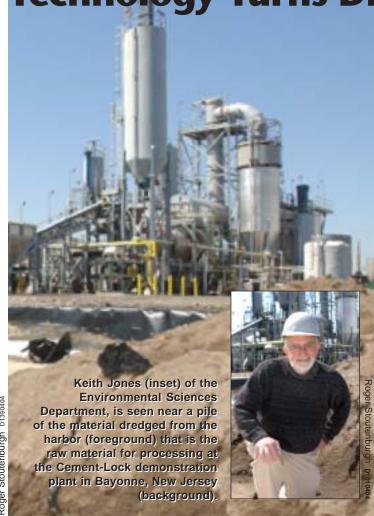
# **Technology Turns Dredged Material Into Cement**



# **Protein Folding on a Chip**

Cientists at BNL are proposing to use a supercomputer originally developed to simulate elementary particles in high-energy physics to help determine the structures and functions of proteins, including, for example, the 30,000 or so proteins encoded by the human genome. Structural information will help to gain a better understanding of proteins' role in disease and health, and may lead to new diagnostic and therapeutic agents.



In work funded by the Lab, James Davenport of the Energy, Environment, & National Security Directorate, and colleagues James Glimm and Yuefan Deng of Stony Brook University, working with Walter Mangel and Subramanyam Swaminathan of the BNL Biology Department, will test their application on a machine named QCDOC, short for Quantum Chromodynamics on a Chip. This supercomputer was

developed for physics applications at BNL by Columbia University, IBM, and the RIKEN/BNL Research Center.

Unlike parallel processors found in typical computers, the 10,000 processors in QCDOC each contain their own memory and the equivalent of a 24-lane superhighway for communicating with one another in six dimensions. This configuration allows the supercomputer to break down the

task of deciphering the threedimensional arrangement of a protein's atoms — 100,000 in a typical protein — into smaller chunks of 10 atoms

Working together, the chips effectively cut the computing time needed to solve a protein's structure by a factor of 1,000, says Davenport, who is Associate Director of BNL's Center for Data Intensive (continued on page 2)

BNL scientists have helped develop a new technology that converts material dredged from the bottoms of harbors and waterways into a substance that can be made into construction-grade cement. The technology, called Cement-Lock, was developed in collaboration with the U.S. Environmental Protection Agency (EPA), the State of New Jersey, and other groups.

"This technology will greatly help to increase the health of many U.S. harbors and waterways, such as the Port of New York and New Jersey," said Keith Jones, Environmental Sciences Department, who took part in Cement-Lock's development. "These waterways are contaminated by metals and pollutants from many human activities, such as sewer overflow systems and discharges from industrial operations."

To ensure that the port can continue to service large container ships, which need deep water, it must be dredged regularly, Jones explained. But because the dredged material is contaminated, there are very strict restrictions on where and how it can be disposed of.

"This is one of several promising technologies that have the power to solve the problem of

In front of the kiln of the demonstration Cement-Lock process plant in Bayonne, New Jersey, are: (from left) Eric Stern, U.S. Environmental Protection Agency Regional Contaminated-Sediment Program Manager: Michael Mensinger, Gas Technology Institute Senior Chemical Engineer, and BNL's Keith Jones, Project Technical Manager.

dredged material," said EPA Regional Administrator Jane Kenny at an event in Bayonne, New Jersey, on November 24, 2003. "It enables us to treat contaminated material and use it beneficially, instead of adding tons of material to landfills that are already short on space."

According to Eric Stern, the EPA Regional Contaminated Sediment Program Manager, "Sediment decontamination is a component of an overall dredged material/contaminated sediment management strategy.

What sets this program apart from typical remediation is that beneficial use products - cement, lightweight aggregates, bricks, and soils — are the end result. These products then serve as economic drivers for the restoration and revitalization of impacted waterways, ports, and harbors around the entire world."

BNL has been involved in this type of work since 1994, when Jones headed the Lab's effort in a collaborative decon-(continued on page 2)



Michael Mensinger (second from right) of the Gas Technology Institute (GTI) holds a sample of the product made using the Cement-Lock technology developed by GTI. The sample is seen as it would look when the product is taken out of the kiln, before it is converted into cement. At right is Robert **Endicott, President of Volcano** Partners, a Florida firm that is looking at possible commercialization of the new process, with (from left) Barry Zamelsky and Randolph Wright of Volcano Partners, and Keith Jones, BNL.

## **Ionic Liquids**

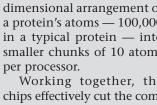
# **New Solvents That Do Not Evaporate or Burn**

A Chemistry and Applications of Ionic Liquids" was held on Wednesday, April 7, at the BNL Chemistry Department. About 50 people attended, Participation and the BNL Chemistry and Environrepresenting BNL, three City University of New York mental Science (ES) Departments sponsored the (CUNY) campuses, New Jersey Institute of Technology, and Rutgers University.

The workshop was held to facilitate collaborations between BNL and local universities in the development and study of ionic liquids, a remarkable new class of materials. Like table salt, ionic liquids are made entirely of positive and negative ions, but instead of being a crystalline solid at room temperature, they are liquid. Unlike ordinary solvents, they do not evaporate and cannot burn. Ionic liquids have a broad range of applications, from replacing hazardous and polluting organic solvents

n all-day "Informational Workshop on to making nuclear fuel and waste processing inherently much safer.

The CUNY Louis Stokes Alliance for Minority meeting. It was organized by BNL's James Wishart of Chemistry and A.J. Francis of ES; Sharon Lall-Ramnarine of Queensborough Community, CUNY; and Sanjay Malhotra of New Jersey Institute of Technology — all members of the New York Regional Alliance for Ionic Liquids Studies (NYRAILS), a new, informal organization of BNL researchers and university faculty dedicated to exploring environmental and other applications of ionic liquids and to providing undergraduates with research opportunities in these areas. For more information, contact Wishart at wishart@bnl.gov, or Ext. 4327.





