

House Science Chairman Reports 'No Word' in Congress on Closing BNL

The Chairman of the U.S. House of Representatives' Science Committee, F. James Sensenbrenner Jr., informed the local media during an on-site press conference on Friday, June 13, that he has "not heard any word whatsoever in Congress about closing Brookhaven."

In fact, the Republican from the Ninth District in Wisconsin stressed throughout the press conference that all the investigation and reorganization involving the Lab "will make Brookhaven a stronger institution than it has ever been."

Sensenbrenner spent four hours on site last Friday morning, as part of his Committee's review of Energy Secretary Federico Peña's May 1 decision to terminate the U.S. Department of Energy's contract with Associated Universities, Inc., and the environmental and management problems leading to that decision.

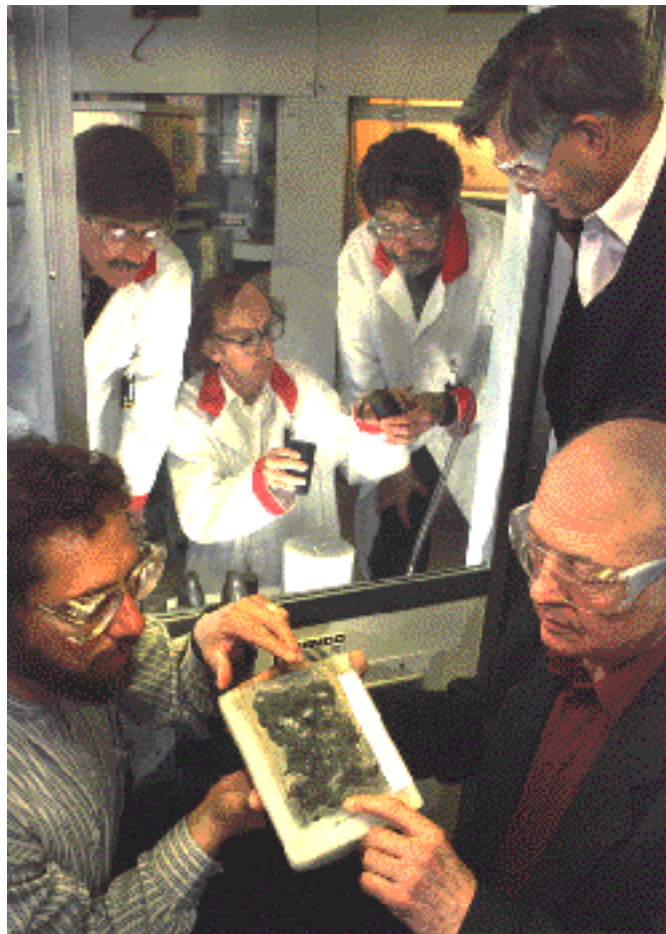
While meeting the press, Sensenbrenner announced that Peña had identified the remaining funds necessary this fiscal year for BNL's Tritium Remediation Project, of which an ad-



Joe Rubino

Congressman Sensenbrenner

ditional \$1 million will have to come out of the Lab's research funds. Under way since May 12, the project, which Sensenbrenner toured, is designed to mitigate the environmental consequences of a tritium plume believed to emanate from a leak of the spent-fuel pool of BNL's High Flux Beam Reactor.



Roger Stoutenburgh

Paul Moskowitz (left) of the Department of Advanced Technology (DAT), shows encapsulated waste to: (right) Yury Sivintsev, Kurchatov Institute, and (right, standing) Vladimir Alexandrov, Institute of Power Engineering, as (behind window) John Heiser, Mel Cowgill and Paul Kalb, all DAT, look on. Grebenkov and Alexandrov collaborate with DAT on a project using furfural polymers to encapsulate components of Russian nuclear submarines before Arctic Ocean disposal.

BNL Technology Helps Nation Dispose of Radioactive Waste

In an environmental age, how do you get rid of 15,067 pounds of toxic, radioactive lead?

Karl Shurberg needed an answer, and he didn't have to look far: Shurberg, Hazardous Waste Management Operations Supervisor in the Hazardous Waste Management Group (HWMG) of BNL's Safety & Environmental Protection Division, turned to a new technology for hazardous waste disposal that was developed at BNL.

Much of the contaminated lead had once been used to shield BNL workers from radiation, and some of it had been stored on site for years, awaiting the development of a safe and easy disposal method. Although some of the lead bricks can be recycled to make new shielding and other materials, lead that has itself become radioactive

cannot be reused.

To dispense with the radioactive lead, Shurberg contracted with Envirocare of Utah, Inc., a hazardous-waste disposal company that uses a technology called macroencapsulation, developed by Paul Kalb, Associate Division Head of the Environmental Waste & Technology Center (EWTC), in BNL's Department of Advanced Technology, and his collaborators.

"Macroencapsulation provides a cost-effective, innovative and environmentally safe way to deal with a problem that exists throughout the DOE complex and elsewhere," said Paul Moskowitz, who heads the center, which develops innovative ways to dispose of various difficult wastes.

