

## BNL, Kansas State University, Yinnel Tech, Inc. Win R&D 100 Award

**Novel radiation detector has applications in homeland security, environmental monitoring, galactic events**

**B**NL, Kansas State University and Yinnel Tech, Inc., of South Bend, Indiana, have won a 2005 R&D 100 Award for developing a highly efficient, low-cost radiation detector. The detector can be used for homeland security applications, nuclear medical imaging, environmental monitoring and cleanup, galactic events studies, and nuclear-weapons safeguards. Funding for the development of the award-winning detector came from BNL's Laboratory Directed Research & Development Program and DOE's National Nuclear Security Administration.

R&D Magazine gives R&D 100 Awards annually to the top 100 technological achievements of the year. Typically, these are innovations that transform basic science into useful products. The awards will be presented in Chicago on October 20.

"This award demonstrates that DOE scientists and researchers are hard at work developing the technologies of the future," said Secretary of Energy Samuel W. Bodman. "In the past, breakthroughs like this one have played an important role in both our economic and national security."

Douglas McGregor of Kansas State University designed the radiation detector, called a cadmium-zinc-telluride Frisch-ring detector, and Energy, Environment & National Security Directorate researchers Aleksey Bolotnikov, Gomez Wright, Gabriella Carini, Giuseppe Camarda, and Ralph James built the prototype using the semi-



Gabriella Carini and Aleksey Bolotnikov display prototypes of the award-winning detector, while another BNL co-inventor of the device, Giuseppe Camarda, looks on. Not present are Kansas State University's Douglas McGregor and BNL's Ralph James and Gomez Wright.

conductor alloy, a polymer, and metal rings. The small, portable detector, which measures about one-half inch long by one-quarter inch wide, detects both x-rays and gamma rays with high resolution, and it can identify the specific source of radiation. Unlike most detectors of its type, which have to be chilled, this novel detector can be used at room temperature. Also, its performance is highly reliable, with minimal maintenance.

"While other cadmium-zinc-telluride detectors are commercially available, they are more expensive and not as sensitive as the one we developed," Bolotnikov said. "The detector includes a layer of polymer and metal rings, called Frisch-rings, that act as an electrostatic shield for the sensitive crystals inside it. This shielding prevents holes — positively charged particles that are created by x-rays and gamma rays — from degrading the detector's sensitivity."

The detector's innovative design, coupled with a patented process for fabricating the detector's surfaces, enables it to be versatile as well as extremely sensitive. It can be assembled into an array of detectors that can produce high-quality images of radioactive sources distributed over a wide area.

While Yinnel Tech, Inc. has marketed the detector, its design and the technology of its fabrication are available for licensing to other companies.

