# Bulletin



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## A.J. Francis Scientist Emeritus

Microbiologist Arokiasamy J. (A.J.) Francis, who retired from the Environmental Sciences Department in 2011, has been named Scientist Emeritus. During his nearly 37 years at the Lab, he has concentrated on the realm of microbial interactions with organic and inorganic contaminants — and their remediation. Francis' investigations have ranged from nitrogen cycling and the control of nitrate pollution to the transformation of radioactive contaminants in the environment. The latter became his primary research focus, taking shape in many different projects, including his groundbreaking work with the use of citric acid to sequester uranium from contaminated soils, wastes, and materials.

Francis attributes the breadth of his work to Brookhaven's unique facilities and collaborative environment. As he explained, having the National Synchrotron Light Source nearby was key to his research, because the sensitive samples he was investigating would not survive long travels to distant facilities to be evaluated properly.

"I really thank Brookhaven for giving me the opportunity to grow professionally," said Francis. "I was pleasantly surprised to be awarded the emeritus distinction. It's a great honor."

Francis' expertise in his field has taken him around the world to conduct a variety of studies. In India, he investigated the He has been a frequent invited speaker at international conferences dealing with the biotrans formation of actinides and radioactive wastes in particular. He is a member of the Scientific Advisory Committee — International Conference on Uranium Mining and Hydrogeology, in Freiberg, Germany. His travels continue, as he now begins his four-month term as a World Class University visiting professor in the Division of Advanced Nuclear Engineering at Pohang University of Science and Technology in Pohang, South Korea. There, he will teach a graduate course and guide postdoctoral and graduate student research. He has also been invited to give a talk at the Biological, Environmental and Nuclear Speciation Seminar in Montpellier, France, in May.

## **Know Your Contaminant...**

Francis first came to Brookhaven in 1975 as a microbiologist on a... See A.J. Francis on p.2



## **BNL's Doon Gibbs Elected To NSBRI Board of Directors**

The Board of Directors of the National Space Biomedical Research Institute (NSBRI) has added Doon Gibbs, BNL's Deputy Director for Science and Technology, to the board.

"Dr. Gibbs is a leader at one of the world's premier research facilities," said Dr. Bobby R. Alford, NSBRI Board of Directors Chairman. "As a scientist, he has made significant contributions to the theoretical and experimental development of resonant magnetic X-ray scattering techniques. His presence on the NSBRI Board of Directors will be beneficial to NSBRI and the nation's human spaceflight program."

In 1983, Gibbs began his 29-year career at Brookhaven, a multi-disciplinary research institution overseen and funded by DOE. Starting as an assistant physicist, his scientific research efforts and strong leadership skills helped him advance in the organization. Gibbs served as a physicist, senior physicist, and group leader before being named in 1995 as Director of the Advanced Photon Source's Complex Materials Consortium, which included BNL and other leading national

research organizations. He also served as the Deputy Chair of Brookhaven's physics department and headed the Condensed Matter Physics Group. Prior to being named Deputy Director, Gibbs served as BNL's Associate Laboratory Director for Basic Energy Sciences.

Throughout his career, Gibbs has been recognized for his research efforts. In 2003, he received the Advanced Photon Source Arthur H. Compton Award "for pioneering theoretical and experimental work in resonant magnetic X-ray scattering, which has led to many important applications in condensed matter physics." Gibbs is a Fellow of the American Association for the Advancement of Science and the American Physical Society. He is a member of the Phi Beta Kappa honor society, the Sigma Xi research society, and the New York Academy of Sciences. He also served as Chair of a Gordon Research Conference on X-ray physics and was named an "Influential Person" by the Long Island Business News.

A Salt Lake City native, Gibbs graduated magna cum laude... See **Doon Gibbs** on p. 2



## Lab Director Aronson Hosts All-Employee Meeting, 4/2

Laboratory Director Sam Aronson led an All-Employee Meeting Monday, April 2, to discuss scientific accomplishments from the past few months, the budget outlook, his stepping down as Lab Director, the search for a new Associate Laboratory Director for Nuclear and Particle Physics, and sustained safety and operational excellence.

The meeting video and presentation slides are available from on site: <a href="https://www.bnl.gov/today/story.asp?ITEM\_NO=2977">www.bnl.gov/today/story.asp?ITEM\_NO=2977</a>.

## Hot Quark Soup, New Liquid Neutrino Detector, and Ultra-Bright Light Source

Some BNL highlights at the April 2012 meeting of the American Physical Society

What was the universe like microseconds after the Big Bang? Can you catch an elusive neutrino in a watery liquid? What features will the world's newest ultra-bright light source reveal?

Scientists from BNL and elsewhere closely following research there presented talks addressing these questions at the April 2012 meeting of the American Physical Society (APS), March 31 – April 3, in Atlanta, GA.

Several talks presented recent analyses of data and discussion of results from the Relativistic Heavy Ion Collider (RHIC), an "atom smasher" at BNL that recreates conditions of the very early universe to explore the fundamental properties and interactions of matter. These talks included new details about the nature of the "perfect" liquid quark-gluon plasma produced at RHIC.

In addition to the talks showcasing RHIC physics, presentations were made on neutrino physics, and the design and capabilities of National Synchrotron Light Source II (NSLS-II), a new light source with world-leading brightness, now under construction at BNL.