In all, more than 520,000 pounds of (continued on page 2)

Subject to DOE Approval, AUI Votes Moncton Director

A news leak to Robert Park of the American Physical Society (APS) resulted in the unofficial announcement in his weekly "What's New" column on the World Wide Web last Friday, June 13, that the Board of Trustees of Associated Universities, Inc. (AUI), had voted the day before to appoint condensed-matter physicist David Moncton of Argonne National Laboratory (ANL) as the full-time Director of BNL.

The Board's decision is subject to approval by the U.S. Department of Energy (DOE), and discussions between AUI and DOE on this subject were planned before the results of the vote were leaked to the physics community and news media via "What's New."

In his column, Park noted: "The trustees of AUI hereby appoint David Moncton Director of Brookhaven National Laboratory effective on or about July 1 for the duration of the current contract." As part of his discussion, Park remarked: "Lyle Schwartz, President of AUI, has been serving as Interim Director... but it was clear that the two roles involved a conflict of interest."

"As many of you have expressed to the Interim Management in recent weeks, Brookhaven is in need of a full-time Director," noted AUI President and BNL Interim Director Lyle Schwartz in an e-mail confirming the news leak sent on Monday, June 16, to all Lab employees who receive electronic mail. So, "Toward that end, the AUI Board of Trustees voted Thursday, June 12, to appoint David Moncton to that position."

David Moncton, Ph.D., is no stranger to Brookhaven: Having done his thesis research at BNL's High Flux Beam Reactor (HFBR), Moncton had joined the BNL Physics Department staff as a tenured physicist in January 1982, performing his research at the HFBR and National Synchrotron Light Source. Moncton left BNL's staff, retaining a guest appointment, when he went to ANL in April 1985.

As Schwartz explained, "Only following DOE approval would any announcement be made; certainly, notification of Lab employees would take precedence over any discussion with the news media. Regrettably, an information leak resulted in [a] notice [regarding the appointment] in (continued on page 3)

BNL Lecture: Surface Electrochemistry — A Non-Superficial Exploration

Surfaces and interfaces play a key role in many natural, as well as industrial processes. Metal corrosion, the conduction of nerve impulses and battery capacity are all examples of processes that depend on the structure and properties of solid-liquid interfaces.

In fact, whenever a solid is exposed to a liquid or a gas, any chemical change that occurs will start on the surface — and often, the structure and properties of the changed surface differ widely from those of the inner bulk of the solid.

Electrochemistry explores the relationship between chemical change at interfaces and electric current. Until about 1980, however, technical difficulties prevented scientists from obtaining microscopic information on electrode reactions.

During the 1980s and early 1990s, sensitive new techniques were developed that widened electrochemistry's range as an investigative tool, providing data at the single-atom level on processes at interfaces.

To describe the new techniques and some of the exciting electrochemical research on surfaces done at BNL, Scientist Radoslav Adzic, Department

of Applied Science (DAS), will give the 328th Brookhaven Lecture.

Adzic's talk on "Surface Electrochemistry: Surface Science With Potential" will be held on Wednesday, June 25. Adzic will be introduced by Senior Chemist Stephen Feldberg, who heads DAS's Chemical Sciences Division, at 4 p.m. in Berkner Hall.

In his discussion, Adzic will show how his research team determined the surface structure of a single layer of atoms of the metal thallium, which has adsorbed bisulfate, a compound of sulfur, oxygen and hydrogen, on a platinum electrode, using a surface x-ray diffraction technique at the National Synchrotron Light Source.

Adzic will explain how surface electrochemistry's potential lies in two directions — pure and applied. First, the fundamental research being done at BNL and elsewhere is still pioneering, with many possible developments ahead. Also, because many industrial products depend on chemical research, new information on materials' structures, properties and adaptability to fulfill different requirements is essential for new processes to evolve.

Radoslav Adzic received his B.S., M.S. (continued on page 3)



Roger Stoutenburgh

Radoslav Adzic, seen with an enlarged surface structure of a thallium-bisulfate interface on a platinum electrode, which was obtained using surface x-ray diffraction at the National Synchrotron Light Source.

Macroencapsulation (cont'd.)

mixed waste — waste with both chemical and radioactive hazards — was shipped to Envirocare's facility, stabilized by the BNL-developed macroencapsulation method, and permanently disposed of last year. The waste came from 22 U.S. Department of Energy (DOE) and naval facilities nationwide, from nuclear power plants, nuclear submarines and nuclear research reactors.

"There's no other disposal process right now for radioactive lead," Shurberg said. "You can't just bury it."

Encased in Plastic

Mixed waste is very difficult to dispose of because it is both radioactive and chemically hazardous. It must be stabilized before disposal to contain the waste physically, thus avoiding leaching toxic chemicals into the groundwater, Kalb said.

Through macroencapsulation, big pieces of hazardous waste are embedded in polyethylene plastic.

The BNL process involves placing the material in a wire cage, which is then suspended inside a large container, such as a 55-gallon drum. Molten polyethylene at about 300°F is then poured into the container. As the plastic cools, it hardens, resulting in a cylinder of milky white plastic that resembles a large, wide candle. Inside the plastic is the toxic waste, entombed and ready for disposal.