— Diane Greenberg

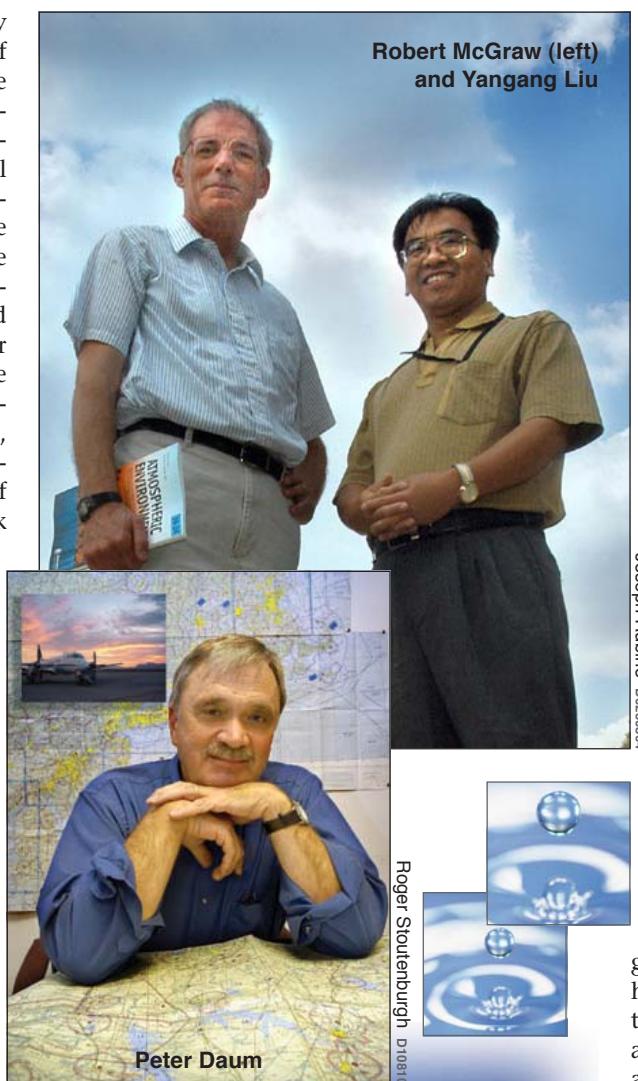
## Building a Better Virtual Raindrop

**A** new way of mathematically modeling the formation of rain drops in clouds may improve the understanding of Earth's climate, cloud formation and movement, and the effect that small airborne particles have on rainfall. In a paper published online by *Geophysical Research Letters* the week of June 20, 2005, atmospheric physicist Yangang Liu and atmospheric chemists Peter Daum and Robert McGraw of the Environmental Sciences Department present a new model, which, they say, helps to overcome some of the shortfalls of previous approaches. This work was funded by the Atmospheric Radiation Measurements Program and the Atmospheric Sciences Program of the Office of Biological & Environmental Research within DOE's Office of Science.

In the first step in the formation of raindrops, small cloud droplets combine to form larger drops in a process known as autoconversion. The mathematical representation of this process is used in simulating cloud activity and global climate patterns. But according to the Brookhaven team, the model used previously has been oversimplified and vague because some of the terms in the equation lacked a physical basis.

To address this problem, Liu and his colleagues developed a new model for autoconversion that takes into account the limited size range of droplets that interact to create raindrops. The new model also accounts for the amount of liquid water present and the concentration of droplets in a cloud. The authors assert that their model avoids guesswork by being more grounded in physics and is as easy to use as other models.

— Karen McNulty Walsh



## Five Brookhaven Scientists Awarded Tenure

**B**rookhaven Science Associates (BSA) granted tenure on June 1 to five Brookhaven scientists. They are: Ivan Bozovic, Materials Science Department; Sergei Lymar, Chemistry Department; James Misewich, Materials Science; Werner Vogelsang, Physics Department; and Zhong Zhong, National Synchrotron Light Source Department. Tenure appointments are granted by action of the BSA Board after a rigorous selection procedure overseen by the BSA Science & Technology Steering Committee. In making tenure decisions, the BSA Board is advised by members of the Brookhaven Council, an elected body that advises the Director on matters affecting the scientific staff.

The Bulletin is describing the accomplishments of each of the five recent tenured scientists in alphabetical order. This week features Sergei Lymar.

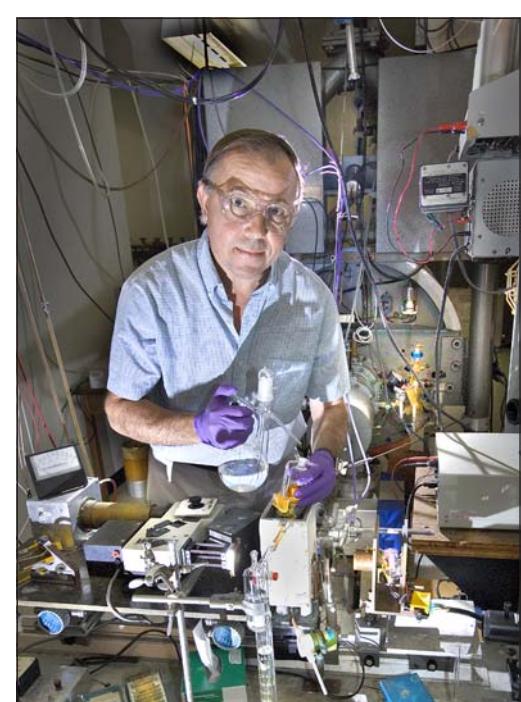
### Sergei Lymar

**F**or his "authoritative research elucidating fundamental thermodynamics, kinetics, and mechanistic chemistry of nitrogen oxides," Sergei Lymar has been awarded tenure in BNL's Chemistry Department.

Lymar has a reputation for rigorous experimental work and careful interpretation that has led to revision of previous inaccurate views or has authoritatively resolved previous controversies," said Chemistry Department Chair Alex Harris. "His work on nitrogen oxides and radiation chemistry has had important broad ramifications for other fields, from biology and medicine to nuclear waste management."

Once thought of only as pollutant precursors to "acid rain" and as one toxic component of cigarette smoke, nitrogen oxides are now recognized as important mediators in vital physiological functions as diverse as blood flow regulation, neuronal transmission, and immune system operation. They have also been connected to human diseases ranging from neurodegenerative disorders to cancer.

