

Ray Davis Shares 2000 Wolf Prize in Physics With Masatoshi Koshiha, University of Tokyo

Raymond Davis Jr., who retired from the Chemistry Department in 1984 but still remains an active research collaborator at BNL, will share the 2000 Wolf Prize in Physics with Masatoshi Koshiha, University of Tokyo, Japan.

The Wolf Foundation has recognized the scientists "for their pioneering observations of astronomical phenomena by detection of neutrinos, which created the emerging field of neutrino astronomy." The \$100,000 award, to be shared by the two scientists, will be conferred by the President of the State of Israel, Ezer Weizman, at a ceremony in Jerusalem on May 21.

The international jury of experts in

"pioneering observations . . . which created the emerging field of neutrino astronomy."

the field who selected the winners commented, "Their observations of the elusive neutrinos of astrophysical origin have opened a new window of opportunity for the study of astronomical objects, such as the Sun and

exploding stars, and the study of fundamental properties of matter."

Davis received notice of his winning the Wolf Prize while he was in Russia to receive the 1999 Bruno Pontecorvo Prize. Issued by the Joint Institute for Nuclear Research, the

When congratulated on winning the Wolf Prize for his work, Davis replied, "It wasn't work."

\$1,000 Pontecorvo Prize was awarded to Davis "for the outstanding achievement in development of the chlorine-argon method for detection of solar neutrinos." Invented by Pontecorvo, this method was further developed by Davis.

"I have been interested in studying neutrinos since 1948, when I first read about them in a review article by H.R. Crane, a physicist at the University of Michigan," Davis said. "Back then, it was a brand new field of study. It has captivated me for more than half a century."

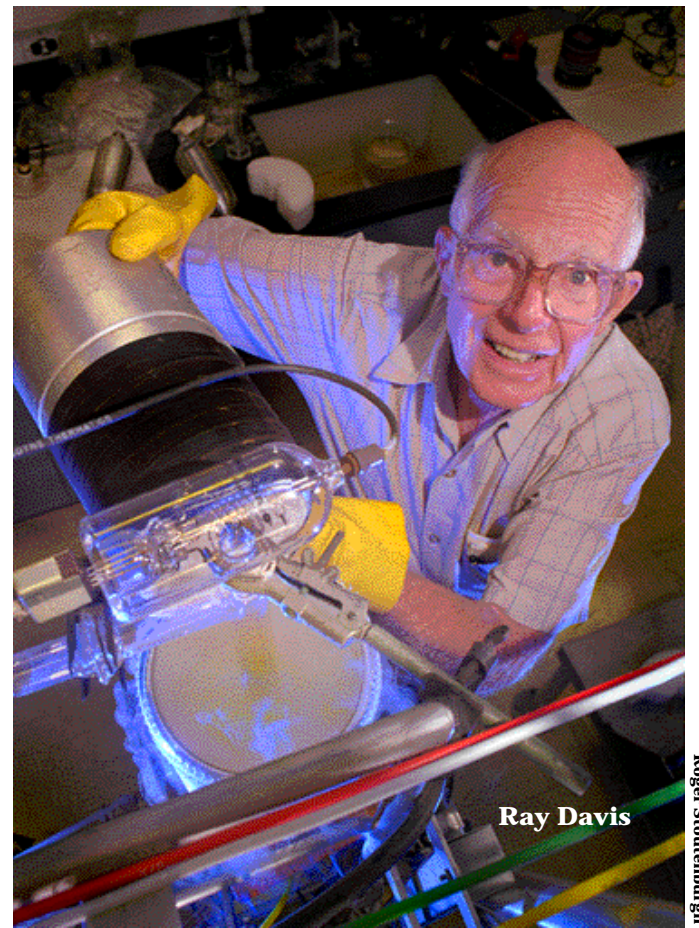
Neutrinos, ghostlike particles that, until recently, have been thought to have zero mass, are produced in the nuclear reactions that provide the

sun's energy. They rain down on each square inch of the earth at the rate of 65 billion per second.

