BROOKHAVEN BULLETIN
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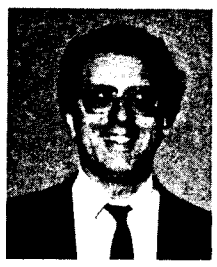
BROOKHAVEN NATIONAL LABORATORY

Denis McWhan Takes NSLS Chair

As a long-time user of the National Synchrotron Light Source (NSLS), Denis McWhan "knows what it's like to be on the floor — what the operating conditions are and what to expect." On Tuesday, May 1, McWhan moved from the NSLS experimental floor to its upstairs department offices, when he became Chairman of the NSLS Department.

McWhan's appointment was announced on April 25 by BNL Director Nicholas Samios, who said, "I am happy to announce that Dr. Denis B. McWhan of AT&T Bell Laboratories has accepted the position . . . Dr. McWhan has had a long relationship with the Light Source as a user, which has culminated in his service for the past year as Chairman of the Users Executive Committee. He has also been responsible for the management of the five AT&T x-ray beam lines at NSLS, and he has had a distinguished career as a researcher in solid state physics.

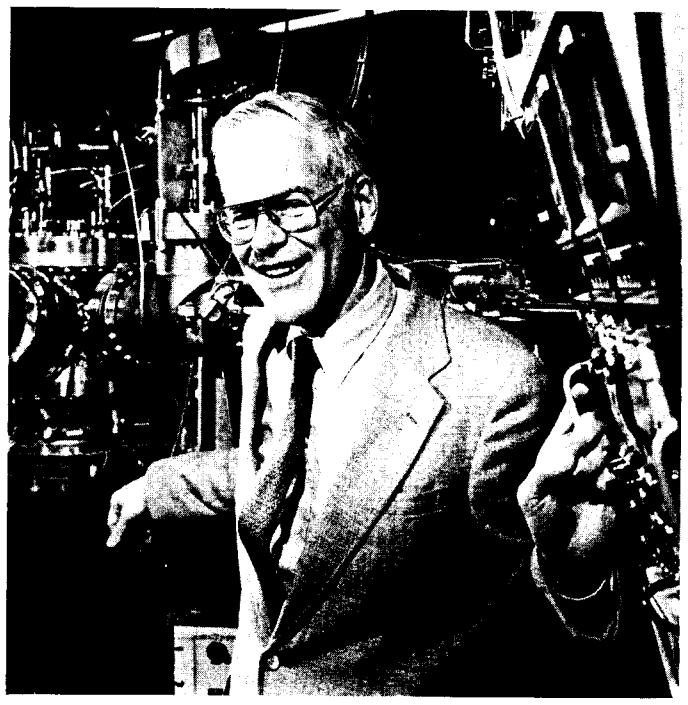
"As Denis takes on this position," Samios continued, "I would like to thank Sam Krinsky for the outstanding job he has done as Acting Chairman since September. This has been a difficult job, and Sam has performed magnificently. We are pleased that he will continue to serve as Deputy Chairman of the Light Source in the future."


Samuel Krinsky

As Samios pointed out, "The Light Source is now the premier synchrotron radiation source in the world, with 1,500 users from many different disciplines and organizations, and outstanding research results are commonplace. Denis and Sam will have the task of maintaining this strength and leading to a new and stronger future."

This is a challenge McWhan relishes. As one who began using the High Flux Beam Reactor in 1974, and who has used the NSLS since the early 1980s, he observed, "It's exciting to realize that BNL is the only laboratory where condensed matter scientists have access to synchrotron radiation, neutron, positron and muon sources.

"In terms of synchrotron radiation, the Light Source is the world's leading facility because of the dedicated work of the NSLS staff over many years. In addition to providing synchrotron radiation to our 1,500 users, we look forward to the NSLS staff's continuing forefront research and development in synchrotron sources and insertion devices and, in collaboration with the Accelerator Test Facility, possible new sources of radiation, such as ultraviolet free electron lasers. We will rely on the users and accelerator physicists to define what the next generation of sources should be and to make the scientific case for them."