Under the current disposal agreement, the waste is first shipped to Envirocare's facility, located in the desert in Clive, Utah, about 80 miles west of Salt Lake City. There, the waste is macroencapsulated, then placed in a large, above-ground cell, along with a mixture of other hazardous debris and soil. Following compaction of the soil-debris mixture, cement is poured into the cell. When it hardens, the result looks like a pyramid with its top removed, said company spokeswoman KayLin Loveland.

Envirocare is the only company in the United States licensed to treat and dispose of mixed waste at the same site, Loveland said.



An aerial view of the Envirocare waste-disposal facility in Clive, Utah, 80 miles west of Salt Lake City.

The only other place in the U.S. licensed for disposal of mixed waste is DOE's Hanford site, in Richland, Washington. Only waste generated at that site, however, can be disposed of there, said Al Rafati, Envirocare's Vice President of Business Development & Marketing.

Envirocare originally became interested in the technology during a 1994 BNL demonstration and finalized its commercialization agreement with DOE in August 1996. The macroencapsulation development and commercialization was funded by DOE's Mixed Waste Focus Area, a major effort by DOE to clean up environmental problems at various national laboratories.

DOE paid Envirocare about \$1 million dollars, which the company matched with \$1 million of its own. In return, the company agreed to dispose of more than 500,000 pounds of waste, most of which came from DOE sites. Rafati estimates that the arrangement saved DOE \$1.5 million in storage and disposal costs.

Rafati also estimated that up to 10 million pounds of radioactive lead remain at DOE facilities around the country. "This will give us an opportunity to help solve DOE's waste problem," he said.

Before Macroencapsulation

Before macroencapsulation was developed and commercialized, disposal of mixed waste was difficult.

The waste was sometimes ground

up and encased in cement, but that made cross-country transportation difficult because only 40,000 pounds can be shipped per truckload, said Mike Clancy, Technical Projects Supervisor in the Hazardous Waste Management Group, who had worked with Shurberg to dispose of the lead.

"If you have lead chunks and you put cement around it, then the package gets very heavy," he explained.

Another method involved encasing the waste in an epoxy resin, but it was sometimes difficult to get the epoxy chemistry right, Clancy added.

Effective Disposal Method

More often, the waste was stored on site at DOE labs for years, awaiting the development of a more effective disposal method. Some of that backlogged waste was permanently disposed of by Envirocare this year, using macroencapsulation.

Macroencapsulation "fills the gap for inherently hazardous material that does not have other treatment options," according to Dave Eaton, a Regulatory Specialist at DOE's Idaho National Engineering & Environmental Laboratory (INEEL), who works with industrial partners and regulators to put new waste-disposal technologies to use, and who helped develop the commercialization agreement with Envirocare.

"It won't save the world," he said, "but it's one more step that allows DOE to comply with environmental laws on a real-time basis." — Dan Ferber

DOE Solicitation Plan Ready for Comment; Workshops Next Week

The Strategic Solicitation Plan, the U.S. Department of Energy's (DOE) second public step in the process to select a new contractor to manage and operate BNL, was released on Monday, June 16, for prospective offerors, members of the public, and Lab employees and retirees to read and comment on.

Containing details regarding DOE's proposed approach to carrying out the selection process, the Strategic Solicitation Plan is available on the World Wide Web — at <http://www.ch.doe.gov/bnlseb> — on the home page of the DOE's Chicago Operations Office.

In general, the Strategic Solicitation Plan describes: BNL, its scientific mission and physical site; DOE's involvement of employees, the public and prospective offerors in the solicitation process; the Source Evaluation Board's selection process; DOE's approach to this procurement; the contract documents involved; etc.

As its next public step, DOE will conduct three Strategic Solicitation Plan Workshops: the first, for Lab employees and retirees, will be held on Tuesday, June 24, from 11 a.m. to 3 p.m. in the Berkner Hall auditorium; the second, for the general public, will also take place on June 24, but from 6:30 to 10 p.m. at Longwood Junior High School in Middle Island; and the third, for prospective offerors, on Wednesday, June 25, 8:30 a.m. - 4:30 p.m., at the Radisson Hotel Islandia in Hauppauge.

During those workshops, DOE will solicit comments on the plan, particularly on the proposed procurement approach, including the potential evaluation criteria and their relative importance. While BNL employees and retirees and members of the general public may attend any of the three workshops, prospective offerors may not attend the workshop for employees and retirees.

After considering the comments received during these workshops in developing the Request for Proposals (RFP), DOE will issue the RFP regarding Brookhaven's management and operation in early July, also from the Chicago Operations Office Home Page.

The RFP will detail the qualifications that DOE desires and the expectations that it will have of the Lab's next contractor. Then, in late July, DOE will hold a Preproposal Conference for prospective offerors and anyone else interested in attending; during this conference, the technical aspects of proposal preparation will be discussed. Proposals will be due in late August.