Davis started investigating neutrinos that were produced in BNL's Graphite Research Reactor and at a reactor at the Savannah River Power Plant in South Carolina, in the 1950s. The particles remained elusive until the 1960s, when he successfully detected solar neutrinos in a new experiment based in South Dakota.

At the time, theorists believed that a solar neutrino produces radioactive argon when it interacts with a nucleus of chlorine.

Davis developed an experiment based on this theory by placing a 100,000 gallon tank of perchloroethylene, a commonly used dry cleaning chemical and a good source of chlorine, 4,800 feet underground in the



Ray Davis

Roger Stoutenburgh

Homestake Gold Mine in South Dakota. The chlorine target was located deep underground to protect it from cosmic rays. Also, the target had to be big because the probability of capturing a neutrino in chlorine was ten quadrillion times smaller than

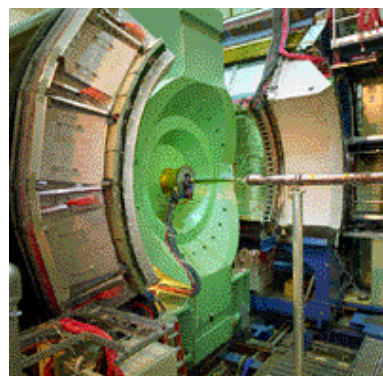
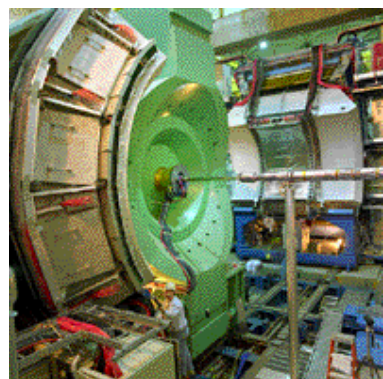
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East Arm of PHENIX Inches Into Place

On January 21, after several days of inch-per-minute movement, the "east arm" of the massive PHENIX detector for BNL's Relativistic Heavy Ion Collider (RHIC) was finally put in place. The event capped an all-out effort to finish the detector's assembly in time for next month's RHIC start-up. Over 430 physicists and engineers from 45 participating institutions in 12 countries work on PHENIX, aided by a compa-

nable number of support personnel. PHENIX, which stands for Pioneering High Energy Nuclear Interaction Experiment, is one of the two larger RHIC detectors. By studying the charged and neutral particles produced at RHIC, PHENIX will address fundamental questions of science: What happened during the first few moments of the early universe? . . . and . . . How does the proton get its spin? — Mona Rowe



Michael Herbert

Roger Stoutenburgh

Earthquake Workshop



Roger Stoutenburgh

How large an earthquake should be considered in the design of the world's nuclear reactors? That was the question addressed by a group of 46 scientists and engineers at an international workshop on the Engineering Characterization of Seismic Input, held at BNL last November 15 - 17. Sponsored by the Organization for Economic Cooperation and Development (OECD) and the U.S. Nuclear Regulatory Commission (USNRC), the workshop was chaired by Nilesh Chokshi, USNRC, (front row, fifth from right); and organized locally by Charles Hofmayer, Department of Advanced Technology, (front row, far right). The workshop's focus was to assess the way various countries are incorporating seismic data into design, reevaluation, margin and risk analyses at the world's nuclear reactors. Participants from OECD, the International Atomic Energy Agency and 10 countries found it to be a good forum for the exchange of views on this issue and to discuss the results of current research. A final report will be published by the OECD.

Graphite Reactor Study Online

The draft Brookhaven Graphite Research Reactor (BGRR) Removal Action Alternatives Study is now available for review and comment.

The study presents several alternatives for the future of the BGRR, and recommends four of seven alternatives for further review. A final report will be issued after public comments have been received and considered.