Denis McWhan

Though he expects his own experience as an NSLS user to be invaluable to him in his new role, McWhan expects to spend far more time running the Light Source than using it. "I will try to be part of a couple of the magnetic scattering experiments this summer, but the challenge of keeping the NSLS as the premier synchrotron radiation facility through the 1990s will take all of my time," he said.

The experiments to which he refers are studies in magnetic x-ray scattering, a technique that he, BNL Deputy Director Martin Blume and BNL Physicist Doon Gibbs have been developing for several years. This work, said McWhan, "has enabled us to learn new things about a class of materials called heavy fermion superconductors."

Magnetism is a common focus to several NSLS experiments, a fact which precipitated the "Workshop on the Use of Synchrotron Radiation in the Study of Magnetism." It will take place at BNL on Wednesday, May 16, in conjunction with the NSLS Annual Users' Meeting, May

(continued on page 2)

Tech Transfer Rewarded

Three Department of Applied Science researchers have won Federal Laboratory Consortium Awards for Excellence in Technology Transfer.

The winners are Leonard Hamilton and Paul Moskowitz, for their work with the photovoltaics industry, and Meyer Steinberg, for his efforts in promoting HYDROCARB, a novel process to make clean carbon fuel.

The Federal Laboratory Consortium (FLC) is made up of more than 500 federal laboratories and research centers. To date, 12 BNL researchers have won FLC Technology Transfer Awards since the award program was established in 1984.

Hamilton and Moskowitz are credited with identifying and evaluating health and safety hazards, as well as risk management approaches for new manufacturing processes and materials used in photovoltaic energy systems.

Having begun this work in 1979 for the Photovoltaics Technology Division of the U.S. Department of Energy (DOE), they point out that DOE had the foresight to incorporate environmental, health and safety concerns early in the development of photovoltaics.

As part of their work, Hamilton and Moskowitz prepare environmental audits of industry and university facilities; train personnel on risk assessment/management techniques; network with industry, university and federal agencies on environmental, health and safety issues; and operate an electronic bulletin board for exchanging information.

Recently, they began a cooperative program with the Solar Energy Research Institute, Photon Energy Inc., Siemens Solar Inc., and ASARCO Inc. to evaluate the feasibility of recycling hazardous solid wastes produced by the photovoltaics industry. The program will assist industry in developing environmental controls at minimal cost. It will also help to ensure that further development of the technology will not be impeded by future environmental hazards.

Hamilton and Moskowitz give thanks to Alec Bulawka, project officer, and Robert Annan, director, of DOE's Photovoltaics Technology Division, for sustained funding of their program.

In winning his tech transfer award,

(continued on page 2)

Coming Up

Keith Jones, Senior Physicist in the Department of Applied Science, will present the next Brookhaven Lecture on Wednesday, May 16, at 4 p.m., in Berkner Hall. His topic will be "From Anthracite to Zeolite — Elemental Analysis Using Photon and Ion Beams."

Tiger Team Ends Visit

Berkner Hall was filled to near capacity on Friday, April 27, when these members of the Tiger Team gave closeout comments on their month-long assessment of BNL's compliance with applicable environmental, safety and health regulations. The Tiger Team's findings will be issued as a report in about one month, after which they will be summarized in the Bulletin.

The U.S. Department of Energy (DOE) team was headed by John Tseng (standing above), who was in charge of three subteams of technical experts: (from left) Joseph Boda headed the subteam on environmental compliance; Oliver Lynch was on the subteam appraising safety and health compliance, which was headed by Yo Taik Song; and Wayne Hibbitts led the subteam evaluating management policies and practices.

Along with the subteam representatives, Tseng expressed his appreciation for the "cooperation and support we have received from the Lab — it's tremendous." Tseng also noted that during this assessment, BNL set two Tiger Team records — as the first non-defense facility to be assessed and the first facility to host an all-DOE team.

In thanking the Tiger Team for their efforts, BNL Director Nicholas Samios observed that a good scientific program goes hand in hand with a good safety and environmental protection program. "We have been enormously successful in our scientific endeavors," he said, "and I know we can achieve the same level in safety and environmental matters.