The Source Evaluation Board will evaluate the proposals based on the Source Evaluation Criteria. This board will present its findings to the Source Selection Official, so he can make the decision on BNL's next contractor, which is expected in early November.

DAT Develops New Ways to Contain Hazardous Wastes

Macroencapsulation is just one of several technologies that are being developed at BNL's Environmental Waste Technology Center (EWTC) to help safely dispose of hazardous chemical and radioactive wastes.

In fact, negotiations are under way with the U.S. Department of Energy (DOE) to commercialize a related technology called microencapsulation, said Paul Kalb, Associate Division Head of the Center. "We're hoping that it will happen within months," Kalb said.

Microencapsulation methods are being developed to dispose safely of a variety of potentially dangerous wastes: Radioactively contaminated fireplace ash from the country of Belarus, an area affected by fallout from 1987's Chernobyl explosion, has been safely microencapsulated in plastic; so has salt, sludge, and ion-exchange resins generated during routine processing of nuclear materials at DOE facilities.

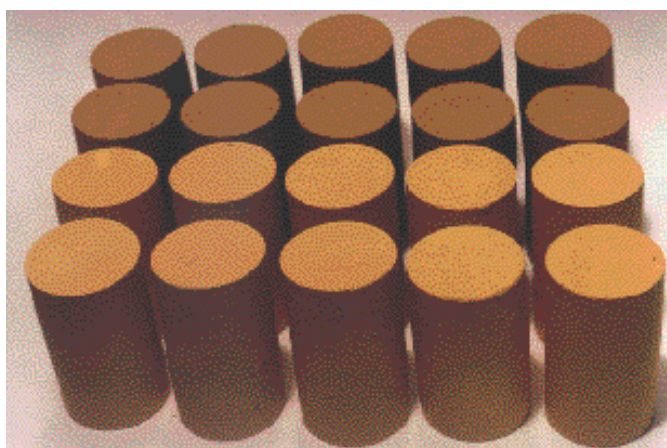
Microencapsulation is used for particles smaller than 60 millimeters in diameter and differs from macroencapsulation in other ways as well, Kalb said. Instead of encasing large chunks of material in polyethylene plastic, the molten plastic is continuously mixed with, for example, the ash. The mixture is extruded into a container, where it cools and hardens. The result is a solid plastic-like object that can be safely disposed, thus reducing the risk that hazardous materials will blow away or leach into groundwater.

Researchers at EWTC are also hard at work improving the microencapsulation process and developing new technologies to help dispose of a variety of difficult materials.

New developments at the center include:

- **Use of recycled plastic:** Virgin low-density polyethylene has been used so far for microencapsulation, but Sung Paal Yim, of the Korea Atomic Energy Research Institute, is testing other plastics at EWTC, such as high-density polyethylene from soda bottles, and polypropylene from the lids, in a project sponsored by the New York State Department of Economic Development.

- **Stabilization of uranium powder:** Uranium oxide, a hazardous product of uranium processing, has been microencapsulated with polyethylene by EWTC researchers Jay Adams and Paul Lageraen to create a new material called "Du-Poly." Because uranium has a high atomic number, it could be useful, when microencapsulated,



Microencapsulated uranium oxide, dubbed "Du-Poly" by BNL researchers who developed it in the Environmental Waste & Technology Center of the Department of Advanced Technology, may be useful for radiation shielding or as ship ballast.

as radiation shielding; because it is just plain heavy, it could be useful as ship ballast.

- **Microencapsulation improvements:** A new process called kinetic mixing expands the types of wastes that can be treated. Until now, moist samples such as contaminated mud could not be directly microencapsulated because water in the sample would evaporate, generating a foamy plastic which did not solidify properly. By driving the mixture of waste powder and plastic pellets with a high-shear steel mixing blade, enough heat is generated to drive the moisture off before the plastic melts, solving the problem.

- **Disposal of radioactive mercury:** Mercury is a toxic metal that is liquid at room temperature; make it radioactive and it's almost impossible to dispose of. Nevertheless, EWTC workers, supported by the DOE Mixed Waste Focus Area and EcoLex, Inc., have developed a two-stage process that converts the mercury into a solid for safe disposal. First, a compound called sulfur polymer cement is reacted with the mercury to form a mercuric sulfide, a process similar to the formation of mercury amalgam for dental fillings. The mixture is then heated and more sulfur polymer cement is added. After cooling and solidifying, it is ready for disposal.

- **Disposal of Russian nuclear submarine components:** Re-

searchers at EWTC are collaborating with Russian scientists to test the stability of encapsulated radioactive waste from Soviet and Russian nuclear submarines. The Russians had used a polymer called furfural to flood nuclear reactor chambers of submarines before dumping the ships in the Arctic Ocean, and the U.S. Environmental Protection Agency (EPA) now wants to know if the material has been safely disposed of. The project was funded in part by the EPA and is a key part of the 1996 Arctic Military Environmental Cooperation agreement, a trilateral agreement between Russia, the United States and Norway, said John Diamante, Senior Scientific and Technical Advisor at the EPA's Office of International Activities. The agreement has been discussed at summit meetings between U.S. President Bill Clinton and Russian President Boris Yeltsin. — Dan Ferber

Science Museum to Host Open House Before Closing for Relocation

Next Monday, June 23, take a walk through the history of BNL's science, through the history of modern science: Take a walk through the BNL science museum.