A fact sheet and a complete copy of the draft document are available on the web at <http://www.bgrr.bnl.gov/docs.html>.

The public comment period began on January 28, and continues through February 28, 2000. Comments may be mailed to James Goodenough, the DOE Project Manager, at Bldg. 701, or e-mailed to goodenough@bnl.gov.

For additional information on the study, attend a tour of the BGRR and open house "question-and-answer" session at the BGRR on Wednesday, February 16, from 3 to 6:30 p.m.

Literacy Volunteers Greatly Needed

One in seven Suffolk County adults needs help with basic reading and writing or English-speaking skills. Become a tutor with the Literacy Volunteers of America (LVA), Inc. Volunteers attend an eight-session training workshop in either basic literacy (reading and writing) or English for speakers of other languages (ESOL), then meet with a learner for at least two hours a week, with a commitment to the program of at least one year. Retirees are also most welcome.

Training sessions begin:
April 3, Selden (Basic Literacy)
February 26, Riverhead (ESOL)
April 4, Amityville (ESOL)
May 1, Huntington (ESOL)

For more information, contact Joseph O'Connor, Ext. 2212 or oconor@bnl.gov.

Ray Davis Shares Wolf Prize

(cont'd)

detecting it in a nuclear reactor.

Despite these odds, Davis's experiment confirmed that the sun produces neutrinos, but only about one-third of the number of neutrinos predicted by theory could be detected. Davis's groundbreaking experiment gave birth to a series of experiments by scientists around the world that confirmed the solar neutrino deficit, with a maximum of 60 percent of the expected number ever detected.

To this day, experiments are ongoing to determine the cause of the deficit, which is believed to lie in the possibility that having mass, neutrinos oscillate among three forms: electron, muon and tau. Thus, muon and tau neutrinos are "invisible" in an experiment set up to detect electron neutrinos.

Wolf Prize co-recipient Masatoshi Koshiba led the design and construction of Kamiokande detectors in Japan, which recorded the time of arrival, energy and direction of incoming neutrinos. The experiments done using these attributes provided strong hints that neutrinos have a new property: non-zero mass.

Raymond Davis Jr. earned a 1937 B.S. and 1940 M.S. from the Univer-

sity of Maryland, and a Ph.D. in physical chemistry from Yale University in 1942. After his 1942-46 service in the U.S. Air Force and two years at Monsanto Chemical Company, he came to BNL in 1948. He received tenure in 1956 and was named senior chemist in 1964.

Retiring from the Lab in 1984, Davis joined the University of Pennsylvania, but remained an active BNL research collaborator. A member of the National Academy of Sciences, he has won numerous scientific awards, including the 1988 Tom W. Bonner Prize and the 1992 W.K.H. Panofsky Prize.

Since 1978, the Wolf Foundation in Israel has awarded five Wolf Prizes annually to outstanding scientists and artists: "for achievements in the interest of mankind and friendly relations among peoples, irrespective of nationality, race, color, religion, sex, or political view."

Davis will be the second BNL honoree; Maurice Goldhaber, Brookhaven's former Director and current Distinguished Scientist, having shared the 1991 Wolf Prize in Physics with Valentine L. Telegdi of the Swiss Institute of Technology.

— Diane Greenberg

BNLers Walk Around Freezing This Week, But L.I.'s '99 Weather Tied for Third Hottest Year



Roger Stoutenburgh

Remember July of 1999? As Long Islanders sweltered, temperatures reached between 90°F and 100°F for 12 days.

Yet, during two July days, thermometers plummeted to below 50°F. While July stands out because of its uncomfortable extremes, temperatures were above normal in every month of 1999 except for October.

In fact, 1999 tied with 1990 as the third hottest year on record, with a yearly average temperature of 52.7°F. Only 1998 and 1991, with average yearly temperatures of 53.1°F and 52.9°F respectively, were hotter. The Lab has been keeping meteorological records since 1949.