All of this research is supported in large part by the DOE Office of Science. See BNL's Highlights at APS Meeting on p. 2

## to conduct a variety of studies. In India, he investigated the biotransformation of thorium. Starving the Ocean: Why We Should Leave Small Fish in the Sea'

Ellen Pikitch, Executive Direc-Conservation Science and Stony Brook University School of Marine & Atmospheric Sciences professor, will deliver a BSA Distinguished Lecture titled "Starving the Ocean: Why We Should Leave Small Fish in the Sea," on Tuesday, April 17, at 4 p.m. in Berkner Hall. BSA Distinguished Lectures are sponsored by Brookhaven Science Associates, the company that manages BNL, to bring topics of general interest before the Laboratory community and the public. The lecture is free and open to the public. Visitors to the Lab age 16 and over must bring a photo ID.

Pikitch will discuss the plight of small schooling fish, such as anchovy, herring, sardine, and menhaden, which, in spite of their petite size, play a big role in the life of the ocean. Often referred to as "forage fish," these tiny species are a key food source



for marine mammals, seabirds, and other fish. Forage fish are also a vital food for non-marine life — namely, humans. As was reported this past Monday, April 2, in *The New York Times*, Pikitch and the Lenfest Forage Fish Task Force, which she chairs, recently released a report on the overfishing of forage fish and their value as a food source for other marine life.

Currently, more than one of every three fish caught globally is

a forage fish. And as demand and price grow, these fish populations shrink. By removing this key link in the food chain, marine life on the whole could be significantly disturbed. Pikitch will address the consequences that the massive removal of these small fish have on the survival and health of other ocean life, and the economic value of forage fish both in and out of the water.

An internationally known expert in ocean conservation science and management, Pikitch has focused her research on ecosystem-based fishery management, the assessment of fish stocks, and the management of bycatch. Her work has informed environmental policy decisions, such as the passage of the U.S. Shark Finning Prohibition Act of 2000, and, under the Convention on International Trade in Endangered Species, the regulation of the international great white shark trade.

From 2000 to 2003, Pikitch was the recipient of the Pew Fellowship in Marine Conservation. Today, she is on the fellowship's advisory board.

Pikitch co-founded and, from 2000 to 2007, was lead scientist of Caviar Emptor, a program that promotes the recovery of sturgeon and increased consumer awareness of the problems facing sturgeon and other fish. This program contributed to the beluga sturgeon's listing under the U.S. Endangered Species Act in 2004. The U.S. import of beluga sturgeon products was banned in 2005 and the worldwide trade in sturgeon caviar of all species was halted by the Convention on International Trade in Endangered Species in January 2006.

For its efforts to raise awareness, Caviar Emptor was recognized with the 2004 Silver Anvil Award by the Public Relations Society of America,...

See BSA Lecture on p. 2

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Doon Gibbs from p. 1

...from the University of Utah with bachelor's degrees in mathematics and physics. He received his master's and doctorate degrees in physics from the University of Illinois at Urbana-Champaign.

NSBRI is a NASA-funded consortium of institutions studying the health risks related to long-duration spaceflight and developing countermeasures to mitigate the risks. The Institute's science, technology and education projects take place at more than 60 institutions across the United States. Brookhaven is a member of the NSBRI consortium.

NSBRI projects address space health concerns, which include bone and muscle loss, cardiovascular alterations, radiation exposure, neurobehavioral and psychosocial factors, remote medical care, and habitability and performance issues. Research findings also impact the understanding and treatment of similar medical conditions experienced on Earth.

For more information about NSBRI, go to: <a href="https://www.nsbri.org/">www.nsbri.org/</a>.

#### **BSA Lecture** from p. 1

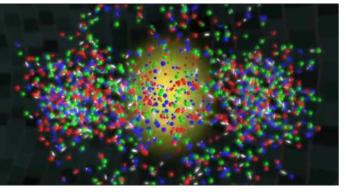
...and the Wilmer Shields Rich Award by the Council on Foundations for Excellence in Public Communication.

Pikitch also holds leadership roles in a number of other organizations, like Shark Savers and the IUCN Sturgeon Specialist Group. She is on the editorial board of *Conservation* magazine.

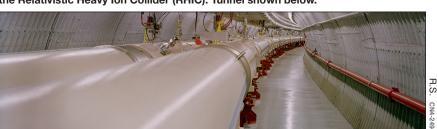
Pikitch earned her B.S. and M.A. in Mathematics from City College of New York in 1977 and her M.S. and Ph.D. in zoology from Indiana University in 1982 and 1983, respectively.

— Natalie Crnosija Pikitch is quoted in an article titled "Too Many Small Fish Are Caught Report Says," by Henry Fountain of *The New York Times*: http://nyti.ms/11VCEJ.

Note: This shortened web address will direct you to the form, which is hosted on the Times' website.



Protons, neutrons melt to produce 'quark-gluon plasma' (above) at the Relativistic Heavy Ion Collider (RHIC). Tunnel shown below.





**NSLS-II** construction site

Below: Detectors for the Daya Bay Neutrino Experiment



## BNL's Highlights at APS Meeting (continued from p.1)

## Interpreting Jet Results From RHIC and the LHC

#### Talk by BNL's Bjoern Schenke

Explorations of how particle "jets" get "stuck" in the strongly coupled hydrodynamic matter (a.k.a. "perfect" liquid) produced in heavy ion collisions at RHIC and the Large Hadron Collider (LHC) in Europe, including computations that allow a direct link of theoretical calculations to experimental observables.

#### Recent Finite Temperature Lattice Results

#### Talk by BNL's Alexei Bazavov

How lattice calculations are used to analyze hard-scattering processes that probe the properties and evolution of RHIC's quark-gluon plasma and inform our general understanding of the thermodynamics of quantum chromodynamics, the theory that describes quark-gluon interactions via the strong force.