Stop, perhaps, at the "electric balcony," where a generation of schoolchildren have gazed in fascination as they learned the magic of light, sound, electricity and magnetism. See the myriad exhibits where for 20 years community members have marveled at the miracles of modern physics, chemistry and biology on Summer Sundays.

Take time on Monday for that walk through the BNL Science Museum, in Bldg. 701, which housed the former Brookhaven Graphite Research Reactor (BGRR) — it will be your last chance.

The 20-year-old museum in the spacious home of the former BGRR, will open its doors for the last time on June 23, between 11 a.m. and 2 p.m., for an employee open house, says Museum Programs Supervisor Janet Tempel, Public Affairs Office.

Tempel, a former teacher who has a master's degree in museum management, has built the museum into a world-class facility during her 16 years overseeing its operation, but, on June 30, she must close it for good.

The science museum is relocating to a newer, more modern facility because Bldg. 701 is not handicapped-accessible and has no bathrooms for museum-goers. In addition, the ground beneath the building and a nearby auxiliary building are slated for Superfund remediation, to clean up contamination dating from the 1950s and '60s, when the reactor was operating.

After July 1, the museum will move into Bldg. 935, a smaller, industrial-type building located on site at the southwest corner of Fifth Avenue and Railroad Street. That building is currently used to manufacture magnet components for the Relativistic Heavy Ion Collider Project; it is slated to open as a science museum October 1.

While she is happy to have a new place for the museum, Tempel is sad to lose the old one. "It's really the closing of an era," Tempel says. "We're losing something really wonderful."

Once Upon a Time

The BNL Science Museum is unique: Where other science museums are housed in, well, museum buildings, BNL's museum was built around what was once a working nuclear research reactor.

Inside the cavernous building, Tempel built the museum's colorful exhibits under, around and on top of the long-dead graphite reactor, lending an authenticity to the place that can't be duplicated.

The high-energy physics section on the top floor, where visitors learn about the Alternating Gradient Synchrotron and experiments in particle physics,



A serene scene of BNL Science Museum-goers.

sits next to 26-foot-long boron steel bars which once functioned as control rods for the reactor.

And several stories below, the electric balcony, where schoolchildren build simple series and parallel circuits, sits next to plugged beam ports, where physicists shot high-energy neutrons at their targets decades ago.

"In the world of science museums," Tempel says, "this is a really fabulous and special place."

Bits of History

The museum is full of bits of BNL history, mingled with information on recent advances.

The BGRR was operated continually from 1947 to 1968, and tucked away in one corner of the museum is a blackboard that was used by workers to communicate the reactor's operat-

ing power, in megawatts, and other important information. On the blackboard, which is dated June 10, 1968, a technician wrote the next shutdown time: "The Endless Sleep."

One exhibit shows life-size models of early radiation workers, dressed in air-filled, white vinyl suits that resemble astronaut suits, next to a detailed Plexiglas-encased model of BNL's early High Intensity Radiation Development Laboratory (HIRDL).

BNL Science, Past and Present

Elaborate models of BNL's big machines, past and present, are scattered around the museum, built by the Laboratory's now-defunct model shop.

Visitors to the medical research exhibit learn about boron neutron capture therapy, an experimental, BNL-developed method to treat a type of

intractable brain cancer.

Placed at strategic points around the museum exhibits are a series of life-size, wooden cutouts of scientists, painted bright yellow. Each cutout has pictures of the scientist as a child, and as an adult, hard at work in the laboratory. Posted on the cutouts are personal recollections about why they loved science as a child, and why they chose it as a career.

Tempel says the cutouts, along with the colorful exhibits and hands-on demonstrations, accomplish their goal: The students are inspired.

Inspired Student Scientists

Richard Thomas, a sixth grade teacher at Helen B. Duffield Elementary School in Ronkonkoma, has brought his students to the museum each year since 1981. Of the 31 children in the class that year, ten, including his daughter, have pursued a career in science.

For the students, he says, the visit to BNL is the culmination of a year of learning about science. It's their opportunity to see the real thing. "It's a really special place in my life," he says. "It's fantastic for the kids."

The sixth-graders especially enjoy seeing the graphite reactor. The BNL museum is superior to other science museums, he says, because the children are always treated with respect, the guides are expert in their field, and the students always learn a great deal from the experience.

"They always mention it," Thomas says. "They'll come back the next year and tell me about what they learned in science and say, 'Hey, I remember that from Brookhaven.'"

Thomas was glad to hear the museum will reopen and will continue to take his students to the new museum. "I'll be out there and involved," he says.

And Tempel will do her best to assemble the new museum into a facility just as special as the current one. "We're going to take 22,000 square feet of exhibits and stuff it into just under 6,000 square feet," Tempel says. "We'll see what we can do with it."

— Dan Ferber



A hair-raising experience with the plasmasphere.