The Bulletin April 23, 2004

# **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 for schedule. Jen Lynch, Ext. 4894.

#### Mondays: BNL Gospel Choir 5:15-7 n m. Berkner Hall. All faiths

5:15-7 p.m. Berkner Hall. All faiths are welcome. 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. Christine Carter, Ext. 2873.

**Monday & Friday: Jazzercise** Noon-1 p.m., Rec. Hall. Preregistrations is required. Christine Carter. Ext. 5090.

Mon., Thurs., & Fri.: Tai Chi Noon- 12:45 p.m., Brookhaven Center North Room. AdamRusek, Ext. 5830 or rusek@bnl.gov. Tuesdays: Welcome Coffee

10-11:30 a.m. Rec. Hall. 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: 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/toastmstrs/default.htm.

Tuesdays & Thursdays: Aerobics 5:15-6:30 p.m., \$4 per class. Rec. Hall. Pat Flood, Ext 7886.

**Tuesdays & Thursdays: Aqua Aerobics** 5:15-6:15 p.m. Eight-week session. \$20 to attend once a week; \$40 to attend twice a week.

Ext 2873 for more information. **Tues. & Thurs: Upton Nursery School**9-11:30 a.m. in the Rec. Hall. For 3 & 4 year olds. Alison Tilp, Ext. 4465, or tilp@bnl.gov.

Wednesdays: On-Site Play Group
10 a.m.-noon. Rec. Hall. An infant/toddler
dron-in event. Parents meet while children

drop-in event. Parents meet while children play. Cindy Otteman, 821-4482. **Wednesdays: Weight Watchers** Noon-I p.m. Michael Thorn, Ext. 8612.

Wednesdays: Yoga Practice
Noon-1 p.m., Brookhaven Center. Free. Ila
Campbell, Ext. 2206.
Wednesdays: Open Chess Night

Wednesdays: Dance Lessons 6-8 p.m., North Ballroom, Brookhaven Ctr. John Millener, Ext. 3853.

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

Thursdays: FreshDirect Delivery
3:30-5:30 p.m., Berkner Hall parking lot.
Fridays: Pilates Class

7-8 a.m. in the gym. Christine Carter, Ext. 5090. **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.

# BNL Celebrates Asian Pacific American Heritage Month This April

Visit the poster display with the "Photographic Meditations on the NY Chinese Scholar's Garden," exhibit in Berkner Hall lobby.

#### —THIS WEEKEND—

#### Saturday, 4/24

\*'Islands of the Pacific' Show

7 p.m., Berkner Hall, to celebrate National Asian Pacific American Heritage Month, drums and dancing. All are welcome. Tickets, \$10 adults, \$5 children. See notice, page 2.

#### **Sunday, 4/25**

#### \*Hospitality Committee NYC Bus Trip

9 a.m. Bus departs from Recreation Hall, returns 6 p.m. \$10/adults, \$5/children. See notice on page 3.

## In BNL's Science & Society Essay Contest 177 Students Write on Nanotechnology



One hundred seventy-seven high school students from throughout Long Island entered BNL's annual Science and Society Essay Contest this year — the most entries ever since the contest began in 1999. The essay topic was on how breakthroughs in nanotechnology will impact society in the future.

Mitchell Fourman (second from right), a Ward Melville High School student, won the grand prize of \$1,000; Lauren Thompson, Garden City High School, won third prize, and received \$200. Margaret Brown, Longwood High School (not present for the photo), won \$300 as second-place winner. Laura Lewis (left), a nanoscience researcher in the Materials Science Department, gave a talk on "Nanoscience at Brookhaven," to students, parents, and teachers at the awards ceremony. Kenneth White (center), Manager of BNL's Office of Educational Programs, ran the essay contest, and Michael Holland, DOE Brookhaven Site Office Manager, congratulated the students along with White.

The essay contest, started five years ago by a BNL employee organization called Friends of Brookhaven, is now sponsored by BSA, and prizes for the contest are BSA-funded. A panel of four independent judges — Diane Greenberg, Media & Communications Office; Sean McCorkle, Biology Department; and Len Schutzman and Mike Stegman, both former Shoreham Wading River High School teachers, chose the winning essays based on critical thinking, scientific accuracy, creativity, and organization.

The honorable-mention winners were: Rachel Cluett, Earl L. Vandermeulen High School; Deirdre Collaso, Plainedge High School; Paul Enzinger, Saint Anthony's High School; Tina Ho, Smithtown High School; Benedict Huang, Longwood High School; Jacob Kraus, Miller Place High School; Jennifer Lee and Steven Locurto, both from Hicksville High School; and Kevin Wang, Ward Melville High School.

— Diane Greenberg

# Attention; Dual Coverage Participants With CIGNA Medical Coverage

As a result of system changes at CIGNA Healthcare, there is a new process for submitting medical bills for payment. Effective immediately, you will be required to submit bills under your policy and your spouse's policy separately. Bills will no longer automatically be processed under the second participant's policy. Bills must first be submitted to CIGNA under the primary policy. Upon receipt of the Explanation of Benefits (EOB) from CIGNA, submit the claim and a copy of the EOB under the secondary policy. Claims for participants with Medicare coverage may require additional filings.

Detailed information regarding the submission of bills will be mailed to you in the near future. For more information please contact the Benefits Office, Ext. 2877 or 5126, or 1-800-353-5321.

#### BNL Career Network Group Meets, 5/7

To provide education and support to BNLers in career management, a group has been formed called the "BNL Career Network." Together, group members learn about career management and support each other as they work to create careers that are consistent with their goals in life.