#### Physics of Strong Color Fields in Nucleons and Nuclei at High Energies Talk by BNL's Raju Venugopalan

Why exploring the properties of the strong color fields that emerge in ions accelerated to near light speed at RHIC is essential to complete our understanding of what happens to quark-gluon

matter in heavy ion collisions.

#### RHIC Results on the Energy Dependence of Flow Fluctuations at all Harmonics

#### Talk by BNL's Paul Sorensen

How the geometry of the initial interaction of colliding ions at RHIC influences resulting particle correlations and "flow," from energies well below the threshold for transition to quark-gluon plasma to well above that threshold.

#### Special plenary session talk:

## The Hottest, and Most Liquid, Liquid in the Universe

#### By Krishna Rajagopal, Massachusetts Institute of Technology

A theorist's perspective on the "hot quark soup" of the early universe produced at RHIC and the Large Hadron Collider (LHC) in Europe, its relation to ultra-cold atomic gases, and mathematical approaches derived from string theory being used to describe these seemingly unrelated extremes.

#### New Water-Based Liquid Scintillator for Large Neutrino Physics Talk by BNL's Minfang Yeh

Highlights of the concept, preparation, and properties of a new type of scintillating liquid based on water, and how it could be used for a very large, but economical detector for applications ranging from fundamental physics, to neutrino physics, to neutron detection.

#### Update on Latest Results from the Daya Bay Neutrino Experiment APS-hosted a press conference

Featuring scientists who recently announced the first results from the Daya Bay Reactor Neutrino Experiment, including the discovery of a new kind of neutrino transformation. Scientists from BNL play multiple roles in this international project, including project management, data analysis, and perfecting the recipe for the chemically stable liquid that fills part of Daya Bay's detectors.

#### Ultra-Bright Storage Ring Light Sources

## Talk by BNL's Ferdinand Willeke

How the next generation of light sources, including NSLS-II, now under construction at BNL, will provide nanoscale resolution and enable advances in a wide range of scientific fields including energy, environmental science, and biomedicine.

## DOE's Support for This Basic Research

DOE's Office of Science is the single largest supporter of basic research in the physical sciences in the United States, and is

## A.J. Francis from p. 1

...project to remove nitrate from wastewater and prevent ground and surface water contamination. The project's funding was not renewed, but Francis found his footing in a new realm of interest, in which he studied how microbes transformed radionuclides and toxic materials found in nuclear energy and fossil-fuel wastes.

For over 30 years, he has investigated the biochemical and molecular effects of microbes on the radionuclides uranium, plutonium and technetium, and on the toxic metals lead, cadmium, nickel, and zinc. Francis's studies have included:

- the effect of acid rain on aquatic and soil microbial processes
- the process of aerobic (oxygen-requiring) and anaerobic (oxygen-less) microbial mobilization and immobilization of toxic metals from coal wastes
- the process of anaerobic microbial dissolution of metal oxides and remobilization of metals co-precipitated with iron oxides
- the process of anaerobic microbial dissolution and stabilization of uranium, plutonium and toxic metals in contaminated soils and wastes

- biotransformation of radionuclide/toxic metalorganic complexes
- the role of microbes in the transport of elements such as uranium, plutonium, americium and neptunium from waste repositories

"I think the work really put Brookhaven on the world map in terms of microbiological studies with the radionuclides, radioactive waste, and microbial gas generation from low- and intermediate-level radioactive wastes," said Francis.

As a prominent voice in the field, Francis has been a grant proposal reviewer for Department of Energy programs, the National Science Foundation, and the U.S. Department of Agriculture.

## ...And Its Cure

Francis' research has yielded four patented processes, two used by industry for lead decontamination: one for the dissolution of lead oxide, and another for the separation and recovery of lead and metals co-precipitated with iron oxides.

Francis' two other patents are of particular interest because they allow radionuclides and toxic metals in radioactive waste to be stabilized or recovered for reuse or disposal.

One of these patented techniques, which treats uranium and toxic-metal contaminated sediment and sludge, depends on activities of a Clostridium species, an anaerobic bacterium commonly found in soils and wastes. Clostridium removes a large fraction of soluble non-toxic metals, like calcium, potassium, magnesium, manganese, sodium, and iron from the waste. Clostridium also stabilizes the radionuclides and toxic metals cadmium, chromium, copper, nickel, lead, uranium and zinc. Eventually, the radionuclides and toxic metal, now in a more stable form, can be recovered, recycled and disposed of. One of Francis' more recent projects has focused on the use of Clostridium to create the alternative fuels ethanol and butanol from plant biomass, after pretreatment with ionic liquid salts.

Francis' most renowned patent is for a procedure that simultaneously enables the reclamation of soil and recovery of radionuclides and toxic metals using citric acid, an agent that binds to the contaminants. The citric acid extract is then degraded by microbes to recover the toxic metals, followed by the photodegradation (degradation by light) of the uranium citrate complex, which is not

biologically altered. This work was based on a paper published in Nature in 1992, and was patented in 1994.

"This patent is for an environmentally friendly green process that uses a naturally occurring organic compound, soil bacteria, and sunlight. It has several applications because it can be used on a number of waste materials. Mixed waste is separated into radioactive and hazardous waste. uranium is separated from toxic metals and recovered for recycling or disposal, all while not generating secondary waste," explained Francis. "The method causes little soil damage and environmentally and economically important metals are removed in a concentrated form."