Duplicated in the duck-into kaleidoscope.

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Moncton

(cont'd.)

Bob Park's . . . column on the Web and [this] led to a subsequent *Newsday* article . . ." which appeared on Saturday, June 14.

According to Schwartz, "No one was more surprised than Dr. Moncton . . ." As a result of the vote's premature disclosure, Moncton released the following statement:

"I have been asked by [AUI], the present contractor for [BNL], whether I would consider a temporary assignment of four-to-six months' duration as Director of Brookhaven. This assignment would be for the balance of the contract term that AUI [at present] holds, after which I would resume my current position as [ANL's Associate

Director] for the Advanced Photon Source. Further consideration on my part awaits the [DOE's] approval and support of AUI's proposal, and [ANL's] agreement to allow the appropriate leave period. Any implication that such an appointment has already been made is incorrect."

Schwartz added, "The intention of AUI has always been to provide this Laboratory with the best management possible in this difficult situation. My own appointment as Interim Director was always viewed as temporary until our search could be completed. AUI will proceed with the discussions with DOE regarding Dr. Moncton's appointment and will make appropriate announcements as warranted."

— Marsha Belford

BNL Lecture

(cont'd.)

and Doctorate of Science in Chemistry at the University of Belgrade (UB), in 1965, 1969 and 1974, respectively.

His first link with BNL was as a UB visiting scientist in 1979, while he was also Research Director for Belgrade's Institute of Electrochemistry, where he served as Director, 1984-92. In 1992 he joined DAS, retaining his 1991 professorship at UB. He has twice won the Annual Award of the City of Belgrade for Natural Sciences.

After the lecture, all are invited to join Adzic for discussion and refreshments. To have dinner with the speaker at a restaurant off site call Eileen Morello, Ext. 4519, before noon on Thursday, June 25. — Liz Seubert

Long Term Care Plan Enrollment Open

From July 1 through July 31, a special enrollment period is being held for the Long Term Care Plan offered by Associated Universities, Inc. (AUI).

The plan covers a wide range of personal care, health care and social services for people who suffer disabling conditions or long-lasting disease. A variety of options helps each participant get the level of coverage that meets individual needs and budgets.

These options will be described in a flyer to be mailed next week via Lab mail to active employees and to the home addresses of retirees.

To learn more about the plan, come to Berkner Hall between 11:30 a.m. and 1:30 p.m. on Wednesday, July 16, when a representative from Aetna Life Insurance Company, which underwrites the plan, will be available. At noon in the auditorium, the rep will give a one-hour presentation of the plan's key elements.

TIAA-CREF Pensions: Tax Status at Risk

According to TIAA-CREF, a provision of the June 9 tax-relief proposals from the House Ways & Means Committee would revoke the tax-exempt status that TIAA-CREF has held since 1918. This would reverse the 1986 Tax Act which taxed TIAA-CREF's non-pension business, but reaffirmed pensions as tax-exempt.

Retirement savings are now tax-exempt for all workers. So the June 9 provision would tax *only* the academic community, reducing educators' retirement incomes by 3-5 percent annually.

For more information regarding this proposal, contact TIAA-CREF or your U.S. Representative, or visit the World Wide Web location <http://www.tiaa-cref.org/message.html>.

Free Shuttle Bus For Students, Visitors

The Lab will provide complimentary shuttle services to local attractions, such as Splish Splash and Smith Point beach, beginning Friday, July 4, and continuing every Saturday or Sunday through August 23, with the exception of Saturday, July 19, the day of the BNL Family Picnic.

Each trip will last approximately four hours. The shuttle will be available for students and visitors living on site who do not have access to transportation on weekends. See next week's Bulletin for more information.

ConOps Program: Coordinators to Meet

The Quality Management Office will provide conduct of operations (ConOps) coordinators with an overview of the BNL ConOps Program on June 25, in Berkner Hall, Room B, 9:30-10:30 a.m. A summary of the ISME ConOps issues will be discussed. The meeting is open to quality representatives and other interested Lab personnel.

If you plan to attend, call Gina Bernard on Ext. 3689, or e-mail ginab@bnl.gov by Monday, June 23.

Arrivals & Departures

Arrivals

Erika L. Carlsen.....Env. Restor.
Grace G. Tsai.....RHIC

Departures

This list includes all employees who have terminated from the Lab, including retirees:

Aristodios J. Philippacopoulos.....
.....Adv. Tech.
Larry D. Smith.....Cont. & Proc.
Thomas R. Thurston.....Physics

1997 Basketball League Champions

Magic and the PE Wolfpack had tied the regular season 9-1, with one game to go. By taking a bite out of the clock in that final regular season game, the Wolfpack won the regular season by a 17 to 13 point spread. During the best-of-three-games championship playoffs, Magic was jinxed during the first game. But the magicians worked their wizardry during the second two games, to possess the 1997 Basketball League Championship. A Basketball team for the past five years, Magic has been League Champion for three out of the past four years. This year's players include:

(back, top) captain Mitch Williams; (middle, from left) Al Langhorn, co-captain Terry Buck, Jerry Gaeta, Greg Mack, Ray Jackson; and (front, seated) Fred Maier. Missing are: Chris Ingoglia, Ralph Garappolo, Hector Machado and Pete Ratzke.