All are invited to attend the next meeting, which will be held on Friday, May 7, from noon to 1 p.m. in Berkner Hall, Room A. Meetings are generally held monthly, after an e-mail announcement to members sent about two weeks in advance. The sessions begin with informal networking over lunch, followed by a brief presentation and/or discussion on a career management topic. Past topics include "Can Performance Appraisals Help You Grow Your Career?" and "When Your Plans Become Derailed: Getting Back on Track." Members are encouraged to share tips, bring questions, and suggest future topics.

Says Cathy Wehrmann, the Human Resources & Occupational Medicine Division's Career Development Manager, "Career management is a process of setting career goals and developing actions to achieve those goals whether it means changing jobs, changing careers, keeping your current job or anything in between. Our networking members have found that the discussions and topics raised in our meetings help give people ideas and direction."

For more information, or to be added to the mailing list, contact Wehrmann at wehrmann@bnl.gov or Ext. 7823. Also, visit the career development website at http://www.bnl.gov/HR/staffdev/career\_dev.htm to see handouts and presentations from past meetings.

#### **Protein Folding on a Chip**

Computing. This would reduce the time for a simulation from about 20 years to 1 week.

"The computer analyzes the forces of attraction and repulsion between atoms, depending on their positions, distances, and angles. It shuffles through all the possible arrangements to arrive at the most stable three-dimensional configuration," Davenport says.

The technique is complementary to other methods of protein-structure determination, such as x-ray crystallography — where the pattern of x-rays scattering off atoms in crystallized proteins is used to determine structure. It will be par-

ticularly useful for proteins that are impossible or difficult to crystallize, such as those that control the movement of molecules across the cellular membrane. The high-speed analysis will also allow scientists to study how proteins change as they interact or undergo other biochemical processes, which will reveal more about the proteins' functions than is available from structural studies alone.

(cont'd.)

This research was the subject of a talk given by Davenport at the March 2004 meeting of the American Physical Society, at the *Palais de Congres*, Montreal, Canada.

- Karen McNulty Walsh

#### In Memoriam

Michal Kolpak, who had become a cabinet maker A in the Plant Engineering Division on March 8, 1976, and had retired from that division on October 22, 1988, died at age 78 on January 3, 2004.

Edgar Cote, who, on March 30, 1964, had joined BNL's Department of Nuclear Energy as a technical specialist III, and had retired from the Department of Applied Science as a technical associate I on September 30, 1990, died on February 5, 2004. He was 69.

Tony Scheschowitz, who had taken a cabinet maker A position in the Plant Engineering Division on February 14, 1977, and had retired as a construction inspector on August 31, 1993, died on March 24, 2004. He was 68.

Murray Klein, who had come to join the Brookhaven Graphite Research Reactor Division as a technician C on August 30, 1948, and, after 34 years, had retired as reactor maintenance supervisor in the Reactor Division, on February 29, 1992, died on April 5, 2004. He was 77.

#### Turning Dredged Material Into Cement (cont'd.)



tamination program for the Port of New York and New Jersey, called the New York/New Jersey Harbor Sediment Decontamination Project, with the EPA, the U.S. Army Corps of Engineers, and the New Jersey Department of Transportation (NJDOT) Office of Maritime Resources.

BNL's participation in many phases of the project included researchers from the Biology, Environmental Sciences, Energy Sciences & Technology, and National Synchrotron Light Source (NSLS) Departments, as well as the Information Technology Division and the then Environmental Safety & Health Division.

As part of the project, BNL scientists performed basic research on contamination chemistry. For example, NSLS x-rays were used for close study of how contaminants are bound to sediment grains. The BNL group also helped to determine which experimental treatment methods would be tested and participated in the selection of companies to perform bench-, pilot-, and large-scale tests of the technologies.

As a result, BNL and the EPA awarded contracts for the mobilization and operation of two large-scale sediment treatment facilities that can treat thousands

of cubic yards of material. The Gas Technology Institute (GTI) in Des Plaines, Illinois, which developed Cement-Lock during the initial testing phases, is one of the two winning companies. GTI is an independent company that deals with energy and environmental technologies.

"The GTI group developed a process that can treat all types of sediment, and highly contaminated ones, in particular," said Jones, who is also the project's technical manager. "The facility has potential for use on major problem spots in the region."

GTI is now carrying out a large-scale demonstration of the Cement-Lock process with a specially constructed rotary kiln melter that is 10 feet in diameter by 30 feet in length. After this testing phase, EPA and NJDOT will work with GTI to construct a commercial-scale kiln that can treat up to 500,000 cubic yards of sediment per year.

Work on the project is funded by the U.S. Environmental Protection Agency, the New Jersey Department of Transportation Office of Maritime Resources, GTI, and Unitel Technologies.

— Laura Mgrdichian For more information on this topic, go to www.bnl.gov/wrdadcon.

**The Bulletin** April 23, 2004

#### **300+ Students Enter Lab's Model Bridge Contest** Won by Commack High School's Aaron Damato



Commack High School student Aaron Damato (third from left) won first place in BNL's 2004 Model Bridge Contest. More than 300 students from 18 high schools throughout Suffolk County entered their model basswood bridges in the contest with the goal of making the lightest bridge that held the most weight. Damato's bridge weighed 14 grams and held 61.3 pounds, or 1,986.7 times its own weight. Anthony Olivo, Westhampton Beach High School (fifth from left), won second place with a bridge that weighed 14.9 grams and held 60.7 pounds, or 1,848.5 times its own weight. Zach Taber, Patchogue Medford High School (sixth from left), made a 17.7-gram bridge that held 69.3 pounds and held 1,777.7 times its weight, winning him third place. Daryl Gleiche, Patchogue Medford High School (fourth from left), won the aesthetic prize for creating the most attractive bridge. Joining the winners are: Martin Woodle, a retired Lab engineer who was a volunteer judge in the contest (far left); contest organizer Mel Morris, Office of Educational Programs (second from left); Andrew McNerney, Assistant Laboratory Director for Facilities & Operations (second from right), and Ed Murphy, Plant Engineering Division Manager. All four winning students received a trophy and a gift certificate to Borders. The two top winners are eligible to enter the 2004 International Bridge Building Contest, which will be held in Baltimore, Maryland, on April 24.