The process is used to remove and recover lead and toxic metals from municipal solid waste incinerator ash and soils, to remediate soils contaminated with lead paint, and to decontaminate metallic surfaces that have been slightly contaminated by radionuclides.

## **Professional Development**

Francis earned a B.Sc. in Agriculture and a M.Sc. in Soil Microbiology from Annamalai University, India, in 1963 and 1965, respectively. He went on to earn his Ph.D. in Microbiol-

ogy at Cornell University in 1971. While at Cornell, Francis researched symbiotic nitrogen fixation in legumes. As a postdoctoral researcher there, he was involved in the development of a life detection system of microbial metabolites, which was supported by NASA for the Mars Viking Project. Before coming to BNL, Francis worked as a microbiologist at the Stanford Research Institute, There, he participated in studies on the microbiological degradation of military standard pesticides, including DDT, 2,4,5-T, and lindane, for the Department of Defense.

Francis is a member of the American Chemical Society, Korean Nuclear Society and the American Society for Microbiology, from which he recently received a certificate in recognition of his outstanding service as an online mentor of the ASM Minority Mentoring Program. He was a scientific advisor and Class-I visiting researcher for the Heavy Element Microbiology Group at the Advanced Science Research Center in the Japan Atomic Energy Agency in Tokai, Japan, and has consulted with United Nations organizations and a number of governmental and commercial groups.

— Natalie Crnosija

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## **Gloria Bennett Recognized For Safety Awareness**

Whether it's adults in a hurry or kids at play, Gloria Bennett tells them all to hold the railing as they walk up or down the stairs leading to the second floor of Building 400.

For this safety awareness, Bennett, a senior office services assistant in the Community, Education, Government and Public Affairs Directorate office, recently received a BNL Spotlight Award. Roy Lebel, manager of the Quality Management Office, nominated Bennett after observing her remind visitors to the office to hold the railing when they're on the stairs.

"I nominated Gloria because she's very persistent," said Lebel. "She's got a very pleasant way of encouraging people to walk safely up and down the staircase. We need more people at Brookhaven that are willing to stand up and challenge people to do things in a safer manner."

Lab Director Samuel Aronson presented Bennett with the award. He commended Bennett for enforcing safe behavior on her own and trying to get people to change an unsafe behavior.

"Gloria's actions are important to the Lab because operational excellence leads to reputational excellence, which leads



Gloria Bennett receives a Spotlight Award from Lab Director Sam Aronson

to ability to do more, better, and safer science," said Aronson. "It's important that every little action in support of safety and operational excellence is recognized. So this is meant to recognize something that Gloria did just knowing what safety procedure pertains to this particular activity and talking to people in an appropriate way about being safe."

Bennett also practices what she preaches — she avoided what

might have been a much more serious fall on those same stairs several months ago because she was holding onto the railing. Bennett said she was very honored by the award and thanked the Lab, Lebel, and Aronson for acknowledging her. She also encourages her fellow Lab employees to be safe.

"You're never too busy to be safe," said Bennett.

Natalie Crnosija

makes science possible at Brookhaven National Laboratory

http://intranet.bnl.gov/safety

## African American Affinity Group Building Scholarship Fund

Seven hundred dollars, with \$1,800 still to go! BNL's African American Affinity Group (AAAG) is setting up a \$2,500 scholarship to benefit highschool students entering college, and undergraduate college students continuing to graduate programs. The AAAG members thank the generous BNLers who attended the events organized during African American History month, and who provided most of the \$700 already collected.

Said AAAG president Noel Blackburn, "The need for this scholarship fund can be reflected in the words of the African proverb, 'It takes a village to raise a child.' I have witnessed many talented students come through our programs at BNL. confirming that it is important

Thursday, 4/12



At the Art Display organized in February 2012 by the BERA African American Affinity Group are members: (front row, from left) Barbara Simpson, Gloria Bennett, Janine Truitt, Yvette Hayes, Ripp Bowman, Patrice Greenwood, Joy Haskins, (back row, from left) Noel Blackburn, Patrick Bynum, Omar Gould, Leroy Smalls, Gretchen Cisco, and Juanita McKinney.

for us to support deserving students in their academic pursuits."

The AAAG is now planning other events to raise the rest of the scholarship money. Anyone who has helpful ideas or who would like to contribute to the

fund should contact Blackburn, blackburn@bnl.gov, Ext. 2890; vice-president Patrick Bynum, Ext. 3472, or Juanita McKinney, who chairs the AAAG outreach and public affairs, mckinney@ bnl.gov or Ext. 3915.

Liz Seubert

## In Memoriam

Norman Carlson, who joined the Physics Department as an advanced technician on December 14, 1964, and retired from the Alternating Gradient Synchrotron Department as a senior technical specialist on June 30, 1986, died on December 25, 2010. He was 88.

Edward Sujeski, who joined the Plant Maintenance Division as a custodian on September 6, 1966, becoming a rigger in 1989 and retiring on October 31, 1997, died at 76 on November 18, 2011.

Stanley Rhodes, who on February 10, 1964, joined the Plant Maintenance Division as a custodian, and retired from the Safeguards & Security Division as a firefighter/emergency medical technician on September 18, 1986, died on February 24, 2012. He was 83.