Roger Stoutenburgh

Outreach Workshop

Coping With Teenage Lawyers

If you feel prosecuted in your own home and are subject to relentless cross-examination, then you must have a teenager. These young lawyers-in-training want to expose all of your faults not only to yourself, but to the world, in hopes of proving you evil and your rules — especially those regarding making one's bed, not allowing tobacco or drugs, and obeying before-midnight curfews — wrong!

To learn "How to Cope With Your Teenage Lawyer," attend the next Outreach workshop sponsored by the Employee Assistance Program (EAP) of the Occupational Medicine Clinic. To be held next Friday, June 27, the workshop will be presented by clinical psychologist Val Brown, Ph.D., who is cofounder of the Zengar Institute in Port Jefferson and whose forthcoming book is titled *SORTing It Out! Using Solution-Oriented Rapid Therapy With Angry Adolescents*.

To register for this workshop, return the completed bottom portion of the Outreach flyer recently sent to all employees to EAP Staff Psychologist Dianne Polowczyk, Bldg. 490, by Thursday, June 26. For more information about EAP, call Ext. 4567.

Equipment Demo

On Thursday, June 26, from 11 a.m. to 1:30 p.m. in Berkner Hall, Rittal Corporation will demonstrate its electronic packaging lines, including 19-inch enclosure systems, data-communications/telecommunication products for 19-inch mounting and VME packaging products.

IBEW Meeting

Local 2230, IBEW, will hold its regular monthly meeting on Monday, June 23, at 6 p.m., in the Knights of Columbus Hall, Railroad Avenue, Patchogue. A meeting will be held for shift workers at 3 p.m. at the union office. The agenda includes regular business, committee reports and the president's report.

Softball

Results reported as of June 13

League E1		League M1	
Phoubars	6-0	Stingrays	5-0
Magnuts	4-1	Gour-Mets	5-1
Blue Jays	3-2	Happy Hour	4-1
System	3-3	Hit 'n Run	2-4
Cleen Sweep	1-5	OER Wellheads	1-5
Hammerheads	0-6	Good Timers	0-6
League E2		League M2	
CCD	4-1	Varmints	3-0
Phytinphytos	4-1	Mixed Nuts	1-1
Scram	4-1	Skeleton Crew	1-1
Contaminators	3-1	No Names	1-2
Gas House Gorillas	3-2	What's on 2nd	0-2
Feds	2-2	League E3	
Hy Tech	2-3	Sure Fire	4-1
Lights Out	2-3	Bombers	3-2
Mesocyclones	0-5	Sultans of Swat	2-3
Phase Out	0-5	Medical	1-4

Computing Corner

The Computing & Communications Division offers the following in July:

Introduction to HTML will be held on Thursday, July 17. To register, send an ILR for \$210 to Pam Mansfield, Bldg. 515, by June 30.

PC training classes on: 7/8, beginner Word; 7/9, intermediate PowerPoint; 7/11, intermediate EXCEL; 7/22-23, 2-day class for beginner Project; 7/23, basics, Windows 95; 7/25, advanced EXCEL; 7/28, intermediate Word-Perfect 7. To register, contact Pam Mansfield, Ext. 7286, or Julie Guhring, Ext. 5196, or e-mail pam@bnl.gov.

Amateur Radio

The BERA Amateur Radio Club will meet at noon, Thursday, June 26, in Room C, Berkner Hall. The agenda includes a discussion of field day, which will be held on Saturday and Sunday, June 28 & 29.

All Lab employees, guests and licensed amateur-radio operators are invited to attend. For more information, call Chris Neuberger, Ext. 4160, or Nick Franco, Ext. 5467.

Volunteers Needed

Healthy men and women over 18 years of age are needed to participate in MRI brain-imaging studies. A fee will be paid. For more information, call Noelwah Netusil, Ext. 8032 after 9:30 a.m.

Coming Up

50th Anniversary Lecture

At the next BNL 50th Anniversary Distinguished Lecture, Nobel laureate Robert Richardson will talk on "The Discovery of Superfluid Helium-3," at 4 p.m. on Tuesday, July 1, in Berkner Hall.

BERA Concert

The next BERA Concert will feature critically acclaimed pianist David Korevaar, playing at 8 p.m. on Wednesday, July 9, in Berkner Hall. Purchase tickets at the door: \$14 general admission, \$9 for seniors, and \$5 for students and youths under 18.

For more information, call Ext. 3550 for a recorded message.

BERA Trips

This summer, BERA will offer the following trips. For more information, call M. Kay Dellimore, Ext. 2873, or Andrea Dehler, Ext. 3347.