1999 Precipitation

Total yearly precipitation in 1999 was 51.7 inches, 3.4 inches more than average. Snowfall, however, was lighter than usual, with 23 inches of snow in the 1998-99 season, compared to a yearly average of 29.6 inches.

BNL meteorologist Victor Cassella, Department of Applied Science, said that most Long Islanders were lucky in the weather of 1999, with no major storms causing severe damage here, despite a busy hurricane season on the Atlantic coast. While 13 hurricanes or tropical storms pounded the coastline, only one — Tropical Storm Floyd — reached Long Island. Between September 15 and 16, the storm dumped 3.69 inches of rain at BNL. Southold residents were not so lucky: a tornado hit the town on August 8, causing substantial damage to some homes and boats.

Although Long Island is not known as tornado country, "about one or two tornadoes strike the region each year," Cassella said.

Five Records

Five record high temperatures and two record lows were recorded in 1999. January 23 brought a record high of 59.5°F, beating the previous record of 56°F set in 1973. On June 7, the thermometer hit 95°F, beating the 1984 record of 91°F.

In July, three record highs were recorded. On July 5, the thermometers soared to 100°F, two degrees more than the previous high for that date in 1955. July 6 brought a high temperature of

98.5°F, which was a half-degree warmer than the record high in 1986. The thermometer hit 93.5°F on July 27, also a half-degree warmer than the previous record set in 1966. Truly a month of extremes in 1999, July also brought two new daily low temperatures. On July 14 and 15, temperatures of 49.5°F and 49°F were recorded, which beat the previous records set for those dates by 3.5°F and 2°F, in 1962 and 1950 respectively.

2000 Weather

What will the weather be like in 2000? From January 1 to 27, 2000, the average temperature was 29.3°F, while the norm is 29.7°F. Already, two new highs were recorded: On January 29, thermometers hit 57°F, one degree warmer than the previous record set in 1979, and, on January 3, the temperature zoomed up to 66°F, beating the 53°F record set in 1953 and 1999.

While thermometers dipped to 4.5°F on January 23, no cold records were broken. The coldest temperature recorded for that date was -8.5°F. Upton got 7.5 inches of snowfall as of January 27, just about the normal amount. Cassella's prediction (made on January 4): "We'll get a few coastal storms in late January, February, March or April, which will bring a significant amount of snow."

Keep the snow shovels ready, because Cassella's weather predictions have been correct for the past two years. *The Bulletin* was Diane Greenberg, bringing this information by a Wednesday, February 2, feature on Cassella in the Daily News — one of the many local "users" of Cassella's annual BNL weather records.



Roger Stoutenburgh

Hospitality Committee

The Committee invites all newcomers, guests, and visitors to the following events. More details are posted in the laundry room and on the door of the Recreation Building. For more information, call Hospitality Chair Susan Hart, 821-4257.

Welcome Coffee

To help newcomers settle in at the Lab, coffee is served every Tuesday, 10 a.m.-11:30 a.m., in the lounge of the Recreation Building in the apartment area. Old friends are also welcome.

Parent-Toddler Group

Parents are invited to bring their toddlers to the Recreation Building on Wednesdays, 9:30-11:30 a.m. For more information, call Sarah Zill, 821-2602.

Sweetheart Food-Sharing

For the coffee meeting on February 29, you are asked to bring a little food to share. For more information, call Mimi Luccio, 821-1435.

German-Speaking Group

To participate in an on-site weekly group that meets to speak and/practise German, call Simone Oppenheimer, 929-0043, for more information.

Healthline Events

The events arranged by Health Promotion Specialist Mary Wood, Occupational Medicine Clinic (OMC), offers BNLers the chance to improve their well-being. To register or for more information, contact Wood, Ext. 5923 or wood2@bnl.gov.

2/7: Healthline Lecture

Alan Hedge, Director of Human Factors & Ergonomics Laboratory at Cornell University, will talk about "Computer Ergonomics, Keyboard & Mouse Positioning," on Monday, February 7, at noon in Berkner Hall. Based on his current research, Hedge will explain how to help prevent carpal tunnel syndrome and create a healthy work environment. All are welcome.