## **Defensive Driving** Course: Two Parts, 4/19 & 4/26

The next six-hour Defensive Driving (Point & Insurance Reduction) course will be held in two parts on consecutive Thursdays, April 19 and 26 in the Brookhaven Center South Room. The course will be from 6 to 9 p.m. on both nights. The course is open to BNL, BSA and DOE employees, BNL facilityusers, contractors, guests, family members, and friends. The cost is \$33 per person. Preregistration is required. To register, call Ed Sierra, 821-1013, and leave a message. Or complete a New York DMV Approved Course Online for \$39.95 with discount (Use code: "SAVE10" for \$10 discount): www.lidrives-

## **Arrivals & Departures**

- Arrivals -Xi Hi..... CMP&MS Departures – Tejaswini Kale ..... CFN Linda Satalino..... Env Scis Roger Thompson..... Rad Control William Venegas, Jr. ..... C-AD

Qin Yao.....Biology

Tomer Zidki .....Chemistry

## Celebrate National Library Week, 4/9-13 To celebrate National Library Week, the Research Library's staff invites the BNL community to an Open House at the Research Library, Bldg 477. All are invited to learn about resources now available through the Library website and to explore the trial databases offered by vendors for limited time. events are scheduled on Tuesday, Wednesday, and Thursday: 10 a.m. – 3 p.m. **Library Open House IEEE Xplore Workshop** presented by Joseph Vaitkus of IEEE

#### Drop by and enjoy refreshments in the relaxing reading/study area and attend Library orientations throughout the week. Special

Monday, 4/9 Tuesday, 4/10 Bldg. 911, C-AD Seminar Room, 2nd. floor

Wednesday, 4/11 **Advanced Searching in the** 

Web of Science 10-11 a.m. presented by Amy Braden of Thomson Reuters Berkner Hall, Room B

**EndNote Web in the** Web of Knowledge 11 a.m.-noon presented by Amy Braden of Thomson Reuters

Berkner Hall, Room B Safari Books Online 10-11 a.m. presented by Andrea Kolodzinski

of Safari Books Online Bldg. 515, ITD Seminar Room, 2nd. Floor

Friday, 4/13 **Library Open House** 10 a.m. – 3 p.m.

For more information, call the Research Library, Ext. 7761/3483.

Please remember to donate canned food, peanut butter, etc. to the BNL Food Drive

## BSA Noon Recital, 4/11

## Stony Brook Opera Performs Mozart

Stony Brook Opera will present scenes from Mozart's comic opera Die Entführung aus dem Serail (The Abduction from the Seraglio) at noon in Berkner Hall. David Lawton will be the conductor. Sponsored by Brookhaven Science Associates, the company that manages the Lab, the concert is free and open to the public.

The composer's most successful opera during his lifetime, Die Entführung is still a great favorite with audiences, especially in Europe, where it is produced much more frequently than in the United States. Spectacular virtuoso arias and intricate ensembles alternate with spoken dialogue in this delightful tale of two young Spaniards' attempts to rescue their sweethearts from captivity in a Turkish harem.

For the Brookhaven performance, the scenes from the opera, which are sung in German, will have projected titles in English.

## **C**ALENDAR

#### - WEEK OF 4/9 -

#### Monday, 4/9

#### \*National Library Week

10 a.m.-3 p.m. BNL's Research Library holds Open House. See article below, left.

#### Tuesday, 4/10

#### \*IEEE Xplore Workshop

1-2 p.m. Bldg. 911, C-AD Seminar Rm., 2nd. floor. Part of National Library Week. See below, left.

#### Wednesday, 4/11

#### \*Advanced Web of Science Search

10-11 a.m. Berkner Hall, Rm B. Part of National Library Week. See below, left.

#### \*EndNote Web

11 a.m.-noon. Berkner Hall, Rm. B. Part of National Library Week. See below, left.

#### \*BSA Noon Recital

Noon. Berkner Hall. Stony Brook Opera. All are welcome to this free event, sponsored by BSA. Visitors to the Lab 16 and older must carry a photo ID. See article below.

#### \*Webinar on Substance Abuse

1 p.m. A 'Seminar on the Web" Webinar on "Substance Use and Young Adults" will be hosted online by Magellan Health Services, sponsored by the Employee Assistance Program. See article, p.4.

#### Thursday, 4/12

#### \*Safari Books Online

10-11 a.m. Bldg. 515, ITD Seminar Room. Part of National Library Week. See below, left.

#### Friday, 4/13

\*Research Library Open House 10 a.m-3 p.m. See article below.

#### — WEEK OF 4/16 —

Tuesday, 4/17

**BSA Distinguished Lecture** 4 p.m. Berkner Hall. See p.1.

## Thursday, 4/19

## **Defensive Driving, Part I**

6-9 p.m. Brookhaven Center. Part 2: 4/26. See notice, left.

## WEEK OF 4/23—

## Wednesday, 4/25

## **Brookhaven Lecture**

4 p.m. Berkner Hall. Talk by Roman Samulyak, Computational Sciences Center.

## Take Our Children To Work, 4/26

Employees and guest are invited to bring their daughters and sons to work on Thursday, April 26. Registration forms were sent through interoffice mail. You can also sign up online: http://1.usa.gov/HdC6d1.

Note: This shortened web address will direct vou to the form, which is hosted on the Lab's website.

#### **New Dance Class Sessions Begin,4/25**

All are invited for dance classes on site through the BERA Ballroom Dance Club. The next six-week session begins Wednesday, April 25, in the Brookhaven Center North Ballroom, Bldg. 30.

The cost is \$40/person for six classes. New beginners can try one class before paying.

5:30-6:30 p.m. Beginner Waltz 6:30-7:30 p.m. Intermediate Viennese Waltz

7:30-8:30 p.m. Intermediate Samba

For information, contact Arup Ghosh, Ext. 3974, or Vinita Ghosh, Ext. 6226.