Lymar's work also opens important new avenues of research in the chemical sciences, including the application of radiation chemistry for investigating high-energy molecules at Brookhaven's Laser Electron Accelerator Facility and for studies pertinent to the conversion



of solar energy for applications in a hydrogen economy. This latter area helps link the chemical sciences with nanoscience, an important strategic area for the Lab's future Center for Functional Nanomaterials.

Lymar received his B.S. in physics and M.S. in chemical physics at the Moscow Institute of Physics and Technology in 1975 and 1977, respectively. He obtained his Ph.D. in chemistry from the Institute of Catalysis of the Russian

(continued on page 2)



## 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. Hall) 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/).

#### 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](mailto: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. Lisa Yang, 979-3937.

#### Tuesdays: BNL Music Club

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

#### Tuesdays: Jiu Jitsu Club

6:30-7:30 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/toastmstr/default.htm](http://www.bnl.gov/bera/activities/toastmstr/default.htm).

#### Tues., Wed. & Thurs.: Rec Hall Activities

5:30-9:30 p.m. General activities, large-screen TV, ping pong, chess, games, and socializing. 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 the apartment area playgroup. Fang Dong, 871-5362.

#### Wednesdays: Farmer's Market

11:30 a.m.-1:30 p.m., Berkner Hall parking lot.

#### 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](mailto: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](mailto:rudy@bnl.gov).

### — THIS WEEKEND —

#### Today, Friday, 8/5

##### \*BNL Science Museum Open

11:30 a.m.-1:30 p.m. BNL Science Museum. The Lab community, with their families and friends, may visit the museum. The gift shop will also be open. Children under 14 years old must be accompanied by an adult.

#### Sunday, 8/7

##### \*Summer Sundays: NSLS

10 a.m.-3 p.m. See notice, page 4. The facility to be featured is the National Synchrotron Light Source. Learn about discoveries made with "invisible light" that impact everyday life.

##### Trip to Ellis Island, Statue of Liberty

8:30 a.m. Brookhaven Center. Luxury bus trip sponsored by BERA. \$25/adult, \$20/children 12 and under, includes ferry, ticket to Statue of Liberty, and coach fare. Buy tickets at the BERA Sales Office, Berkner Hall. See also notice on page 4.

### — WEEK OF 8/8 —

#### Wednesday, 8/10

##### St. Joseph's College Demo

11 a.m.-1 p.m., Berkner Hall. Representatives from the St. Joseph's College Graduate Management Studies Program will present information about degree programs, including the Executive Master of Business Administration and Master of Science in Management with Concentrations in Organizational Management, Human Resources Management and Health Care Management. The school will offer an MBA with a concentration in accounting in the near future. Classes meet every other week, evenings, weekends. Matthew Colson, 447-3933

## In Memoriam — Martin Haase

Martin Haase, the Food Service Director at BNL of FLIK International Corp., the company that provides food service on site, died on Friday, July 8, after an accident. He was 52. He had taken FLIK's manager position at the Lab on January 29, 2004.



service at many interesting venues, including the World Trade Center and Citi Corp. Marty enjoyed his work, and people enjoyed working with him. He took personal interest in each special event. He will be missed."

Marty Haase, a resident of Selden, is survived by his wife Rochelle and three children, David, Amanda, and Lisa. —Liz Seubert

## BWIS Seminar, 8/18

### Mentoring Programs for Women in Science

Mary L. Pavone, Director of the Women in Science Project (WISP) at Dartmouth College, will give a Brookhaven Women in Science-sponsored seminar titled, "Shaping the Circle of Science with Mentoring, Active Learning & Community," on Thursday, August 18, at noon in Berkner Hall. All are welcome.

Dartmouth College pioneered an initiative to increase the numbers of undergraduate women graduating in the sciences, math and engineering and to prepare them to pursue professional science careers. Recognizing that women leave science for varied reasons, a comprehensive and complementary set of programs evolved around the themes of early hands-on research, experience, mentoring and networking, role models, access to information, and a sense of community.