"I want to thank the staff, technicians — everyone at Brookhaven," Samios added, "for their efforts in preparing for the Tiger Team, assisting them, and now responding to their findings. Good job!"

Associate Director for Applied Programs Sy Baron (second from right) congratulates (from left) Paul Moskowitz, Leonard Hamilton, and Meyer Steinberg for winning 1990 Federal Laboratory Consortium awards for technology transfer. — Photos on this page by Stoutenburgh

Harvey Brooks to Deliver Haworth Lecture on Monday

"Science and Technology Policy and the American Competitiveness Debate" will be the topic of a Labwide lecture by the Lab's sixth Haworth Distinguished Scientist, Harvey Brooks. The talk will take place on Monday, May 7, at 4 p.m. in Berkner Hall and will be followed by a reception.

An emeritus professor of applied physics and of technology and public policy at Harvard University, Brooks began his appointment last January, but this lecture was postponed due to snow.

During the talk, Brooks will review not only the proposed causes of the decline of American competitiveness in the world market, but also the suggested solutions to this problem. He will especially focus on the role that science and technology play, and how government policy regarding basic research and high technology affects American competitiveness.

Harvey Brooks

Brooks took his A.B. in mathematics at Yale University in 1937 and his Ph.D. in physics from Harvard University in 1940. There, he served as Dean of the Division of Engineering and Applied Sciences, 1957-75.

Now at Harvard's Kennedy School of Government, Brooks is researching the national policy on dual-use technologies, that is, technology having both military and civilian applications. One of his current memberships is on the U.N. Advisory Committee on Science and Technology for Development.

The Haworth Distinguished Scientist appointments were established to honor the memory of Leland J. Haworth, BNL's second Director, who died in 1979.

While at the Lab, Brook's host is the Department of Applied Science. For more information about his BNL schedule, call Pat Taylor, Ext. 2452.

BNL Does Good Business With Small Business

Roger Stoutenburgh

For another year, BNL has captured a small business award from the Department of Energy (DOE). Accepting the award from Hilary Rauch (second from left), Manager of DOE's Chicago Operations Office, is BNL Associate Director for Management & Physical Plant, Parke Rohrer (center).

Standing by are: BNL Director Nicholas Samios (left); Jerry Bellows (third from right), Manager of DOE's Brookhaven Area Office (BAO); Timothy Drawbridge (second from right), BAO Contract Specialist; and Robert Gordon, Chief of BAO's Administrative Branch.

The award, issued by DOE Secretary James Watkins, was won "in recognition of the outstanding performance and support of the DOE small business program for fiscal year 1989."

To earn the award, BNL not only met its goal of doing 60 percent of its business with small and small disadvantaged businesses, it exceeded it. Last year, in fact, BNL awarded 68.2 percent of its contracts to these firms and spent a total of $52,537,470.

Tech Transfer (cont'd)

Meyer Steinberg was cited "For unstinting and continuing efforts in promoting the HYDROCARB process for producing clean carbon fuels from coal up to the point of industrial acceptance and initial funding of a prototype system."

Steinberg, along with BNL consultant Edward Grohse, invented HYDROCARB, a two-part process in which coal is reacted with hydrogen, and the resulting methane is then further decomposed into elemental carbon and hydrogen.

HYDROCARB has worldwide applications, Steinberg points out. "Wherever large resources of coal exist, including the U.S., Canada, Poland, Australia, China and South Africa, HYDROCARB can be used to produce an economical and clean carbon fuel," he says. "The process also produces hydrogen-rich and methane-rich gaseous fuel or liquid methanol and gasoline fuel." He adds that the fuels are ash- and sulfur-free, making them "highly environmentally acceptable."

As a result of Steinberg's efforts, AMAX Corporation of Golden, Colorado, has entered into a cost-shared agreement with the DOE Morgantown Energy Technology Center to build a prototype plant, which is required to test the economics of the laboratory-proven process and to see whether it can be scaled up.

According to Steinberg, AMAX intends to use HYDROCARB to upgrade the initial products from its own mild, low pressure and low temperature coal-gasification process into clean carbon, which is already used in copying machines and to make tires.