## 2012 Long Island Earth Summit, 4/17

Includes 'green' hybrid vehicle display, workshops, panel discussion on L.I. environmental challenges, and BSA Distinguished Lecture on 'Starving the Ocean'

On Tuesday, April 17, BNL's Community Relations Office and its partner, Citizens Campaign for the Environment. will host the 2012 Long Island Earth Summit in Berkner Hall. The Earth Summit, which is free and open to the public, aims to combine good science with good advocacy. Visitors to the Lab of 16 and older must carry a photo I.D.

As part of the Earth Summit, BNL and environmental organizations will show a solar research poster display in Berkner Hall lobby. All are welcome to visit the "Green Vehicle Expo" of hybrid electric vehicles in a display set up in the circle outside Berkner Hall. At 1 p.m., a series of workshops will be held on "Toxic Tides," "Long Island's Energy Future," "The

Classified

Advertisements

Current job openings and a statement of

job placement policy at BNL are available

on the homepage at www.bnl.gov/HR/ca-

reers/. To apply for a position, go to www. bnl.gov and select "Search Job List." For

**Motor Vehicles & Supplies** 

05 JEEP WRANGLER 4 X 4/ TJ - 85K mi.

a/c, c/c, 6 spd manual trany, hardtop, incl transfble warr, gd to 5/2013, running boards,

SOFTTAIL - 14K mi. pearl/white, extras,

99 MERCEDES SL500 - 89K mi. gar, 8 cyl,

convert/hard top, custm whls, new tires,

upgrade and syst w/cd dvd. Ithr sts. pwr

mirrors, s/roof. \$14,900 neg. 516-983-8037.

99 FORD ESCORT SE - 120K mi. 4cyl, a/t,

a/c, p/w, p/l, p/s, dual air bags, ABS, smart

key, new timing belt, Lu, eric20070422@

98 VOLVO V70 T5 - 110K mi. awd, silver

w/dark gray int, recent maint. \$4,250 neg.

JEEP CANOPY COVER - Pavement Ends

Jeep Wrangler Canopy Cover, new, chai

coal, '97-'06, Model 41729-09, ask/\$60.

LADDER RACK - '04 stock heavy duty

w/removable back Cross Bar, made for

F-350, Short Bed 6'6", great shape/\$250.

LADDER RACK - KargoMaster Heav Duty

Rack systm, rack powder coated silver,

came off a 2008 Ford F-350 8' bed, cost

\$1,200 ask/\$200. Ext. 3411, prwivoj@bnl.gov.

MOTORCYCLE COVER - Nelson-Rigg,

Defender 2000 XL, new, never used, incls

backpack carrying case, \$50. Chris, Ext.

25' SEARAY SUNDANCER - '98, excel, 5.0

Bravo III Mercruiser Eng, Bimini Top/Camper Canvas/Cockpit Cvr, pic avail. \$19,500

20' CENTURY #2001SV - 08 Century centr

console, MdI #2001SV 150 4-stroke Yama-

ha outbrd motor, trailer, extras. \$24,900

neg. 255-7443, hogbossl150@aol.com.

neg. 495-1184, marescam@optonline.net.

Ted, Ext. 8363 or tselmer@bnl.gov.

HARLEY/DAVIDSON HERITAGE

Tow pkg. \$12,900 neg. Wayne, Ext. 3256.

mint cond. \$9,700. bill, 312-2535.

gmail.com. \$2,500 neg. Ext. 2458.

Scott. sbronson@bnl.gov.

Tony, 764-8772.

2022, 741-9169.

**Boats** 

more information, call Ext. 2882.

Hydrogeology of Long Island," and "Smart Planning." A panel discussion on Long Island's environmental challenges will follow at 3 p.m. Closing out the day from 4 to 5 p.m. will be a lecture, "Starving the Ocean: Why We Should Leave Small Fish in the Sea." This free BSA Distinguished Lecture will be given by Ellen Pikitch of the Institute for Ocean Conservation Science at Stony Brook University's School of Marine and Atmospheric Sciences. Learn more about this talk and the speaker in the story on page one.

Pre-registration for the Summit workshops — not Pikitch's talk — is requested: www.citizenscampaign.org/ events/long-island-earth-summit/2012/index.asp.

23' VENTURE SAILBOAT - retractable keel, sea-worthy, mast in gd shape, needs new sails and interior woodwork, incl trailer, \$4,200/neg. Kyle, 319-0197.

## **Furnishings & Appliances**

AIR CONDITIONERS - Frigidaire, 5,500 Btu, excel cond/\$50; Panasonic 5,000 Btu, older/\$35. Diane, 929-6442.

BED FRAME - q/size solid wood, honey color, great cond, \$110. Wencan, Ext. 8061 or wxu@bnl.gov.

COUCH SET AND LOVESEAT - microfiber, \$500; Boys complete bdrm set, 1/ yr old, pd/\$1500, ask/\$850, all items like new, pics avail. 516-527-4902.

DECK FURNITURE - Glasstop tble, metl frame, nds paint, 4 mtchg side chrs, 2 turng chrs, end w/umbrlla & stand, pic avail, new \$1250, sell/\$400. Ext. 2483, susiespix@aol.com.

DINING TABLE AND CD PLAYER - must sell, dining table/\$50, pic avail: http://tinyurl.com/tz-table. Tomer, 398-8468.

HOMEDICS PARASPA MINI - Parrafin Bath, in box, used a couple of times \$20, Older model Oster juicer, hardly used, \$15. Kathy, Ext. 2818 or schoenig@bnl.gov.