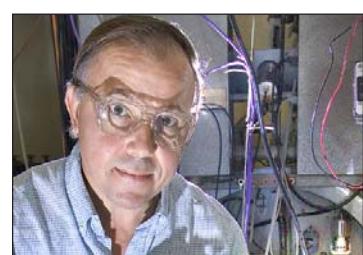
Pavone will discuss two mentoring programs at Dartmouth: WISP, which pairs women freshmen or sophomores interested in science with a research faculty member for two terms in a paid, hands-on mentored introduction to research; and MentorNet, a worldwide, nonprofit e-mentoring network that addresses the retention and success of those in engineering, science and mathematics through connections with professional scientists.

Pavone holds a B.S. in biology and an M.S. in aquatic biology, both from Kent State University. In 1996, on behalf of WISP and Dartmouth College, she accepted the National Science Foundation's Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring Programs. For more information, contact Lynne Ecker at Ext. 2538, or [lecker@bnl.gov](mailto:lecker@bnl.gov).

### Tenure Awarded to Lymar of Chemistry (cont'd.)

Academy of Sciences in 1983, later holding a staff position there and serving as a part-time faculty member at Novosibirsk State University. In 1991, he came to the U.S. as a visiting scientist at the Oregon Graduate Institute, moving to Washington State University in 1994.

Sergei Lymar joined Brookhaven's Chemistry Department as a Senior Research Associate in 1997 and was pro-



moted to Associate Chemist in 1999 and to Chemist in 2003.

— Karen McNulty Walsh

### New School Supplies Needed

Back packs, pads, pens and pencils, folders, glue, and all general school supplies are being collected to help local children in need. Drop off donations at Building 179B in the Quality of Life / BERA/Recreation Office; or send a check payable to BERA so that supplies can be purchased for those in need.

### Bus Trip to Cradle of Aviation, 8/24

On Wednesday, August 24, join a trip to the Cradle of Aviation Museum to learn about the history of flight, with actual planes and rocket ship machinery to look at and touch. In addition, you will see a great movie on the ocean in the giant IMAX Dome theater at the museum.

The trip, which is sponsored by the English for Speakers of Other Languages Program, costs \$10 per adult and \$8 per child, which includes bus, museum and film entry. The bus will leave the Recreation Building in the apartment area at 9:30 a.m. and depart from the Cradle of Aviation at 3 p.m. You may bring lunch to eat at the museum cafe or buy lunch there.

Buy tickets by August 8, from Jennifer Lynch, Bldg. 179B, Ext. 4894 or [lynch@bnl.gov](mailto:lynch@bnl.gov).

### One-on-One Retirement Counseling, 8/11

A TIAA-CREF consultant will visit BNL on Thursday, August 11; Tuesday, August 16; Monday, August 22; Tuesday, August 30; and Wednesday, August 31, to answer employees' questions about financial matters. The consultant will help you:

- Understand the importance of protecting your assets against inflation
- Find the right allocation mix for you
- Learn about TIAA-CREF retirement income flexibility
- Compare lifetime income vs. cash withdrawal options

For an appointment, call Kathy Murphy, (866) 842-2053, Ext. 4625. (Not the on-site Ext 4625.)

## Correction

The Bulletin regrets that an article summarizing Laboratory Director Praveen Chaudhari's all-employee meeting in the July 29 issue omitted some pertinent information regarding the conclusions of a Nuclear Science Advisory Committee (NSAC) report on BNL's RHIC and Thomas Jefferson National Accelerator Facility's CEBAF.

The exact wording of the NSAC report reads, "Because of the superb science lost in both scenarios, the committee was not able to make a choice based on scientific merit alone. The present budget scenario, however, represents a crisis that would preclude running both large facilities simultaneously and force an immediate choice while RHIC is still in its initial discovery phase. Based on this additional consideration, the subcommittee, while split in its decision, has a slight preference for the choice that maintains operations at RHIC. If such a budget exercise were to occur in the future, for instance, with the Jefferson Lab 12-GeV Upgrade well underway, a different choice might well be made."

## SBU Master's Offered on Site

Stony Brook University (SBU) will be offering an on-site program to receive a Master's degree in Technological Systems Management. This degree will have a concentration in environmental and waste management. Admission requirements include one year of calculus as an undergraduate and a bachelor's degree in engineering, natural sciences, social sciences, mathematics or a closely related area from an accredited college or university.

The BNL Tuition Assistance program can reimburse employees at 100 percent for the cost of tuition. Employees will be responsible for fees and books. Applications are being accepted for the fall 2005 semester. The application process needs to begin without delay.

For more information, see the HR Staff Development website at [http://www.bnl.gov/HR/staffdev/onsite\\_ed.asp](http://www.bnl.gov/HR/staffdev/onsite_ed.asp) and the SBU website at <http://www.stonybrook.edu/est/academics/graduate/or> contact Starr Munson, [munson@bnl.gov](mailto:munson@bnl.gov) or Ext. 7631.