2/8: Quit Smoking, Lose Weight

A "Green Seminar," combining hypnosis with behavior modification techniques to help you quit smoking or lose weight, will be held on Tuesday, February 8, 4:30-6:30 p.m., in Berkner Hall. Fee: \$10 for new participants, free for past participants.

2/23: Weight-Watchers at Work — Note: Date Change

The (previously 2/9) registration date for the upcoming Weight Watcher sessions will now be at 11 a.m. on Wednesday, February 23, just before the first session of the program starts at noon. The 10-week program will be held in the south dining room of the Brookhaven Center on Wednesdays, noon-1 p.m. Fee: \$89.

Upcoming Healthline Lecture:

2/29 - "Acupuncture - What You Need to Know," by James Wu.

GLOBE@BNL Club

The GLOBE@BNL Club's next monthly meeting will be Friday, January 14. For more information and the meeting's location call Mike Loftus, Ext. 2960, or Chris Gardner, Ext. 4537; or go to the club's Web page on the BERA activities page at <http://www.berahome.bnl.gov/beraact.htm>.

BROOKHAVEN BULLETIN

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On the World Wide Web, the Brookhaven Bulletin is located at www.pubaf.bnl.gov/bulletin.html. A Weekly Calendar listing scientific and technical seminars and lectures is found at www.pubaf.bnl.gov/calendar.html.

Contact the Employee Relations Committee



Roger Stoutenburgh

If a confidential problem is kept confidential, only those immediately concerned know that it exists or that it has been resolved or alleviated. And so, because the ten members of BNL's Employee Relations Committee (ERC) keep their work confidential, the Committee's excellent record of solving work-related problems that employees have not been able to resolve with their supervisors cannot be well known.

Yet, because of the weight given to ERC recommendations by Lab Director John Marburger, to whom the Committee is responsible, the ERC is often able to make a considerable difference in the work situation of many of the non-bargaining unit employees it was formed to help. As employees who have contacted an ERC member know, the Committee reviews complaints and attempts to hear all sides of an issue before making a recommendation, and no action is pursued without the complete agreement of the employee involved.

Shown above with past ERC Chair Neil Schaknowski (center, seated), Instrumentation Division; and new Chair Nancy Warren (right, seated) are present ERC members: (seated, from left) Arline Willsey, Information Services Division; new member Pamela Mansfield, Information Technology Division; (standing, from left) John E. Barry, Chemistry Department; new member Tina Byrd, Procurement & Property Management Division; Lisa Toler, Department of Advanced Technology, ex-officio member Susan Foster, who is the Employee Relations Counselor in the Human Resources Division; Patricia Meehan, Physics Department; Anne Corr, Financial Services Division; and Joseph Gatz, Safety & Health Division. Not present was new member Marty Woodle, National Synchrotron Light Source Department.

To bring a problem to the ERC's attention, call its special number, Ext. 4005, or contact a member: Barry, Bldg. 729, Ext. 4285; Byrd, Bldg. 355, Ext. 5915; Corr, Bldg. 134B, Ext. 2427; Gatz, Bldg. 348, Ext. 3120; Mansfield, Bldg. 515, Ext. 7286; Meehan, Bldg. 510C, Ext. 3776; Toler, Bldg. 197C, Ext. 2276; Warren, Bldg. 750, Ext. 7548; Willsey, Bldg. 477, Ext. 3490; and Woodle, Bldg. 725C, Ext. 2521.

College Courses

BNL employees may take day, evening or accelerated weekend courses at the Suffolk campus of St. Joseph's College. At Berkner Hall on Wednesday, February 9, 11 a.m.-2 p.m., a college representative will answer questions on St. Joseph's programs.

Employees may receive tuition assistance for approved college courses. For information on BNL's tuition reimbursement program, contact Marilyn Pandorf, Ext. 5251.