HOOVER FLOOR MATE - like new w/ manual, \$75. Frank, 849-5887.

HUTCH - oak finish, Hudson collection, modern home desk hutch 44w x 10d x 7h, \$50, needs some re-finishing. Mary, Ext. 6344 or phraner@bnl.gov.

used French LG REFRIGERATOR dr w/bottom freezer, White 35x34x69, ask/\$200. Ext. 4532.

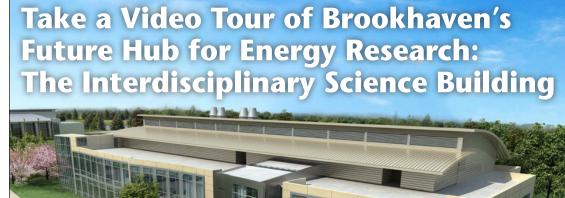
MOVING SALE - Radiators as new-\$30/ ea; Halogen stands w/bulbs/\$35; Philips DVD player/\$10; APC batt backup/\$30; Food Saver/\$50; fish tank/\$15, pics: http://tinyurl.com/HW-sale. 671-8769.

SHOWER WALL KIT - Kohler-Sterling Accord, new 48x36x77H white: new still in box w/slight dent @ top of one wall, ask/\$250. Ext. 2198, 909-7080 or lysik@bnl.gov.

WICKER PORCH SET - 5 wicker arm chairs and little round side table, need spray painting/\$50/all. Susan, Ext. 2888,

## Audio, Video & Computers

IPHONE 4S - Brand new in sealed box. 16GB Black. \$500. Mark, Ext. 3970 or mwahlert@bnl.gov.



Construction is under way for the Interdisciplinary Science Building (ISB), a future world-class facility for energy research at Brookhaven Lab. Meet two scientists who will develop solutions at the ISB to tackle some of the nation's energy challenges, and tour the construction site.

Note: This shortened web address will direct you to the video, which is hosted



## Substance Use & Young Adults: Live Webinar, 4/11

Young adulthood is a time of growth, exploration, and independence. Those in the age range of 18 to 26 begin to chart their own course and make decisions that will shape their lives, including whether to try alcohol or drugs.

Join Magellan's live interactive webinar on Wednesday, April 11, from 1 to 2 p.m., to learn more about trends that are impacting young adults today. It is available to BNLers at no cost through the Magellan program. This webinar will be co-presented with Andrew Kendrick, a licensed counselor with a master's degree in clinical psychology and more than 15 years of experience in working with families. This webinar will help you:

- Identify substances commonly used by young adults
- Differentiate between experimentation, abuse, and addiction
- Recognize warning signs of potential issues with substances
- Learn about prevention strategies
- Identify resources for dealing with substance use concerns.

To sign up for this live webinar, register at <a href="http://magellanhealth.adobeconnect.com/e1lgi6uh053/event/">http://magellanhealth.adobeconnect.com/e1lgi6uh053/event/</a> registration.html and create your own password. After registering, you will receive a confirmation and information to access the webinar

You also can register for this and other upcoming webinars at www.MagellanHealth.com/member. After registering with your program's toll-free number, 1-800-327-2182, go to Tools, On Demand Learning for a complete listing of live webinars, as well as webinar recordings and podcasts.

SONY PLAYSTATION ONE - One controller and 3 games, \$20. Kathy, Ext. 2818 or schoenig@bnl.gov.

## Sports, Hobbies & Pets

AEROPILATES 55-4050 - incls Aero-Pilates Performer Elevation Stand/\$300. Eileen, Ext. 3995. PAINTBALL GUN - & accessories, Ion gun

w/Halo hopper, gloves, stock barrel, nitrous tank/cover, CO2 tank, sm barrel, bag, & batt, used 1ce, pic avail/\$170. 445-2868.

SPORTS ITEMS - punching bag, \$99; Pool Tble 5' (4'6") x 8'; 1" slate, \$300 disassembly req, 2-in-1 Game Tble, "Poker & Blackjack", \$40. Mary, Ext. 6344, phraner@bnl.gov.

## Tools, House & Garden

ALUMINUM PUMP JACKS - 2 24' poles, 2 12' poles, 2 splicers for total hgt of 32; 3 Pump jacks w/workbench brackets; Spikes ft or rubber, 6 steel v/braces, new/\$2,400, sell/\$800. Ted, Ext. 8363.

EXTENSION LADDERS - 2/28' fiberglass 300lbs, 1/36' aluminum ladder 300lbs, take all 3/\$300. tselmer@bnl.gov.

FIREPLACE TOOL SET - brass, gd cond, \$25/obo. Lois, 929-4753 or lobob12@optonline.net.

SNOWBLOWER - Craftsman, 9 H.P. 28" elect/pull start, 6spd frwrd & 2 revrse, p/s, 3-4 vrs old, pd/\$1500 ask\$600, moving. 775-6636.

YARD TRACTOR/MOWER - Sears Craftsman, front axle needs repr/new batt. flat tires, gd shape otherwise, gd Briggs & Stratton eng, ask/\$250. sbronson@bnl.gov.

## Miscellaneous

BARBEQUE - Weber Silver Series in gd cond w/side burner. Asking \$90. Ext. 2897. CANON CAMERA BATTERIES - rechargeable NB-6L for Canon S-95 camera, \$10/ea or 2/\$15. Susan, Ext. 2483.

INNOTEK IUC-4100 - In grd dog fence system, brand new in box, \$250. Mark, Ext. 3970 or mwahlert@bnl.gov.