## LabVIEW Training

BNLers who are preparing to develop applications using LabVIEW, or NI Developer Suite are welcome to register for LabVIEW training classes, which will be held September 12-16, 8 a.m.-5 p.m., in Berkner Hall, Room D.

**Basics I:** A three-day course that prepares you to develop, test, and perform measurement; conduct data acquisition, instrument control, data logging, and measurement analysis applications using LabVIEW.

**Basics II:** A two-day course that prepares you to design complete, stand-alone applications in LabVIEW. Course covers proper design techniques, implementation of complete LabVIEW solutions, Data-Socket technology, advanced file I/O, networked environments, and error handling.

The full course curriculum is available at [www.ni.com/pdf/products/us/LabVIEWBasicsI.out.pdf](http://www.ni.com/pdf/products/us/LabVIEWBasicsI.out.pdf) and at [www.ni.com/pdf/products/us/LabVIEW\\_BasicsII.out.pdf](http://www.ni.com/pdf/products/us/LabVIEW_BasicsII.out.pdf).

Space is limited, so register as soon as possible by contacting Marcia Swiss, Ext. 4120.

## Summer Fun On Fridays At BNL Science Museum

The on-site BNL Science Museum will be open for BNL employees, their families and friends, 11:30 a.m. -1:30 p.m. on all Fridays in August, starting today, August 5. Visit the Museum to experience hands-on exhibits and view new images in the 3D Visualization Theater.

The Museum gift shop will be open for purchases. An adult must accompany children under 14 years old.

## Arrivals & Departures

### Arrivals

Christopher Jackson ..... Physics  
**Departures**

John Brady ..... Plant Eng.  
Anne Corr ..... Fiscal  
James De Santis ..... Plant Eng.  
Richard Eggert ..... PPM  
Sharon Hoey ..... Rad. Ctrl.  
Tao Huang ..... Mat. Sci.  
James Jefferis ..... PPM  
Timothy Kidd ..... Physics  
Robert Marascia ..... C-A  
Marilyn Pandorf ..... HROM  
Myron Strongin ..... Physics  
Nicole Trent ..... Plant Eng.  
Gustavo Vazquez ..... Env. Sci.  
Antonio Zambano ..... Mat. Sci.

### Safety Shoe Office

The Safety Shoe Office will be closed from August 18 through 25. It will re-open on August 29.

## Cruise to Music on Port Jeff Ferry, 8/17

The Hospitality Committee invites the BNL community of all ages to join a Port Jefferson Ferry Sunset Cruise on Wednesday, August 17. During the voyage to Bridgeport and back, King Wellington & The Earth Peoples will play reggae music, or passengers can mount to the top deck to enjoy the wind and waves more quietly. Meet at the Port Jefferson ferry building at 5:15 p.m. and buy tickets on the boat, \$12/adults, \$7/children 5-12. Snacks and drinks may be purchased on board, or you can bring your own picnic. The boat will return by 9 p.m. Some parking is available in the ferry lot. For more information, contact Lisa Yang, 878-3937 or [lisayang@optonline.net](mailto:lisayang@optonline.net).



## Calendar

(continued)  
Friday, 8/12

\*BNL Science Museum Open  
11:30 a.m.-1:30 p.m. BNL Science Museum. The Lab community, with their families and friends, may visit the museum. The gift shop will also be open. Children under 14 years old must be accompanied by an adult.

Sunday, 8/14

\*Summer Sundays: Celebration and Music Festival  
10 a.m.-3 p.m. All are welcome. See notices, page 4. This Sunday's features include the "Einstein and Beyond Magic Show," the Lab glassblower demonstrating his work, and a Summer Music Festival with blues, rock, reggae, and drums.

— WEEK OF 8/15 —

Wednesday, 8/17

Marriott Residence Inn Demo  
11 a.m.-2 p.m., Berkner Hall. Representatives from Marriott Residence Inn in Holtsville, a few exits west of the Lab, will present available services and discounted rates. A raffle drawing will be held. Contact Donna Chider, 475-9500, Ext. 4908, dchider@colwenhotels.com.

BSA Noon Recital

Noon, Berkner Hall. Violinist Stephanie Mocilan and pianist Pavel Bogomakov will perform at the BSA-sponsored Noon Recital. All are welcome. Visitors of 16 and over must carry a photo ID.