Denis McWhan (cont'd)

17-18. As the workshop's chair, McWhan said that the large number of experiments represented "show the power of synchrotron radiation. Here we have a wide range of new experiments providing information on the magnetic properties of materials.

"But the areas where synchrotron radiation has really changed the way in which we look at things is in surfaces," he added. "Synchrotron radiation is now one of the major probes of the structure and electronic properties of surfaces, and a large number of exciting experiments continue to be done at the NSLS in this area. I think that most of the NSLS' major participating research teams [PRTs] are doing some form of surface studies."

As the head of a Bell Labs PRT, McWhan was responsible for planning beam line X16B. Four years ago, when he became responsible for all five AT&T x-ray beam lines, he and his family moved permanently to Mt. Sinai.

McWhan earned his B.S. degree at Yale University in 1957, then his Ph.D. in chemistry from the University of California, Berkeley, in 1961. Following his postdoctoral work at the Royal Institute of Technology in Stockholm, Sweden, he became a member of the technical staff at AT&T Bell Laboratories in 1962.

A fellow of both the American Physical Society and the American Association for the Advancement of Science, McWhan was the recipient of the Bell Laboratories Distinguished Technical Service Award in 1982. With the exception of a year's sabbatical as the visiting Director de Recherche at CNRS, Grenoble, France, in 1973, he was with Bell Labs for 28 years.

He comes now to BNL with his eye on the future. "It's a real challenge to keep the Light Source improving," McWhan said, "to keep putting new things in and keep having good science come out." — Anita Cohen

Equipment Demo

On Tuesday, May 8, IBM representatives will demonstrate their new UNIX workstation, the RISC System/6000 in Berkner Hall from 10 a.m. to 3 p.m.

In addition, a seminar on the RISC System/6000 machine will be held in Berkner Hall at 10 a.m. and at 1:30 p.m. Speakers will be Ray Dupont, from the RISC System/6000 Hardware Architecture Group in Austin, and Kevin McLaren, from IBM's Federal Group, Washington, D.C.

Note to Employees:

Attendance at lectures, meetings and other special progams held during normal working hours is subject to supervisory concurrence.

RHIC/QED Workshop Looks Forward

Roger Stoutenburgh

Once the two beams of heavy ions in BNL's proposed Relativistic Heavy Ion Collider (RHIC) start colliding at a combined energy of 200 billion electron volts per nucleon pair, interactions will occur where the nuclei actually hit each other and make nuclear reactions. These are the collisions that could produce a quark-gluon plasma. In addition, enormously strong electromagnetic fields will cause long-range electromagnetic interactions. These effects, perhaps never before observed, could mean that traditional calculations using quantum electrodynamic (QED) perturbation theory may be inadequate.

Addressing the questions brought about by this possibility was the principal aim of the April 20-21 BNL workshop entitled "Can RHIC be Used to Test QED?," which drew over 50 participants from Europe and the United States.

Photographed during one session were (from left) two BNL organizing committee members, Mark Rhoades-Brown and Michael Tannenbaum; and three of the speakers, Chris Bottcher, Oak Ridge National Laboratory (ORNL); Michael Strayer, ORNL; and Berndt Muller, Duke University. Not present was Mirek Fatyga, the third member of the organizing committee.

Inside Info

Thomas Ludlam became Associate Head of the RHIC Project on May 1. As a physicist in the Physics Department, Ludlam headed the task force formed in 1985 to guide the Relativistic Heavy Ion Collider (RHIC) concept to project status. In his new capacity, he will be a member of the RHIC project management team, headed by **Satoshi Ozaki**, and have responsibility for project areas that relate to the implementation of physics experiments, including liaison with potential users of the collider.

Roger Stoutenburgh

Thomas Ludlam

He will work with **Lawrence Trueman,** Associate Director for High Energy and Nuclear Physics, to formulate and oversee the experimental program.

In announcing Ludlam's appointment, Ozaki said, "Since coming to Brookhaven in 1978, he has been an active advocate for the development of the new field of quark matter research within the international community of nuclear and particle physicists. As many of us know, he has been instrumental in gaining the sustained support from the nuclear physics community for RHIC. He has also been active in detector research and development in this field. I am very happy to have a scientist with such experience as my associate, and together we will move forward on the exciting endeavors of the RHIC project."