### Arrivals & Departures

#### Arrivals

Alexei Blednykh ..... NSLS

Departures

Terri La Grega ..... Fiscal Nigel George.. .....Chemistry



#### **BSA Noon Recital Central Park Trio** To Play, 4/28

At noon on Wednesday, April 28, in Berkner Hall, the Central Park Trio, a combination of violin, bassoon, and piano, will present music by Braun, Schumann, Piazzolla, and Silver. A highlight of the recital will be the performance premier of a new composition for the Trio by pianist Noam Sivan.

All are welcome to BSA Noon Recitals, which are free and open to the public. Visitors of age 16 and over must carry photo ID.

### Service Anniversaries

The following employees celebrated BNL service anniversaries during March 2004.

# Nicholas Samios ... Director's Office

45 Years

#### 30 Years

Laurence Littenberg Phys	sics	
25 Years		
Ralph Wilson S8	HS	
Peter Popken	C-A	

i eter i opkeri	0-7	
Charles Bloxon	C-A	
Robert Scheuerer	NSLS	
Kathleen Hauser	ITD	
Jose Mendez	. Plant Eng.	
Anne Corr	Fiscal	
Sebastian Dimaiuta	Magnet	
Philippe Ouvrard	. Plant Eng.	
Edward Weigand	Magnet	
Lawrence Welcome	Magnet	
Kathleen Brown	C-A	
20 Years		
Linda Greves	S&HS	
Harold Heffert	. Plant Eng.	
Stephen Perlstein	C-A	

ephen Perlstein	C-A		
omas Russo	C-A		
rristopher Watts	C-A		
chard Lagattolla	Env. Svcs.		
10 Years			
nathan Kotcher	Physics		
	nomas Russo nristopher Watts chard Lagattolla 10 Y		

Jonathan Kotcher	Physics
Cornelius Donahue, Jr	Physics
Jorg Kewisch	C-A
William Smith	Physics

# **Indian Cooking Demo, 4/26**

The Hospitality Committee's Cooking and Craft Club will sponsor an Indian cooking demonstration by Rooshi on Monday, April 26, at 11 a.m. in the Recreation Hall, Bldg. 317, at a cost of \$2 per person. All BNLers are welcome. For more information, contact Lisa at lisayang@optonline.net or Kazuko at nabekazu@mac.com.

#### New BNL Film Series Kicks Off 5/6

The BNL Music Club announces the "BNL Film Series," showing classic and avant-garde films monthly at 7:30 p.m. in Berkner Hall. The shows will be open to the public.

The first film, on May 6, will be The Howlin' Wolf Story — The Secret History of Rock & Roll, a critically acclaimed documentary on the life of blues innovator, Howlin' Wolf (Chester Arthur Burnett), Also featured will be live interviews with Hubert Sumlin, Howlin' Wolf's 20year collaborator; and Joe Lauro, film producer and archivist, and a musician in his own right, who will provide the film. Tickets will be \$5 and available at the door. For more information, call Ext. 3846.

#### **Get to Know Your Lab** Birding Walk, Noon Today, 4/23



Celebrate Earth Week and Spring with a lunchtime bird-watching tour today, Friday, April 23, in BNL's "outback," guided by Tim Green, Environmental Services Division, and Ernie Lewis, Department of Environmental Sciences. Bring binoculars if you have them. This is the beginning of tick season, so take necessary precautions: wear heavy socks and trousers: rubber bands will be provided. The group will meet in the upper lobby of Berkner Hall near the couches at noon and return by 1 p.m. All are welcome. For more information, call Elaine Lowenstein, Ext. 2400. No rain date is planned.

### Pick a High School Student

BNL scientists are asked to sponsor Community Summer Science Program students. This program runs for six weeks, from June 28 through August 6, to offer talented local high school juniors and seniors lectures on BNL research in the mornings and internships in the afternoons. Student interns participate in research under the direction of BNL staff at no cost to the sponsoring department. Student applications are now available for review at the Science Education Center, Bldg. 438. If you have questions, contact Mel Morris, mmorris@bnl.gov or Ext. 5963.

#### Buy Candles at BERA, Diabetes Fund-Raiser

"Candles for a Cure" is an American Diabetes Association (ADA) fund-raiser that increases awareness about diabetes and raises money for the research, information and advocacy efforts of the ADA. For Mother's Day on May 9, Yankee candles and specially designed, limited edition Plushland Mother's Day bears will be sold to benefit ADA. The candle and bear may be bought together for \$20, or separately for \$15/candle or \$10/bear. Buy candles and bears for delivery during the week of May 3. Prepaid orders may be made at the BERA Sales Office, weekdays, 9 a.m.-3 p.m.

#### What's in BERA Store?

- Great Adventure Tickets: Early Bird tickets at \$30 (\$48 at the park) that are good through June. Regular discount tickets for use after June are \$35- \$48 at the Park.
- Splish Splash: the Long Island water park opens in May. BERA offers discounted tickets at \$22.99/adult (\$5 off park price), and \$17.99/child under 48 inches (\$3 off park price).