ASAP Party

5 p.m. Ball field gazebo or the lounge, Bldg. 720, in case of rain. BNL's Association for Students & Postdocs (ASAP) will hold a party for students and postdocs. Food, soft drinks will be provided. Bring music.

\*Sunset Cruise on Port Jefferson Ferry

5:15 p.m. Port Jefferson ferry building. All Lab community family and friends are welcome to join a group of BNers who take the ferry to Bridgeport, CT, and back to watch the sunset over the water, listen to reggae music by King Wellington and The Earth Peoples, or just relax. Sponsored by the Hospital Committee, the tickets are \$12/adults, \$7/children 5-12. Bring a picnic or buy snacks on board. Boat returns by 9 p.m. See also notice on page 2. Contact Lisa Yang, 878-3937 or lisayang@optonline.net.

Thursday, 8/18

\*BWIS Seminar: Mentoring Programs  
Noon. Berkner Hall. All are welcome to attend a Brookhaven Women in Science (BWIS)-sponsored seminar, "Shaping the Circle of Science with Mentoring, Active Learning & Community," by Mary Pavone, Director of the Women in Science Project at Dartmouth College. For more detail, see notice on page 2.

Friday, 8/19

\*BNL Science Museum Open  
11:30 a.m.-1:30 p.m. BNL Science Museum. The Lab community, with their families and friends, may visit the museum. The gift shop will also be open. Children under 14 years old must be accompanied by an adult.

Sunday, 8/21

\*Summer Sundays: RHIC  
10 a.m.-3 p.m. See notice, page 4. The facility to be featured is the Relativistic Heavy Ion Collider. Learn how scientists probe matter thought to have existed at the dawn of the universe.

— WEEK OF 8/22 —

Wednesday, 8/24

\*Bus Trip to Cradle of Aviation Museum  
9:30 a.m. Recreation Bldg. in apartment area. At the Cradle of Aviation Museum, in Nassau County, touch real planes and rocket-ship machinery, see movie on flight history at giant IMAX Dome theater. Bus will depart the museum at 3 p.m. Sponsored by the English for Speakers of Other Languages Program, the trip costs \$10/adult, \$8/child, which includes bus, museum, and film entry. Buy tickets by Monday, August 8, from Jennifer Lynch, Bldg. 179B, Ext. 4894 or lynch@bn.gov.

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@bn.gov. Write "Bulletin Calendar" in the subject line.

**N**ow's the time for swimming and diving — but at least one BNer started his swim season much earlier in the year, when he went diving in Lake Ronkonkoma last April to look for a 1950s motorcycle.

The story started last winter, when two BNL Kevins, Kevin Yachnik, who works in the Plant Engineering Division's Chilled Water Facility, and Kevin Barnes, former Lab heavy equipment mechanical operator, decided that they would try to put one of the many myths of Lake Ronkonkoma to rest.

Says Barnes, "Lake Ronkonkoma has always been the center of myths and legends, including the myth of the lovesick Indian maiden who committed

suicide in the lake because her dad would not allow her to marry her true love." Over the years, Barnes explains, many local gamerooms and pubs contributed to an information stream about the lake and the myths have piqued the interest of many neighborhood Long Islanders.

Because they were interested in motorcycling, the two Kevins focused on one more recent myth from the 1950s: a local biker was reputed to have driven his motorcycle off the end of the pier into the lake on a \$100 bet.

To confirm this, the Kevins partnered to develop a plan. Their partnership worked perfectly — Yachnik is an experienced diver and Barnes had the

time to do research in libraries and speak with folks at the local historical societies in order to determine where the pier once may have stood.

Then, one spring day in April, Yachnik, helped by Barnes, geared up in his 75-pound diving equipment and entered the 40-degree water on the first planned dive. Several local residents, who were out enjoying the benefits of the Ronkonkoma park that surrounds this part of the lake, became interested and stood by to watch. Other onlookers included a local motorcyclist who had known about the dive beforehand and a vintage car driver who was passing by.

On this dive, Yachnik spent an hour at the bottom of the

lake looking for remnants that could confirm the old story. He came to shore with a few old bottles, but he had also found a good deal of debris in the area, possibly debris from the old pier.

"We'll need to dive again, probably more than once, for more information before we can confirm the story," said Yachnik. "We're expecting our next dive to be in September. This time I will have a better idea of where to look, so here's hoping!"

— Jane Koropsak

If you are interested in watching future dives, or in taking up diving yourself, contact Kevin Yachnik at 631-821-DIVE or Kevin Barnes at 631-281-8031.