Balancing the Demands Of Chemistry and Children

Mary Willcox is one of 17 undergraduate students who have been at BNL since January pursuing research as part of the Department of Energy-sponsored Science and Engineering Research Semester (SERS) program. But Willcox has a few more challenges than the other students have — four more, to be exact.

Willcox is a single mother with four children — Sarah, 13; Rachel, 9; Daniel, 8; and Theresa, 4. She has brought them to BNL for the semester to live on site and attend schools in the Longwood district, while she works in the Chemistry Department under the supervision of J. Robb Grover.

A senior majoring in chemistry at the University of New Mexico, Willcox hopes to earn her Ph.D. in chemistry and continue to do basic research. Her interest in science started early, when she attended a college-preparatory program at Roswell High School, New Mexico. After her graduation, she earned an associate of arts degree at New Mexico State University in one year.

After marriage and a first child, Willcox took a job as a laboratory technician at the New Mexico Military Institute, where she worked for ten years. She also took one course per semester there and gained recognition as "College Physics Student of the Year" in 1983. And she became a mother three more times.

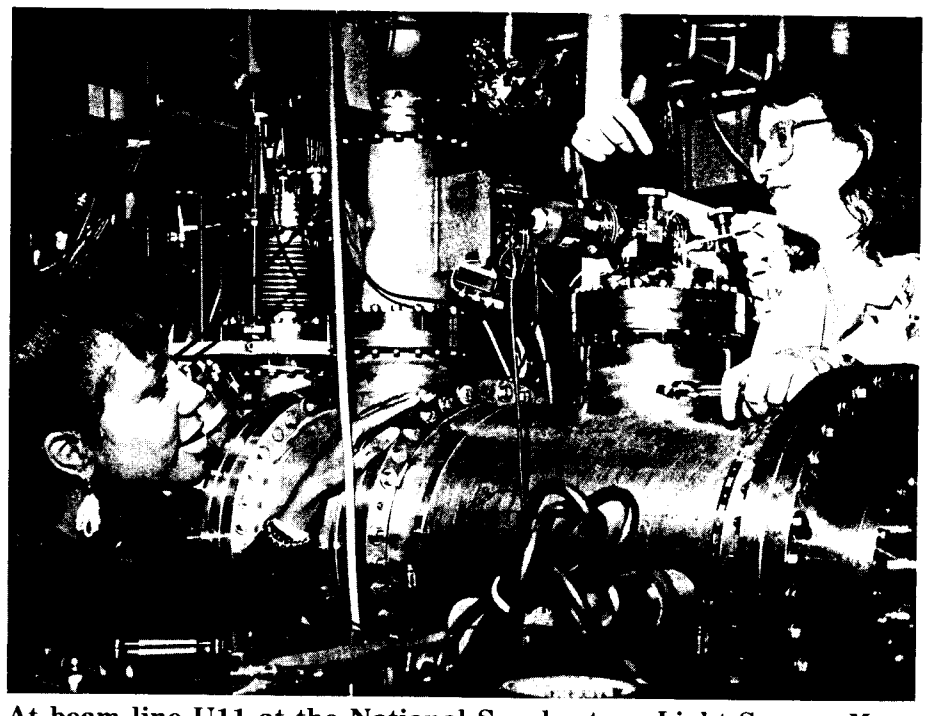
In 1988, with her marriage over, Willcox returned to school full time — this time, at the University of New Mexico (UNM). Last year, she won a research fellowship from the National Science Foundation's Research Experience for Undergraduates program. Ed Walters, a faculty member at UNM, who is also a user of the National Synchrotron Light Source (NSLS) at BNL, told Willcox about the SERS program — and she knew she'd like to give it a try.

Working with Grover at his NSLS beam line, Willcox is studying trifluorobromomethane (CF_3Br), a flame suppressant, to determine why and how it works.

