMSL). And the Brookhaven Lab team took home a trophy for winning the "B-cup" or "Loser's Cup" in the double elimination cup tournament. The following BERA soccer club members contributed to this success: Manager Richard Wagener, Assistant Manager Yusuf Celebi, Alexei Blednykh, Andrew Davis, Carlos Avila Orta, Giuseppe Camarda, Iouri Sedykh, Jun Xu, Kevin, Rich Casella, and Werner Vogelsang.

BNL Soccer Team Needs More Players

Savs Wagener, "We are trying to form a new team for the 2nd division of the SMSL. If you are 30 years or older and willing to commit your Sunday late afternoons from September to December and March to June to playing soccer on a competitive soccer team, contact me." Wagener, wagener@bnl.gov, or Ext. 5886, by next week. For League schedule, standings, and field directions, as well as links to the SMSL, go to www.geocities.com/suffolk menssoccer/.



Members and some future members of the winning "Brookhaven Lab" soccer team are: (back, from left) Alexei Blednykh, Giuseppe Camarda, Richard Wagener, and (third from right) Jun Xu; (front, left) Yusuf Celebi, (front, third from left) Tony Begley of the American Physical Society, with sons Luke and William. Most of the other players grew up in the Longwood School District and are now scattered across the Island. Three generations of the Manghan family play in the team: (front, second from right) Austin Jr., a Longwood High School teacher who coached many of the players when they were in the Junior leagues; and (third from right) Austin, III; Austin, IV, in front of grandpa Austin, Jr.; and Meagan in front of Austin, III.

TICKETS (2) FOR SENIOR GOLF - Commerce Bank - Red course @ Eisenhower Park 7/1-3 - valid ONE day Fri.-Sun. Ext. 5980.

Yard & Garage Sales

MOUNT SINAI - 2-family yard sale. Furnishings, tools, lots more, 10 Harbor Ct, 8 a-1p, m., Fri.-Sun., July 1,2,3. Ext. 7787 or 474-8715.

Wanted

CRIB - crib needed for family with disabled child. Hugh, Ext. 2031 or 631-924-7262. GERMAN-SPEAKING CHILDREN - German Lang. School Long Island is encouraging enrollment now. Brigitte, 716-1584. HOUSE CLEANING - looking for a reliable person to clean my house in Jamesport on a weekly basis. Achim, Ext. 4750.

SOCCER PLAYERS - 30 or older, for new Div-2 team in Suffolk Men's Soccer League. email:wagener@bnl.gov. Rick, Ext. 5886.

Lost & Found

FOUND - one Motorola (Verizon) pager has been found near tennis courts. Ext.

For Rent

CHERRY GROVE - summer rental. 1 bdrm., pvt. yard w/pond, deck, sunroom, w/d, monthly or weekly. \$900/wk./neg. 597-6874.

E. SHIRLEY - studio, one bdrm., furnished, full bath, sep. ent., no smkg/pets, one mo. sec., 10 min to beach, close to stores.15 min. to Lab. \$750/mo. Ext. 8321 or 804-8609.

MEDFORD - new 2-bdrm., 10x10, 10x12 bsm't apt. Lq. kit., lq. dr/lr, side yard, off street parking, all utils incl., no smkg/pets, avail. 4/ 15. \$1,200/mo. Steve, 374-3967.

MILLER PLACE - share lq. Col. house, furn., cac, I'net, TV, own bdrm., fenced back yard, deck, prof. resid. area, 9 mi. to BNL, mature nonsmoker. \$700/mo. 744-8386.

MILLER PLACE - 3-rm. apt., furn., 22x13 bdrm., full kit., ceramic tile bath, Internet, TV, prof. residential area, 9 mi. to BNL, responsible non smoker. \$900/mo. 744-8386.

SHIRLEY - Lrg. 1 bdrm, pvt. ent., all utilities, exc. phone, no pets/smoking, suitable for one, 1 month + sec. \$850/mo. Ext. 3846.

SHIRLEY - 2 bdrm, 1 bath, I/r, sm. util. rm., pking., side patio, 1 mo, sec., 15 min. to BNL, util. incl. \$1,300/mo. Maria, 399-1756.

SHIRLEY - 1-bdrm., I/r, kit., full bath, pvt. ent., utilities included, 10 miles to BNL, bright, sunny, spacious. \$950/mo. 878-5449. WADING RIVER - completely remodeled,

4 bdrm., 2 bath, igp, 1-acre fenced-in

yard, one family or several colleagues, pets neg. \$2,100/mo. 744-0007.

WADING RIVER - 4/5 bdrm., 2 bath, possible mother/daughter, SWR schools, 8 miles to Lab. \$2,100/mo. John, Ext. 4028.

YAPHANK - Studio apt., fully furnished, priv. ent., 4 mi. to Lab, cable, high speed internet, all incl. \$850/mo./neg. 924-3049.

MYRTLE BEACH, SC - 2-bdrm. (4 beds) 2.5-bath Townhouse on golf course in Little River, SC, community pool. \$491-\$813/ week or \$700- \$1,200/mo. 472-4994.

For Sale

PATCHOGUE, NY - Lake Shore Drive, Waterfront, 2 bdrm., 2 full bath, I/r, d/r, eik, 2-car gar., agp, 2 lg. sheds, 85 x 130. \$410,000 828-1366.

ROCKY POINT - 1-bdrm cotage, all new roof, siding, floors, & bdrm; freshly painted. Mins to beach, beach rights. \$225,000. 255-8445.

RIDGE - 1.3 acres, opp. land reserve, all permits to build, foundation dug, city water avail. Mins to Lab. \$250,000 neg. 255-8445. SETAUKET, NY - 4-bdrm. ranch, 3 bath, I/r, d/r, brkfast rm., fin. bsmt, walk to library & pond, lg. deck, 2-car gar. \$519,000, 941-

ARUBA - time share Marriott ocean veiw can swap \$16,500/neg. Robert, Ext. 7238.

On-Site Service Station

Owners of vehicles from 1996 and newer are required by New York State to have inspections performed using the new OBD Il system. If a check-engine light is displayed while the vehicle is running, it will not pass. The on-site service station is ready to diagnose and correct a problem. Your battery may also need to be changed; have your vehicle checked and/or serviced while you are at work. Call Ext. 4034.

Farewell Gathering

FOR BOB MARASCIA - Party animals & roasters wanted for Bob's party, 7/27, 6 p.m., Rock Hill Country Club. D.J., Ext. 3555.

In Appreciation

Thanks to John Smalley who found my money and returned it. Thanks very much. There are still honest people around. —Barbara Langhorne

Sincere thanks to all my friends that I've

worked with for the last 37 years. The party was great and the gifts are beautiful. I take with me a lot of good memories and will miss you all. Much appreciation. —Toni Fridae