(Above) Kevin Barnes (far right) and Kevin Yachnik (second from right), are joined by local motorcycle enthusiast, Kevin Quinn, vintage car owners Clarke and Sandi Abrecht, and wildlife photographer Roland Brown, who cheered Yachnik on and awaited his return to the dock with debris that may help confirm the local motorcycle myth.

(Top) As he enters Lake Ronkonkoma, Kevin Yachnik sets up his wreck reel, which will define a search pattern and help him find the "missing" 1950s vintage motorcycle.

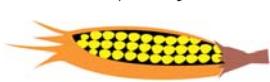


Kevin Barnes helps Kevin Yachnik gear up for his dive into Lake Ronkonkoma.

### Farmer's Market With Music!

The Farmer's Market will be outside Berkner on Wednesdays until August 31, from 11:30 a.m. to 1:30 p.m. This year you can buy fresh produce, handmade jewelry and baby clothes, beaded sandals, piñatas, herbal soaps and lotions, as well as coffee, tea, textiles, and paintings.

In addition, you'll have music! Shaded by the trees outside Berkner, a member of the BNL Music Club will perform to passers by and the listeners who take time out on the grass. For more information, call Joanne Rula, Ext. 8481.



### Ice Cream Coupons

Coupons redeemable for one ice cream from the cafeteria are now available for employees who came to Berkner Hall at 3 p.m. on June 20 for the safety celebration only to find the refreshments exhausted. To obtain a coupon, visit Maria Beckman, Bldg. 120, Rm. 1-51, before 5 p.m. on Wednesday, August 10. One coupon per person will be issued, first come, first served, and supplies are limited. Coupons can be redeemed between Monday, August 8, and Wednesday, August 17. For more information, contact Beckman, Ext. 5483.



## BNL Summer Sundays — This Sunday Features National Synchrotron Light Source

This summer, combine free family fun and learning some thing about the tremendous discoveries at the Lab by visiting BNL on a Summer Sunday. 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 non-technical terms about some of BNL's forefront research.

Summer Sundays run through August 21. No reservations are needed. Visitors, including anyone from the Lab community, may arrive at any time between 10 a.m. and 3 p.m. All visitors



Lisa Miller, NSLS

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. In addition, visitors may test their creative and problem-solving skills at the Brain Teasers exhibit in Berkner Hall lobby. Artifacts from Camp Upton — the U.S. Army base that occupied the Lab site during World Wars I and II — will also be on display. The Summer Sunday schedule of facilities to visit follows:

8/7 ..... **National Synchrotron Light Source (NSLS)**: See with Invisible Light! Powerful beams of invisible light help scientists make remarkable discoveries that can impact our everyday life! The NSLS is one of the world's brightest sources of x-ray, infrared, and ultraviolet light. Used by over 2,000 researchers from around the world each year, and by the 2003 Nobel Prize-winner in chemistry, the Light Source has contributed to advances in medicine, materials, space travel, and more.

8/14 ..... **Celebration Sunday**: See the Einstein & Beyond Magic Show, a Blues/Rock/Reggae/Drumming & Dance Concert by local bands, Camp Upton history, much more.

8/21 ..... **Relativistic Heavy Ion Collider (RHIC)**: Probe matter thought to have existed at the dawn of the universe.

## 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).

The following position has been exempted from the freeze by the Deputy Director:

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

**MK2138. RESEARCH ASSOCIATE** (reposting) — Requires a Ph.D. in accelerator science, experience in beam dynamics simulations of high-brightness high-charge electron beams from RF guns, as well as experience in experimental work on laser photocathodes or RF guns. Also, knowledge of the physics of emittance compensation, experience in magnetized beam dynamics, and experimental and computational work on the development of diamond amplified photocathodes, superconducting RF guns and Energy Recovery Linacs. Collider-Accelerator Department.

### Motor Vehicles & Supplies

04 HARLEY DAVIDSON HERITAGE SOFTAIL - blk., Screaming Eagle II pipes & air filter. 5000 mi. \$16,000. Ext. 4797.

03 YAMAHA R6 LTD EDITION - Black/Red Flames, Mint. 11K mi. \$7,000. 878-8228.

01 CHEVROLET BLAZER LS - m/roof, a/t, p/seats, 2-dr, 4x2, 6cyl., all pwrs., a/c, abs, 99K mi. \$6,000/neg. Ext. 4705 or 929-4978.