"If we're successful in finding out why CF_3Br works so well to put out fires," Willcox said, "we would eventually like to suggest other products that would work equally well without depleting the ozone layer."

About her experience at BNL, Willcox added, "The opportunity to work at a national laboratory was important to me. The facilities here are excellent, and I never suffer time delays in my work, the way I sometimes used to, because of lack of supplies or equipment. Whatever I need is right here."

Grover is equally pleased to have Willcox work with him. He said, "Because of her enthusiasm, businesslike attitude, steady application to work and quick grasp of essential scientific points, I think Mary has a promising career ahead of her."



At beam line U11 at the National Synchrotron Light Source, Mary Willcox (right), a Science and Engineering Research student at BNL, explains how she uses photoionization mass spectroscopy of molecular beams in her Chemistry Department experiment to Melva Ray, Director of the U.S. Department of Energy's Office of Minority Economic Impact, who was visiting the Lab.

— Photos on this page by Roger Stoutenburgh

Willcox drove cross-country with her four children when she came to the Lab. "It was 2,297 miles — four days of traveling, and the whole trip was a geography lesson. I especially liked Virginia and the long-span bridges of the East Coast," she said.

Her children complained, Willcox said, because they couldn't bring along many of their treasured possessions — like a skateboard and about 67 stuffed animals. But, she added, "They are adjusting very well, and they are also learning about different cultures. A lot of children here are from other countries — and my children are learning that not everyone has the same holidays, the same beliefs or traditions."

— Diane Greenberg

Mini-Semester Introduces Students To Applied Physics, Technology

Applied physics and technology were the subjects of a four-day Mini-Semester at BNL for students from the City College of New York (CCNY), Bronx Community College (BCC), and Brooklyn Technical High School (BTHS).

From April 9-12, fifteen students participated in the program organized by the Office of Educational Programs. The students at right were the fourteenth group from CCNY to spend a mini-semester at BNL; the BCC group, pictured below top, are the pioneers from their college; and this is the second group from BTHS, below bottom.

Their full schedule included an introduction to positron emission tomography, BNL's magnet and computer facilities, the National Synchrotron Light Source, the Lab's occupational and environmental health program, nuclear physics, the Tandem Van de Graaff, and the Alternating Gradient Synchrotron.

Film badges will be changed tomorrow. Please place your badge in its assigned rack space before leaving work today.

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Exploring Science for a Semester

During this spring semester, 18 undergraduates from across the U.S. left their college campuses to experience the real world of science by performing research tailored to their academic needs and supervised by scientists at BNL. They are students in the Brookhaven Semester Program and in the Science and Engineering Research Semester (SERS) program for undergraduates.

Started in 1968 by the Office of Scientific Personnel, the Brookhaven Semester Program selects participants from 22 member colleges and universities of the Regional Cooperative Association in Science and Mathematics. The Department of Energy-sponsored SERS program began four years ago. Currently, both programs are administered through BNL's Office of Educational Programs (OEP).

Pictured here with OEP administrators Renée Flack (standing, far left) and Robert Thomas (standing, far right) are the following students, whose BNL research advisor's names appear in parenthesis: (seated, from left) Barbara Feiccabrino, California University of Pennsylvania (Darrell Joel, Medical); John Searingen, University of Illinois, (Laurence Littenberg and Richard Strand, Physics); Jin Pak, Washington College (Toshifumi Sugama, Applied Science [DAS]); Bruce Behrens, North Dakota State University (Samuel Aronson, Physics); Nannette Rivera, University of Puerto Rico (Mow Lin, DAS); Manish Wani, University of Texas at Arlington (Prantika Som, Medical); Lana Lall, Pace University (David Weber, Medical); (standing, from left) Shelia Wright, Jackson State University (Eugene Premuzic, DAS); Mary Willcox, University of New Mexico (J. Robb Grover, Chemistry); Charles Norton, Northeastern University (Bruce Stewart, DAS); Melissa Hurley, Stanford University (Betsy Sutherland, Biology); Rudolph Rico, State University of New York [SUNY] at Buffalo (Carol Creutz, Chemistry); Lisa Brown, Long Island University (Paul Falkowski, DAS); Chi Lam, SUNY at Buffalo (Jane Setlow, Biology); and Thomas Blum, Tarkio College (Tsong-Lun Chu, Nuclear Energy).