SAMSUNG INFUSE 4G + EXTRAS - great cond w/extra batt, car & batt/charger, case, gorilla glass protector, \$300. 816-3554 or jad9817@yahoo.com.

TOYS - Deal or No Deal Board Game/\$5, Handy Manny Workbench & Tools/\$30, Smartcycle & 2 games/\$30. Ext. 7918.

## **Happenings**

DINNER/SHOW OUTING - to see Jonah at Sight n Sound Theatre in PA on Sat., Oct. 13, 2012. Deposits by May 30, Call for details. Kim, Ext. 2896 or khayes@bnl.gov. SPRING FLING, APRIL 20 - Join us @ The Flaming Hearth, Farmingville, 6pm-Until, DJ Alex Petway, appetizers, 50/50 raffle, cash Bar, \$10/advance, \$15/at the door. Charles Gardner, 631-219-2884. chuckg@bnl.gov. Charles, Ext. 5045.

BLACK INK CARTRIDGE - Canon 3e. Kevin, Ext. 3498.

THREAD MILL – gd working order, u pic up. George, 208-6614 or eliasg@bnl.gov.

## Wanted

BOTTLES - empty, clean, clear wine and/ or liquor bottles. Angela, Ext. 5322.

CAR - Sedan, hope to buy this month, April. Matibur, Ext. 4331, 718-737-1757 or mzamadar@bnl.gov.

GPS - used, in gd cond. Ext. 3511 or geniusni@gmail.com.

GROCERY STORE GIFT CARDS - Gift cards (any amount) from Stop & Shop and/or King Kullen for families/guests at Thee Island INN for Easter, Greatly appreciated! Send to B. Royce at Bldg 460. Barbara, royce@bnl.gov.

LAWN MOWER - gently used working push or self propelled mower w/bag, reasonably priced for sm yd. Ext. 5288, 487-5717.

POP UP TRAILER RENTAL - need wk of July 18-25th, 2012. Hank, 516-424-3299 or kkautod@optonline.net.

## **Farewell Gathering**

SHERYL GOLDEN - Celebrating Sheryl's retirement at Ladakins on 4/26@5:30, RSVP w/\$35, pymt by 4/13. Karen, Ext. 4432 or liebermann@bnl.gov.

## For Rent

LAKE GEORGE, NY - Lakefront cottage, fully furn, 3 bdrm, 1 bath, 2 decks, gas grill, screen prch, outdr f/p, dock, canoe, Huletts Landing, avail 8/11-9-1. \$1,850/mo. Debbie, Ext. 7870.

MIDDLE ISLAND - \*NEW\* bsmt apt, 4 mi to Lab. 1 bdrm. kitch/lr, cac, priv ent, offst prkg, no smkg/pets, 1/mo sec req'd, incls all util, phone, cable, use of w/d . \$925/mo. 205-9252.

RIVERHEAD - 3bdrm, 2 full ba, Western Ranch, kit, dw, l/r, d/r, w/d & gar, new windows & furnace, quiet, lg pty on cds, nr shops, no smkg/pets, refs & cc reqd, 1/mo sec+util. \$2,250/mo. McGill, 512-6470.

SHOREHAM - 1 bdrm, furn/unfurn, new apt, grnd flr, indep ent/drway/prkg, full bath, kit, I/r, cac, no smkg/pets, few mi to BNL, 1 mo sec, all util incl, single only. \$1.100/mo, 566-8261.

SPRING HILL, FL - priv ranch on Gulf, 70m Orlando, 45m Tampa, fly Islip direct, near beach/tennis/park, SW architecture, 3/ bdrm, 2/bath, d/r, f/p, 2gar, igp in lanai, fruit trees, see review.oktane.net/HouseTour. \$450/wk. 344-5537.

## For Sale

SPRING HILL, FL - priv ranch on Gulf, 70m Orlando, 45m Tampa, fly Islip direct, near beach/tennis/park, SW architecture. 3/bdrm, 2/bath, d/r, f/p, 2gar, igp in lanai, fruit trees, see review.oktane.net/House-Tour. \$125,000 neg. 344-5537.

AMITYVILLE VILLAGE - Townhse overlooking priv lake, 2bdrm, 1.5 bath, eik, cac, near LIRR & Village, low taxes & maint fees. \$269,000 neg. 264-2421.

ISLANDIA - 2-story town hse, 2 br/2.5 bath/ loft/eik/dr/lr w/vaulted ceiligs & fp/att gar, gas heat, cac, new carpet, bkyrd w/deck, to BNL, pics. \$265,000. Sue, Ext. 7270.

ROCKY POINT - 3 bdrm, 1 bath Ranch, 100x100 lot, I/r w/fp, kitch w/skylight, FDR, 1 car gar, deck, fend bckyd, new in last 5 yrs: boiler/roof, drway, bath. \$219,000. Michael, Ext. 3434.

SAYVILLE - Sayville Co-op: upstairs unit, 1 bdrm. 1 renov'd bath, spacious I/r, d/r, kitch, bike to downtown/ FI ferries, tons of storage. \$109,000 neg. 750-6082.

SHOREHAM - 3 bdrm, 1.5 bath colonial on cul de sac, updated bath & kitch w/ ss applis, new w/d, den w/fpl, bsmt, gar, la deck, la wood shed, 10 min to Lab. \$349,000. Andrea, Ext. 3347, 744-8793.

Services offered by BNL employees are listed at the end of "See all ads" (lower right) on the intranet homepage. To get the list from off site, email bulletin@bnl. gov and put "Services" in the subject head, or call Liz Seubert, 344-2346, leaving your address or phone number.



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