00 FORD ESCORT ZX2 - Red, 2-dr, 4-cyl., a/t, a/c, p/s, p/w, p/l, AM/FM cass., rear spoiler, excel. 48K mi. \$6,300/neg. Ext. 5282.

00 DODGE GRAND CARAVAN - Quad seats, all pwrs., 3.8lt., prof maint., one owner, vg condition. 95K mi. \$4,100/neg. 384-2422.

99 MERCURY GS SEDAN - dark green, a/t, radio, no cooler, available end of Aug., 81K mi. \$3,000/neg. Taka, Ext. 8408.

97 TOYOTA CAMRY XLE - V6, 4 dr., moon roof, pwrs. seats, excel. cond. in and out. 94K mi. \$6,900. 236-9031.

97 CHEVY S10 - 4cyl., a/cm red, cap & bedliner, extended cab, excel. cond. 110K mi. \$3,350/neg. Ext. 5087 or 874-3145.

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.

96 TOYOTA CAMRY LE - V6, a/c, c/c, p/w, p/l, a/t; excel. cond, orig. owner. 83K mi. \$4,300/neg. 286-5918.

95 ACURA INTEGRA - hb, 5-spd, all pwrs. access., white, m/roof, mint cond. 70K mi. \$4,250. 631-473-5092.

95 TOYOTA TERCEL - white, 2dr. 4-spd. a/c. 107K mi. \$1,500/neg. Bernd, Ext. 3640.

95 LAND ROVER DISCOVERY - lthr. int., 10 CD, a/c, p/w, p/l, fr.-grill guard, dual s/roofs, new tires. 135,000 mi. \$4,500/neg. 650-5529.

95 DODGE CARAVAN - Red, 6-cyl., 7-pass., runs well. 132K mi. \$1,900/neg. Ext. 5562.

94 CHEVY ASTRO - Conversion Van, high top, new eng., tv, vcp, 2 stereos, seats 7, rear seats to bed. \$3,800/neg. 839-6327.

93 CHEVY CAVALIER - 2-dr., a/t, abs, a/c, CD, engine runs well, some body damage. 129K mi. \$650/neg. Ext. 4826 or 821-3762.

93 FORD PROBE - Mazda engine, a/t, a/c, am/fm/cd, well maint., no rust, 32 mpg on trip. 128K mi. \$1,295/neg. John, Ext. 7726.

92 FORD TAURUS - station wagon, runs, looks good. 120K mi. \$650/neg. Ext. 8137.

91 MITSUBISHI ECLIPSE GS - a/t, p/w, black w/grey int., pop-up roof, am/fm/cass.

85K mi. \$1,500. 347-385-4126.

91 HONDA CIVIC DX - good cond, auto, white, 2-dr. 154K mi. \$450/neg. Sangmoon, Ext. 3714 or 949-3809.

91 CHEVY S10 BLAZER - 4.3L 4wd., new alt. & batt., just tuned up. \$1,275. 872-2788.

89 FORD BRONCO - Eddie Bauer ed., blue/beige, beige int., 4wd, 8-cyl. 120K mi. \$4,700/neg. Ext. 7316.

87 DODGE ARIES - a/c works, int. gd., body fair, no rust, rec. brakes, passed inspec., reliable. 92K mi. \$650/neg. 929-5876/evens.

86 FORD F250 - V6, 4-spd., runs well, body good, rebuilt eng, great for plumber/electrician/handyman. \$1,500. Cliff, 744-2411.

83 MERCURY COLONY PARK - wagon, classic car cond., all pwrs., leather, gar., one owner, orig. mi. 75K mi. \$3,400. 751-7053.

77 CHEVY S10 - a/c, 4 cyl., red, ext. cab, cap & bedliner, excel. cond., . 110K mi. \$3,350/neg. Marion, Ext. 5087 or 874-3145.

TIRES - (2) 15 in. mounted and balanced on steel rims, good for spares or trailer, \$25 ea.; (2) 16 inch, \$5 ea. Steve, Ext. 4719.

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VCR - RCA with remote \$30. Cordless phone Vtech \$25. Printer Epson 740 stylus color \$35. 821-1435.

BOAT TRAILER - 2001 Venture, 4000 lb capac., dual-axle, (as new) for 21-22 ft boat. \$1300. Carl, Ext. 4420 or 631-344-4420.

DOWN RIGGERS - 2 Penn Fathom-Master 600, Gunnel mounts, Fathom Trol wghts, rod holders, more. Excel. \$250/ea. 475-8183.

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