Absent from the photo are: James Kelaher, Creighton University (Jerome Barancik, DAS); Radha Kotamarti, North Dakota State University (Graham Smith, Instrumentation); and Hualiang Zheng, SUNY at Stony Brook (Leslie Lawrence, Computing and Communications).

Great Adventure Tickets on Sale

Tickets for the 1990 season at Six Flags Great Adventure amusement park, featuring "The Great American Scream Machine," are now on sale at the BERA Sales Office. Adults' tickets are being sold for $18 per ticket, a $5 savings. Children's tickets are $15.

If you have questions, call Louisa Barone at the Sales Office, Ext. 3347.

Hearts and Flowers For Mother's Day

Geraniums will be among the lovely flowers available at a Mother's Day plant sale on site next week. Sponsored by the Caring Friends (parents) of Westhampton's Association for the Help of Retarded Children (AHRC) to defray workshop deficits, the plant sale will be held on Thursday and Friday, May 10 and 11, from 11 a.m. to 3 p.m., in the parking lot on Brookhaven Avenue opposite Berkner Hall, where the Farmers' Market is held.

Heart-shaped pillows — handmade and trimmed with lace — will also be on sale. ♥♡♥

Golf Tournaments

The second BGA golf tournament of 1990 will be held on Monday, May 21, at the Hampton Hills Country Club. It will have a "shotgun" start at noon and be run as a stroke-play competition.

The course needs to know the number of golfers as soon as possible, so please sign up early; the deadline is May 11. Call Mike Losquadro, Ext. 7594, or Joe Carbonaro, Ext. 5139, to reserve your place.

The course now requires the use of riding carts, which brings the fee for golf and cart to $40. Although the BGA protested this requirement, it lost out in the end.

With any questions about the weather, call the Pro Shop, 727-6862.

Eighty-two golfers teed up under fair skies during the first BGA outing of the year at the Heatherwood Golf Club. The highlight of the day was a hole-in-one by Ron Weider on the 15th hole. Other closest-to-the-pin awards went to John Usher, See-Meng Wong and Don Gates. Joe DePace and Dennis Hall won long-drive prizes. Other winners were:

Flight	Gross	Net
A	John Usher	Ron Webster
B	John Dioguardo	Joe Carbonaro
		Bill Sampson
C	Bill Francis	John DiNicola
D	Dennis Malloy	Ron Weider
E	Alice Desmond	Bill Carrapezza
Unflighted		Per Bak
		Ed Montvidas

Basketball

Playoffs

Scram 46		Knicks 38	
S. Nappi	16	J. Belz	10
J. Duggan	8	R. Domenech	8
E. Gregory	7	T. McGill	8
T. Powers	6	D. Martin	7
P. Lang	4	L. Walcott	5
T. Daniels	2		
D. Bingham	2		
J. Barkwill	1		

Three-point shots: J. Belz, R. Domenech, T. McGill, S. Nappi (2), L. Walcott

Celtics 76		Runaways 67	
D. Hoggard	36	J. Desmond	34
J. Wells	12	T. Blum	11
P. Brubwier	9	P. Brown	8
B. Turner	7	G. Shepherd	8
A. Jones	6	C. Norton	4
B. Wells	6	R. Doty	2

Three-point shots: J. Desmond (6), B. Wells, J. Wells (2)

Bowling

Week of April 23

Red/Green League

N. Parrinello had a 245/607 scratch series, A. Warkentien 214/207/603 scratch, R. Jansson 211, D. Jesaitis 209, E. Sperry IV 208, A. Pinelli 205, H. Marshall 202.

Purple League

Jim Petro had a 241, Sharon Smith 208, Jim Vogel 201, Betty Jellett 192, Pat Manzella 181, Mickey Haller converted the 4/10 split. The Diamonds are the second-half winners.