Tickets are available for the following events, all including a free luxury coach bus ride:

- Pocono 500 NASCAR Race, Sunday, 6/13, \$110
- The Producers, Broadway show, Saturday, 7/10, 2 p.m., \$110
- Lion King, Broadway show, Sunday, 7/11, 3 p.m., \$85
- Mets vs. Philadelphia, with fireworks show; mezzanine reserved, \$30, Friday, 7/16, 7 p.m.
- Yankees vs. Baltimore, Friday, 7/30, \$40, with "Cap Give Away"
- Yankees vs. Toronto, Friday, 8/6, \$40
- Yankees vs. Anaheim, Friday, 8/20, \$35, with "Cap Give Away" Tickets (no bus service) are available for:
- LI Lizards Lacrosse at Mitchell Field, 4 tickets for each of the five home games will be available at \$15 per ticket.
- Ducks tickets have been purchased for each of the Ducks home games. \$10 per ticket, eight tickets per game are available. For seating and more information, go to the BERA Store, or call Ext. 3347.

### **Gym and Pool News**

As usual, the gym and swimming pool will be closed on the holiday weekends: May 29-31; July 3-6, and September 4-6.

The gym will be closed on Saturdays from the Memorial Day weekend, May 29, through the Labor Day weekend, and it will reopen on weekends on September 11.

Apart from the holiday weekends above, the swimming pool will be open on Saturdays throughout the summer, from noon until 4 p.m.

### **Registration for BERA Spring Classes**

Aqua Aerobics ........ Tues.& Thurs., BNL Pool, 5:15-6:15 p.m. 8 weeks, May 4-June 11, \$20 once a week, \$40 twice a week

Jazzercise ...... Mondays & Fridays, Rec. Hall, noon-1 p.m. 6 weeks, May 14-June 25, \$60

Pilates ...... Friday mornings, BNL Gym, 7-8 a.m. 8 weeks, April 23-June 11, \$60.

Make all checks payable to BERA and mail to Christine Carter, Bldg. 179B.

#### **Coming Soon!**



# Calendar

(continued)

#### — WEEK OF 4/26 —

#### Monday, 4/26

#### \*Hospitality Indian Cooking Demo

11 a.m. Recreation Hall. Indian cooking demonstration by Roosh, sponsored by the Hospitality Committee. Cost: \$2/person. All are welcome. Contact Lisa, lisayang@optonline.net or Kazuko, nabekazu@mac.com.

#### **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.

#### **BERA Bridge Club**

7 p.m., Brookhaven Center. Morris Strongson, Ext. 4192, mms@bnl.gov.

#### Wednesday, 4/28

#### **BSA Noon Recital**

Noon, Berkner Hall. The Central Park Trio, a combination of violin, bassoon, and piano, will present music by Braun, Schumann, Piazzolla, and Silver. A highlight of the recital will be the performance premier of a new composi-tion for the Trio by pianist Noam Sivan. All are welcome to this free recital.

#### Thursday, 4/29

#### **BWEN Brown Bag Lunch**

Noon-1 p.m., Berkner Hall, Room C. Brookhaven Women Engineers Network sponsors a brown bag lunch meeting and a presentation entitled "A Career in Engineering: One Woman's Story." All are welcome. Loralie Smart, Ext. 2425.

#### - WEEK OF 5/3 –

#### Tuesday, 5/4

#### **Caring Friends Meet**

Noon, Berkner Hall, Room D. All are welcome tojoin an informal support group serving as a resource for individuals experiencing grief following the loss of a loved one. Call Pat Hein, Ext. 3962, or Gerry Van DerLaske, Ext. 3476.

#### Keyspan Energy Demo

Noon-1:30 p.m., Berkner Hall. Representatives from Keyspan Energy will present BNLers with special offers and incentives on a wide variety of consumer products, appliances, electronics, heating and cooling equipment, and service plans. For more information, contact Christine

#### Thursday, 5/6

#### \*Classic Film Series

7:30 p.m. Berkner Hall. BNL Music Club sponsores the Howlin' Wolf Story – The Secret AHistory of Rock & Rolĺ. \$5. All are welcome. See notice at left. **BERA Bridge Club** 

7 p.m., Brookhaven Center. Morris Strongson, Ext. 4192, mms@bnl.gov.

#### — WEEK OF 5/17 —

#### Thursday, 5/20

#### **BERA Bridge Club**

7 p.m., Brookhaven Center. Morris Strongson, Ext. 4192, mms@bnl.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  $information for each {\it event} {\it in the order listed}$ above (date, event name, description, and cost) and send it to bulletin@bnl.gov. Write "Bulletin Calendar" in the subject line.

#### **NYC Bus Trip**

The Hospitality Committee invites visitors, guests, and their families, as well as employees to join a bus trip to New York City on Sunday, April 25. The bus will depart at 9 a.m. from the Recreation Hall in the apartment area and return from the city at 6 p.m. E-mail lisayang@ optonline.net or call 878-3937 for reservations. Tickets are: adults \$10, children 2-12, \$5.

#### 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/

Laboratory employees and outside candidates. MK4140. ASSISTANT PHYSICIST (S-1) — Requires a Ph.D. in condensed matter physics, an ability to communicate with experimentalists and other members of the theory group, excellent analytical skills, and knowledge of the physics of strongly correlated systems. The research program, in the Condensed Matter Theory Group is

**OPEN RECRUITMENT** – Opportunities for

the Condensed Matter Theory Group, is concentrated on nanoscale physics and the physics of strongly correlated systems. Under the direction of A. Tsvelik, Physics Department.