Lifeguard Training

BERA will offer a lifeguard training course at the BNL swimming pool, Bldg. 478, beginning Sunday, February 27, at 10 a.m.

The course is open to BERA members who are at least 15 years old, and the class size will be limited.

Registration is taking place now at the BNL pool.

For fee and other information, call Head Lifeguard Susan Dwyer, Ext. 3147 or 3496.

Rifle & Pistol Club

The BNL Rifle & Pistol Club's next monthly meeting will be on Wednesday, February 9, at noon in the AGS second-floor conference room, Bldg. 911. The new requirements for the range will be discussed. For more information, call Joe Gatz, Ext. 4212, or the club's hotline, Ext. 2658; or go to www.berahome.bnl.gov/clubs/rpc/rpc.html.

BERA Returns to Disney World

It's time to sign up for the ninth annual group trip to Walt Disney World in Florida. Sponsored by the Brookhaven Employees Recreation Association (BERA), the seven-day, six-night trip is scheduled from Tuesday, October 26, through Wednesday, November 1. The trip is open to BNL employees, guests, users, on-site contractors, and their families.

The discounted group-package rates per person are as follows:

4 adults/rm.	\$982.85	Jr. age 10-17*	\$609.06
3 adults/rm.	\$1,107.45	child age 3-9*	\$515.11
2 adults/rm.	\$1,356.65	child under 2	\$202
1 adult/rm.	\$2,104.24		

*Rates for ages 3-17 are applicable only when children occupy room with adult(s); children under two pay only air fare..

Included in the rates are:

- Round-trip, non-stop USAir flight between Islip and Orlando;
- Round-trip transportation between Orlando airport and the hotel;
- Baggage handling;
- Six nights at Disney's Polynesian Resort, with daily housekeeping and hotel tax included;
- Seven days unlimited transportation within the Walt Disney World Resort;
- Unlimited admission and use of attractions at the Magic Kingdom, Animal Kingdom, Epcot, Disney-MGM Studios, Typhoon Lagoon, Blizzard Beach, Pleasure Island, River Country and Discovery Island;
- One breakfast or lunch at a Walt Disney World dining location, including a Character breakfast;
- One dinner at a Walt Disney World dining location, including dinner shows.

For more information, call M. Kay Dellimore, Ext. 2873, or Andrea Dehler, Ext. 3347.

Coming Up

On Thursday, February 17, at 11 a.m., in Berkner Hall, Laboratory Director John Marburger will hold an all-employee meeting on the "State of the Laboratory."

DOE Waste Database Available Online

On Monday, DOE announced the establishment of a new database giving the public easier access to information regarding radioactive waste, hazardous materials and facilities across the DOE complex. The Central Internet Database (CID) can be accessed on the World Wide Web at <http://cid.em.doe.gov>.

The CID provides users with several ways to obtain detailed information on department inventories and management activities for low-level, transuranic and high-level waste, contaminated media, spent nuclear fuel, facilities, nonradioactive hazardous wastes, toxic chemicals, and buried transuranic waste.

Stony Brook Trio: Noon Recital, Feb. 9



Three outstanding solo performers from past BSA recitals have joined forces and achieved official recognition as the Stony Brook Trio. Both Laurent Weibel, violin, and cellist Sally Singer are concerto competition winners at Stony Brook. Singer will perform Bloch's concerto "Schelomo" at the Staller Center on 3/11; Laurent will perform in the fall.

Oksana Ezhokina is a familiar figure at Berkner Hall's Steinway piano, appearing recently as soloist and accompanist. The Trio will perform works by Beethoven and Schumann.

Lunchtime recitals are informal, free, and open to all.