Summer Bus Trips

- **New York Yankees** vs. Seattle Mariners, night game, upper tier — Friday, July 25, \$25/person;
- **Bronx Zoo:** ZooVenture includes general admission, zoo shuttle round-trip, Bengali Express Monorail, Skyfari cable car one way, children's zoo, Worlds of Darkness, World of Reptiles and Jungleworld — Saturday, July 26, \$26/adult, \$24/child of 12 & under;

- **Atlantic City:** including hotel and casino package, on the boardwalk, the casino's name and amount of coin return to be announced — Saturday, August 9, \$25/person of 18 years or over only;

- **Six Flags/Great Adventure Park:** features Batman Ride, the Right Stuff MACH1 Adventure, the Great American Scream Machine, the Viper, a water & stunt show, and Skull Mountain indoor roller coaster.

All trips include admission and roundtrip bus transportation from BNL on a video-and-bathroom-equipped bus. Prepaid reservations will be taken first-come, first-served, at the BERA Sales Office in Berkner Hall, weekdays, 9 a.m.-1:30 p.m.

Last Call for Disney World

Spaces remain for the seventh annual BERA trip to Walt Disney World in Orlando, Florida. The seven-day, six-night trip is scheduled for October 23-29, and all BERA members and their families are invited to go.

BNL Toastmasters

The BNL Toastmasters Club invites adults who are BNL employees and guests to take the first step toward becoming a confident, poised speaker — by attending one of the Toastmaster meetings held on the first and third Tuesday of each month, at 5:20 p.m. in the Biology Bldg. 464, room 160.

Toastmasters International is a nonprofit communications and leadership training program with over 170,000 members worldwide. In this learn-by-doing program, members study and practice speechmaking or impromptu speaking skills in a friendly, non-threatening environment. If you are interested in attending a meeting, call Nand Narain, Ext. 5435, or Ronnie Evans, Ext. 2851.

See Supplement for other news and for classified ads.

Hot Summer Jam

Get cool with music by E.T. on Friday, June 27, at the Hot Summer Jam, sponsored by BERA for all BNL employees, visitors and their guests at the Rock Hill Country Club, Manorville, starting at 6 p.m.

The fee of \$5 at the door includes hors d'oeuvres; a cash bar is available. For more information, call Charles Gardner, Ext. 5214.

**Classified
Advertisements**

Placement Notices

The Laboratory'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 complete list of all job openings; use a TDD system to access job information by calling (516) 344-6018; or access current job openings on the World Wide Web at <http://www.bnl.gov/JOBS/jobs.html>.

SCIENTIFIC RECRUITMENT - Doctorate usually required. Candidates may apply directly to the department representative named.

SCIENTIST - Trained in physics and/or engineering, to join R&D team involved in superconducting-magnet development for particle accelerators. Responsibilities will include superconductor testing, magnet design and construction, and accelerator-lattice and interaction-region optics design. Contact: Peter Wanderer, RHIC Project.

POSTDOCTORAL RESEARCH ASSOCIATE - Trained in performing relativistic heavy-ion experiments. Will participate in the ongoing data analysis of completed AGS E802/859/866 experiments, as well as assist in developing detectors for the approved BRAHMS experiment to be built at RHIC. Junior scientists with relevant postdoctoral experience may be considered for appointment at the assistant-scientist level. Contact: Chellis Chasman, Physics Department.

OPEN RECRUITMENT - Opportunities for Laboratory employees and outside candidates.

DD 4053. TECHNICAL POSITION (Crane and Elevator Inspector) - Will perform inspections of overhead cranes, hoists and mobile lifting equipment; perform inspections of passenger and freight elevators; and witness acceptance tests of new elevators and cranes. Will develop procedures for material-handling operations, and develop and implement training programs related to material handling. Will also perform construction-safety inspections and evaluate rigging plans. Must have significant experience as well as training in crane and hoist inspections and rigging safety. Excellent communication skills, and demonstrated interpersonal and computer skills (MSWord, WordPerfect, Access, EXCEL) are required, as is the ability to maintain certification for ANSI/ASME QEI-1 Qualified Elevator Inspector. (reposting) Plant Engineering Division.

NS 4055. ENVIRONMENT, SAFETY & HEALTH ENGINEER - Requires a bachelor's degree in environmental, industrial or chemical engineering, and CSP or PE certification. At least five years' experience in the development and implementation of ES&H programs is necessary, as are strong communication and computer skills. Will be responsible for providing guidance and technical support, managing small environmental projects, and planning, developing, implementing and promoting the ES&H programs within the Division. Plant Engineering Division.

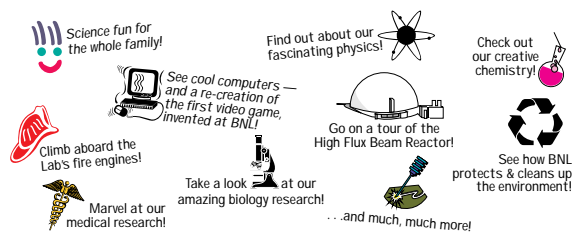
Tell your friends and neighbors!

BNL's having a

F R E E

Open House!

Sunday, June 29 • 10 a.m. to 3 p.m.



Spread the word!

Pick up fliers in the Public Affairs Office, Bldg. 134

to post in your community and give to friends!

(Of course, the entire BNL community is welcome too!)