NS8528. PROJECT ENGINEER I (P-9)/ CRYOGENIC SYSTEMS GROUP LEADER/ CRYOGENIC ENGINEER - Requires an advanced degree in engineering, physics or related technical field and at least 10 years' experience leading multi-personnel efforts in a laboratory environment or equivalent setting. Knowledge of cryogenic systems for superconducting magnets and related hardware is necessary, as is knowledge of cryogenic safety standards, pressure vessel design, vacuum systems, instrumentation, and control systems. The knowledge to help define and guide technical and safety training for the facilities is also required. Experience with the preparation of cost estimates and management of budgets and schedules is required, as are excellent written and verbal communications skills and office computer skills. The Group Leader reports directly to the Accelerator Division Head and is responsible for all administrative, engineering, operations, and personnel decisions for the Collider-Accelerator Department Cryogenics Group. The group is responsible for operation and upgrade of the 15 kW Relativistic Heavy Ion Collider (RHIC) superconducting magnet refrigeration system, the 0.8 kW g-2 system, and other existing and planned cryogenic systems in the de partment. For new systems and system upgrades, the Cryogenic Group Leader directs the efforts of the engineers and technicians in the group during all phases of construction including proposal, budgeting and scheduling, design, procurement, assembly, testing, installation, and commissioning. Collider-Accelerator

#### Motor Vehicle & Supplies

03 NISSAN 350Z - perform. pkg. a/c, p/s, p/b, p/w, 6spd, short shift, 18" rims, warr./serv. pkg., 16K mi., \$26,500. Mike, 301-351-2277. 02 FORD F-150 LARIAT - a/t, a/c, p/s, p/b, p/w, 4x4 super crew, loaded, great cond., 13K mi., \$28,000. Diana, Ext. 7837; 929-1693.

01 VW JETTA GLS - turbo, 1.8L, 5 spd, a/c, p/s, p/b, p/w, Wolfsburg Ed., m/roof, 6-cd ch, 33K mi., \$12,900. Suresh, Ext. 4459; 751-2095.

99 CHEVY LUMINA - a/t, a/c, p/s, p/b, p/w, c/c, 4dr., 3.1L, V6, am/fm/cd, rem. strt., gd. fam. car. 54K mj., \$5.500, John, 732-7568.

99 CHRYSLER CONCORDE - V6, 2.7L, Lo-Jack sec., many extras, gar., new tires, low mi., excel. cond., \$8,500. JoAnn, 924-4147. 99 SATURN SL2 - a/t, a/c, p/s, p/b, p/w, sunroof, new brakes, alarm, great cond., 102K hwy. mi., \$5,100/neg. Lisa, Ext. 7524.

98 CHEVROLET CORVETTE - a/t, coupe, Targa, blue w/blk. leather, new brakes & batt., 37K mi., \$21,500. Tim, 369-5597.
98 CHEVROLET LUMINA - sedan, 4WD,

a/t, a/c, p/s, p/w, V6, 4dr, abs, trailer hitch, gd. cond., 108K mi., \$3,000. Charlie, 754-2471. 97 SUZUKI SPORT - 4WD, 5spd, a/c, p/s, p/b, p/w, 5dr, new tires, 78K mi., \$4,900. Edouard, Ext. 7502 or 284-3026.

95 MERCURY GRAND MARQUIS - a/t, a/c, p/s, p/b, p/w, loaded, wh./blue, leather, 84K mi., \$7,500. Steve, Ext. 3271 or 395-3168. 95 OLDSMOBILE 98 - a/t, a/c, all pwr., incl. pass. seats & sunroof, leather, 90K mi.,

95 PLYMOUTH VOYAGER- a/t, a/c, p/s, p/b, p/w, green, tinted windows, new brakes & struts, am/fm/cass., 95K mi., \$3,699. Angela, 758-8725.

\$2,000. Rodney, 751-7023.

94 FORD E150 CONVERSION VAN - p/w, p/l, new tranny, TV/VCR, Nintendo, vgd. cond., 111K mi., \$6,500. Richard, 471-8765. 94 JEEP GRAND CHEROKEE LAREDO - 6cyl., 4L, alarm, extras, gar., orig. owner, vgd. cond., \$4,200. JoAnn, 924-4147.

94 MAZDA 626 - a/t, a/c, p/s, p/b, p/w, 1 yr. on tmg. blt., new tires, v. clean, excel. gas mi., 110K mi., \$3,150. Jim, Ext. 5018; 355-9007. 92 INFINITI M30 - a/t, a/c, p/s, p/b, p/w, c/

c, leather, moonroof, orig. owner, 110K mi., \$3,500. Herb, 928-0297.

91 FORD E-250 VAN - new batt., starter, & rebuilt tranny, ladder racks, shelves, runs

well, \$1,500. Rich, Ext. 5319.

90 LINCOLN TOWNCAR - Cartier series, a/t, a/c, p/s, p/b, p/w,, grey, gd. cond., new tires, 120K mi., \$1,500/obo. Lou, 495-7853. 88 CHEVROLET CELEBRITY - a/t, p/s, p/b, am/fm, new batt., 41K mi., \$550. Tirre, Ext. 3288; 344-1018.

88 NISSAN 300ZX - 5spd., a/c, p/s, p/b, p/w, leather, cd player, T-tops, gd. shape, 124K mi., \$1,800. Charlie, 875-9426.

FIBERGLASS LID - for Dakota quad cab slate, gray, like new, orig., \$850, ask \$450. Dennis, 399-1605.

TOOL BOX - steel, cross-bed style for stepside & mini pickups, sliding tray w/2 wingtype lcking. drs., ask \$100. Arlene, 878-8302. UTILITY TRAILER - 5.5' x 10', ramp dr., 4'h plywood walls, new tires, light-duty, \$450. John, 732-7568.

#### **Boats & Marine Supplies**

23' LARSON HAMPTON 235 - '97, 5.7 Volvo Penta, 240 hrs, Cobra SX outdr., swim plat., encl. head, \$17,500. Kev, Ext. 4639; 878-4285. 22' CRUISER, INC. BARNEGIT - '93 w/ trailer, reblt Chevy 350 & outdr., new parts, \$7,000/neg. 516-798-2599; 516-860-9339.

21' STEIGER MERC. - '00 w/trailer, stainless prop, low hrs., \$7,250. Zeb, 516-807-6896

18' ANGLER CENTER CONSOLE - '87 Mercury w/trailer 155hp, gd. shape, must sell. Charlie, 875-9426.