Arrivals & Departures

Arrivals

Wolfgang A. Caliebe NSLS
Christopher C. Cacace Physics
Sheng Peng C-A
Andre Peshier Physics
Minfang Yeh Chemistry

Departures

Ronald Dobert Advanced Tech.
Kenneth H. Johnson Plant Eng.
Walter R. Kane Advanced Tech.
Conrad F. Koehler III Chemistry
Richard F. Krajewski App. Science
Frederick Ligon Plant Eng.
Carole McNulty ... Proc. & Prop. Manag.
Alfred Minn Physics
Michael A. O'Donnell C-A
Jeffrey M. Stuart Reactor
Yunjia Tang Biology
John Tighe Finan. Services

Dosimetry badges will be exchanged today, Friday, February 4. Therefore, please place your badge in its assigned rack space before leaving work today.

Send a Love Note To Your Valentine — Today!

(However, since the Bulletin's heart occasionally turns to marshmallow, if your note arrives on Monday, 2/7, it will probably get printed.)



Have you a special message to send to your valentine? Are you looking for a valentine?

Use a Bulletin classified ad form that you mark "Valentine" to send one 15-20 word "love note" to the Bulletin, Bldg. 134, by Friday, February 4, to have your message printed in the Bulletin on Friday, February 11. On the form, you must include your signed name, life number, and extension, but your name will not appear unless it is clearly part of the message. Copy must be deemed tasteful and will be accepted at the Bulletin's discretion.

Scotch Doubles 3/5

Enjoy a day at the Scotch Doubles Tournament, to be held on Sunday, March 5, at 1:30 p.m. sharp, at Port Jeff Bowl. The cost of \$36 per couple includes bowling, prizes, food and baby-sitting services. Application and payment deadline is March 1. After March 1, the cost will be \$40.00 per couple. The tournament is open to all.

Applications and information are available weekdays, 9 a.m.-5 p.m., from: Tracy Blydenburgh, Bldg. 750, Ext. 4422; Debbie Keating, Bldg. 211, Ext. 3888; John McCaffrey, Bldg. 902, Ext. 2075; Ken Koebel, Bldg. 725, Ext. 7351; and Ron Mulderig, Bldg. 326, Ext. 3084.

Lab Will Sell 33 Vehicles

BNL will offer 33 motor vehicles at a public sale conducted as a sealed bid. The vehicles will be available for inspection on Tuesday and Wednesday, February 8 and 9, from 9:30 a.m. to 2:30 p.m., at warehouse T-87, where bid forms will also be available. Bid opening will be Thursday, February 24. For more information, contact Jerry Quigley, Ext. 4527.

Ski Camelback Feb. 16

If more people do not join the BERA-sponsored one-day ski trip on Wednesday, February 16, to Camelback Mountain Ski resort in Pennsylvania, the trip will have to be cancelled. The cost of \$45/person includes bus fare and lift tickets. A new skier package (restricted) is available for \$55; it includes lift tickets, equipment and a one-and-a-half-hour "beginner" lesson. Seniors over the age of 70 pay \$35.

The bus will leave from the BNL tennis courts at 5:30 a.m. and return by approximately 8 p.m. Buy tickets at the BERA Sales Office, open from Monday-Friday, 9 a.m.-1:30 p.m., in Berkner Hall. For more information, call Andrea Dehler, Ext. 3347, or Bob Marascia, Ext. 7779.

Classified Advertisements

LABORATORY RECRUITMENT - Opportunities for Laboratory Employees.

DD7026. SECRETARIAL POSITION - (term appointment) Requires an AAS degree in secretarial science or equivalent experience, excellent word-processing skills, including Microsoft Word, Excel and Outlook. Familiarity with BNL travel systems, PowerPoint, previous experience in a legal office and steno skills are highly desirable. Will provide varied clerical and secretarial support including filing, copying, and updating legal books. Legal Office.

DD8463. SECRETARIAL POSITION - Requires an AAS in secretarial science, or the equivalent, excellent communication skills, comprehensive knowledge of Laboratory practices, policies and procedures, and experience with spreadsheets, databases, and file management software programs. Knowledge of presentation software, specialized tracking software and lab-wide administrative computer systems is also required. The ability to perform complex administrative procedures and a customer service orientation is necessary. Will be expected to develop proficiency in web-based programs. Will be responsible for maintaining confidential administrative records, developing reports, responding to SBMS Help Desk inquiries, arranging conferences and minor editing of web programs. Standards Based Management Systems Office/ESH&Quality Directorate.

OPEN RECRUITMENT - Opportunities for Laboratory Employees and Outside Candidates.

MK7829. POSTDOCTORAL RESEARCH ASSOCIATE - Requires a Ph.D. in biology, chemistry or physics, experience in database, GUI development on Windows and Unix operating systems, familiarity with web development and Internet technology, and experience programming in VB, C, JavaScript and SQL. Must be capable of original work and possess excellent communication skills. Will work on the Human Proteome Project and develop techniques to determine protein structures in a high-throughput mode with one challenging task being the manage-

ment of an overwhelming amount of biological information in a dynamically changing environment. This will be part of an informatics system being developed to serve the evolving needs of the Project. Under the direction of D. Lin. Biology Department.

MK7977. POSTDOCTORAL RESEARCH ASSOCIATE - Requires a Ph.D. in nuclear chemistry, radiochemistry, analytical chemistry, or nuclear physics. Experience in experimental techniques such as nuclear detection methods, data analyses, handling and preparing of radioactive samples, and chemical separations/studies of inorganic species in aqueous and organic media highly desirable. Individual will work for the Solar Neutrino Group, part of the SNO collaboration, searching for neutrino oscillations at the Sudbury Neutrino Observatory. Will be expected to spend extended periods of time at the site of the SNO project in Ontario, Canada. Under the direction of R. Hahn. Chemistry Department.

MK7923. POSTDOCTORAL RESEARCH ASSOCIATE - Requires a Ph.D. in physics, applied mathematics, or related field, with emphasis in computational aspects of physics. The individual will work in the Center for Data Intensive Computing on computational issues arising from the scientific programs at BNL, including simulation and processing of RHIC or ATLAS detector events, accelerator design, computational materials science or medical imaging. Under the direction of J. Davenport. Department of Applied Science.

MK7978. POSTDOCTORAL RESEARCH ASSOCIATE - Requires a Ph.D. in physical chemistry and a strong background in chemical kinetics or dynamics. Will participate in kinetics studies on gas-phase radical-radical reactions important to the combustion systems involving small hydrocarbon radicals using a new apparatus with time-of-flight mass spectrometry as its primary detection technique. The research also includes investigations with a diode laser absorption system on selected reactions. Under the direction of C. Fockenbergh. Chemistry Department.

NS8704. MANAGER, ACCOUNTING - Requires a bachelor's degree in accounting or business, advanced degree preferred, strong computer skills, demonstrated proficiency in oral, written and interpersonal communications, prior supervisory experience and the ability to organize and maintain control over multiple tasks simultaneously. Knowledge of PeopleSoft financials or other client-server-based financial systems and CPA certification is highly desirable. Position is responsible for the overall management of Accounting Operations, regulatory reporting to the DOE; GAAP Reporting for BNL and BSA records and all related self-assessment and performance measure initiatives for these functions. Will provide communication, support, and interfaces with applicable parties (staff, management, internal/external auditors, etc.). Financial Services Division.

DD8555. TECHNICAL POSITION - (term appointment) - Requires a BS degree in a physical science (physics, chemistry, engineering) excellent communication skills, and a demonstrated ability to learn to operate complex apparatus and computer software. Under general supervision, will assist users of the Structural Biology beam lines located at the National Synchrotron Light Source in the execution of x-ray diffraction experiments. Responsibilities include the maintenance and repair of apparatus as well as the performance of routine computer operations. Experience in the operation of the UNIX computer operating system and in electromechanical debugging and troubleshooting is desirable. Biology Department.



Roger Stoutenburgh