18' BAJA ISLANDER - '86 w/trailer, I/O 3.7 Merc., \$2,000. Gary, Ext. 8580 or 821-7952.

16' WELLCRAFT C/C - '96, 50hp, Johnson '02 radio, D.F. cover trailer, \$7,500. Alanson, 929-5911.

OUTBOARD BRACKET - alum., 23" setback, ask \$100; HydraulicSteering Cyl., side mount, w/instruct.; ask \$50. Arlene, 878-8302.

OUTBOARD MOTOR - Brit. Seagull Osprey, long shaft aux. for sailboat, new, gar., orig. \$1,500, best offer. Alfredo, Ext. 7699; 821-1435.

SUNFISH - '60, unused for last 20 yrs., trailer, never used, \$500. William, Ext. 3996; 286-1136.

#### Furnishings & Appliances

AIR CONDITIONER - window, 5,000 Btu, old but in gd. working cond., \$50. Michael, 473-3604.

BEDROOM - Furn-a-Kit assembled, armoire, qu. hdbd., cedar chest, dresser, more, \$225; qu. sleeper/sofa, loveseat, \$375. 751-7023. CABINET - medicine, 29hx30w, oak laminated, w/3 mirrored drs., like new, in box, \$36. Eva. Ext. 2295.

CABINET - golden oak china, 2 glass shelves w/drs & open buffet top, perfect cond., e-mail picture avail., \$900. Donna, Ext. 2826.

DEHUMIDIFIER - gd. cond., \$75. Joe, Ext. 3787 or 929-8321.

MATTRESS - Evenflo, Infinite Innerspring for crib, ask \$30; Graco stroller, \$79; girl's skating boots, wh., 13½, \$25. Eugene, Ext. 7113. MICROWAVE OVEN - 850W, Magic Chef, 1.0 cu.ft., like new, \$80. Sue, Ext. 3492 or 734-2593.

WALL OVEN - GE True Temp digital, white, \$100/obo. Barbara, Ext. 2585.

WINDOW - white replacement, 32"x38", dbl. hung, clear Thermopane glass, full scrn., new, \$100. Richard, Ext. 3239; 472-9034. WOOD BURNING STOVE - Atlantic freestanding, airtight, \$450/obo. Joann, Ext. 7459: 929-1981.

#### Tools, House & Garden

FAUCETS - (3) Moen, \$25/ea.; door knobs (9) polished brass, 3-bath, 3-bdrm., 3-hall, int. \$45/all. Bill, 395-9610.

FLOOR TILES - vinyl, (18) 12"x12", self-adhesive, marble pattern. Carl, Ext. 3213. FLOORING - pre-finished, 2"4" oak flooring, #1 med. color, 100 sq. ft., \$100. Tony, 289-1932.

HOT WATER HEATER - instant, mounts easily in any kit. sink, gives hot water on demand, new unit, ask \$60. Joseph, Ext. 2795. LAWN MOWER - Murray, 5.5hp, 20", gas can, collects clippings, works excel., must sell, \$50. Kimberly, Ext. 6437; 286-7343. LAWN TRACTOR - '68 IHC Cub Cadet, model 105, new AG tires, 10hp eng., excel. ask \$725. Dan, 563-6236.

LEAF BLOWER - Toro elec., \$10; Murray lawn mower, 22", self prop. mulching w/bag, \$80; Sears 20" rear bagger, \$50. 567-9025. MOWER - riding, John Deere, model RX75,

new belts, grass bagger, needs work, u-pickup, \$200. Sue, Ext. 3492 or 734-2593, eves. OIL-BURNER VACUUM - soot, commercial Mastercraft, dolly, hoses, extra new wire brushes & bags, mint, \$125. 878-8967.

#### Sports, Hobbies & Pets

26' CAMPER - '99 Sunline, queen bed, bunks, a/c, like new, ask \$10,900. Beth, 447-6517.

BICYCLE - 26" Murray woman's mountain bike, 18sp, gd. cond., \$40. Walter, 567-9025. DOLL SALE - Medford, 4/24, 10 a.m.-5 p.m., S.Temples, G.Vanderbilt, Tiny Tears, Pr. Diana, Barbies, etc. Linda. Ext. 2733; 395-6784.

EXERCISE MACHINE - Guthy Renker Eliptical Cardio, upper & lower body, incl. LCD readout, ask \$75. Joseph, Ext. 2795.

HAMSTER CAGE - complete Habitrail safari cage w/many extras, \$45. Nick, Ext. 3205. TICKETS - Opera, *Tosca* at City Opera, 2nd ring, 4/25, 1:30 p.m., pd. \$70.40/ea., 2 for \$125. Alfredo, 821-1435.

TICKETS - Mets, Friday & Tuesday games, 2 seats per game, Loge 5, Row G, face value, call for avail. dates. Rodney, 751-7023.

#### Audio, Video & Computers

COMPUTER - Win 98, HP amd-k6-2/300 mhz, 48mb/4-GB reformatted hd., 15" mon. acces., HP color DeskJet ptr., \$75. Bill, 395-9610.

CB RADIO- 23-chan. Home Royce base stn., Citizenband transcvr., Realistic microph., 50x more output level, \$50/obo. Steve, Ext. 2964.

# 'Islands of the Pacific' Show, 4/24 Polynesian Dancing, Japanese Drumming

"Islands of the Pacific," a special event to celebrate National Asian Pacific American Heritage Month, will be held on Saturday, April 24, at 7 p.m. in Berkner Hall. The public is invited to the event, which will feature the Aloha Iolani Hawaiian Dance Troupe and Japanese drumming group Ryu Shu Taiko. All visitors to the Lab age 16 and over must bring a photo ID.

Tickets cost \$10 each for adults, and \$5 each for children and students who present a student ID. Buy tickets at the door or in advance at the BERA Sales Office, 9 a.m.-3 p.m.



PIANO - elec., Korg SG-1, sampling grand, 73 weighted keys w/stand & hard shell case, \$200. Steve, Ext. 2897.

TV/VCR COMBO - 14", blk., remote control, excel. cond., paid \$135, ask \$50. Marco, Ext. 2110.

#### Free

BED - Trundle, w/mattresses, you pick up, Michael, 473-3604.

DOG - adopt a 4 yr. old Jack Russell Terrier, very cute, great w/kids, house broken, great pet, needs gd. home. Joe, 732-5380.

MULCH - blk., Ig amount to give away, upick-up. Maxim, Ext. 3621.

RED BRICKS - used, approx. 300, u-pick-up. Daniel, 874-2838.

#### Happenings

OUTDOOR ART SHOWSALE - Sunday, 5/23,10 a.m. - 4 p.m., 1720 William Miller House, N. Country Road, Miller Place. Hosted by North Shore Art Guild.

#### **Community Involvement**

BENEFIT - for Margaret Nugent, currently suffering from pancreatic cancer, to be held Sunday, April 25, 3-9 p.m., Pt. Jazz, 201 Main St., Pt. Jefferson, NY, (above Starbucks) 631-476-7600. \$20 admission, music, food & raffles.

DONATIONS NEEDED - new items & baskets, for fundraiser for 5-year-old Krystal Schmitt, who has rare cancer. 4/30, 7-10 p.m., Longwood Mid. Sch. \$10 admiss., 10 tkts. for auction incl. Donations, incl. checks to "Krystal Schmitt's Fund Raiser," are tax ddctbl. JoAnn Palumbo, 878-8263.

RAFFLE TICKETS in return for your donation to benefit the Leukemia & Lymphoma Society. Great prizes! \$10/ea. or 3/\$25. Just \$300 to my goal. Please help! Will come to you. Anna, Ext. 7132 or 793-4551.

#### Lost & Found

LOST - engagement ring, gold baguette, high stone diamond, Tiffany style. Carol, 284-3387.

#### Miscellaneous

BOILER - 103K Btu, oil fired, Honeywell controls, Taco circltr., 41-gal. stnls. stl. hot water stor. tank, \$850. Mike, Ext. 7788; 580-1194.

CHRISTMAS TREE- 7' artificial Balsam Fir, \$20; child's step-2 push buggy, \$10. Penny, Ext. 2625.

MODEL TRAINS - LGB, superset G scale, mint; white Pass locom. #2055 & blue/wh. caboose, eng., set, \$650. Stan, 878-4360. RED BRICKS - approx., 1,500, clean, not used. Mauro, 265-6542.

VIOLIN - Antonio Anatra, complete w/bow, rosin & black case, full size, like new, ask \$200/obo. Brandon, 399-3098.

#### Wanted

COFFEE CANS - empty, for Krystal Schmitt fundraiser, please drop off to Joann Giambalvo, Bldg. 179B. Ext. 7459.

GUITAR PLAYER - Acoustic, & like playing The Dead, Dylan, N. Young, The Blues, etc.,? Seeking partner for fun jamming, John, 878-3430.
RESEARCH VOLUNTEERS - men and women who smoke cigarettes, ages 18 and over. are needed for PET study. Strictly con-

SHOTGUN - model 870 in 410Ga,. Joe, Ext. 3783 or 929-8321.

fidential, fee provided. 344-5015.

#### For Rent

EAST MORICHES - 4 bdrm. 2 bath, huge Ir, study, 3 story, park-like property, wraparound porch, storage, parking. avail. immed., \$2,000 + sec. Nick, Ext. 4979 or Anna, 513-6688.

EAST SETAUKET - 5-bdrm., 3-bath, 3-level house, sliding dr. to wraparound deck, cul-de-sac, h/wd flrs., 2.5 car garage, 3VSD, \$2,400/mo. Mei Han, 689-6495.

MIDDLE ISLAND - 1-bdrm condo, patio, dining area, w/d, pool, rec. rm, 10 min. to Lab, furn./unfurn., non smkr, avail. 6/1, \$900 + util. & sec. Nick, Ext. 4979, or Anna, 513-6688.

YAPHANK - Middle Is. area, Ig., newly decorated & fully furn. Ig. studio apt., priv. home, separate ent., high spd. internet, \$750/all. Camelia, 924-3049.

#### For Sale

SHIRLEY - House, Fernando, 345-3754.

For several years, the Bulletin has printed ads for houses/apartments for sale or rent only on the third Friday of each month. For a trial period, these ads will be printed each week, just as cars, boats, etc. are printed.

# Elder Care Expo

Presented by the Human Resources & Occupational Medicine Division

Wednesday, June 16 •

11 a.m.-1:30 p.m.

Berkner Hall

#### **Topics Include:**

- Health resources: Alzheimer's, arthritis, diabetes, blood pressure, vision care, long-term care, medical supplies
- Resources for caregivers: home care, respite care, hospice care, nursing home care, visiting nurse, adult day care
- Activities: BERA, BREA, BOCES, parks commissions
  Safety: BNL Fire/Rescue and BNL Police Groups
- Fitness: Curves, Eastern Athletic Club, YMCA
- Volunteer opportunities: foster grandparents, LIBS
   Benefits and services: Social Security, veterans benefits, Suffolk County Office of the Aging, United Adult Ministries, federal talking books, Senior Net
- Nutrition: FLIK, Meals on Wheels

#### **Future Lectures:**

"Benefits for the Elderly & Support for Caregivers"

June 3 noon-1 p.m.

Elder Law & Estate Planning June 10 noon-1 p.m.

"Long-Term Care" June 17 noon-1 p.m.

Pre-registration is necessary.

To pre-register, or for more information, contact
Michael Thorn, Health Promotion Coordinator,

(631) 344-8612, mthorn@bnl.gov