White League

Ken Riker had a 215, Joe Mayeski 212, Mary Grace Meier 209, Larry Welcome 203, Jeanne Penoyar 192, Lynne Warkentien 181, Cheryl Miezianka 180, Gerry Riker converted the 6/7/9/10 split. The Good Times are the second-half winners.

New Season At Swimming Pool

Tickets for a new four-month season — May through August — are now on sale at the pool.

Open Hours —

Monday through Friday

11 a.m.-1:30 p.m.	employees only
1:30 p.m.-2 p.m.	reserved for speed swimming and training
5 p.m. to 9 p.m.	employees, families and guests*

Saturday and Sunday

1 p.m.-5 p.m.	employees, families and guests*

Ths pool is closed on all Lab holidays.

Fees —

Season tickets (fees not prorated)

Individual membership	$30.00
Family membership	$40.00

Season tickets will be sold only to employees and their immediate family members who reside within the same household.

Daily Admissions

employee	$2.00
family member	$2.00
guest	$3.00

** One guest accompanying an employee is permitted without prior permission. Advance arrangements for more guests, up to a maximum of five at any one time, must be made at the Recreation Office in Personnel.*

Social Club

The following events are on the Social Club's calendar:

• **Wrestling** - Nassau Coliseum, second tier, Saturday, June 30, 8 p.m., tickets $13.

• **National Parks Tour** - 13 days, August 11; $1,529 ea./double, $1,449 ea./triple. Arrive in Phoenix, Arizona, tour Oak Creek Canyon, Marble Canyon, Grand Canyon, Bryce Canyon, Zion Canyon; on to Salt Lake City, see a rodeo in Jackson, Wyoming, Grand Teton National Park, Yellowstone Park, Mt. Rushmore, Black Hills and more. Bus from BNL to airport. Deposit of $100 needed immediately. Balance due May 31.

• **Germany: Oktoberfest or the Passion Play Tours** - 8 or 10-day Passion Play Tours start in May with discount prices for BNL employees starting at $1,285 ea./double; Oktoberfest discount prices for BNL employees start at $899 ea./double, 8 days starting in September. Both tours on individual basis, no quota required for BNL discount.

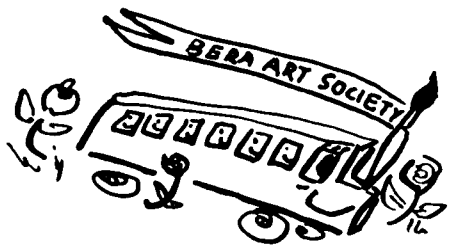
• **Switzerland** - 9 days, Lugano, St. Moritz and Lucerne, dates start from May 11 through November 16; prices from $1,079 ea./double, depending on date.

Trips and events are open to all BNL employees, their families and friends. For information, contact Doris Terry, Ext. 7610, Bldg. 197C.

On the Menu

At the Cafeteria

Monday, May 7	
Soup: Mushroom barley	.75/.95
Entree: Baked macaroni & cheese w/1 veg.	3.10
Entree: Shepherd's pie w/1 veg.	3.10
Fitness: Baked chicken w/1 veg.	3.00
Carvery: Pastrami sandwich	2.85
Grill: Grilled Reuben w/cole slaw	2.95
Tuesday, May 8	
Soup: Vegetable	.75/.95
Entree: Veal Parmesan hero w/1 veg.	3.10
Entree: Knockwurst & sauerkraut w/1 veg.	3.10
Fitness: Baked scrod w/1 veg.	3.10
Carvery: Hot roast beef sandwich	2.85
Grill: Grilled Monte Cristo	2.85
Wednesday, May 9	
Soup: Cream of tomato	.75/.95
Entree: Breaded pork chop w/1 veg.	3.10
Entree: Cheese ravioli w/Italian bread & 1 veg.	3.10
Fitness: Spinach quiche	2.95
Carvery: Baked ham sandwich	2.85
Grill: Philly steak hero w/fries	2.95
Thursday, May 10	
Soup: Beef noodle	.75/.95
Entree: Moussaka w/1 veg.	3.10
Entree: Stuffed cabbage w/mashed potatoes	3.10
Fitness: Steamed vegetable platter	2.50
Carvery: Hot corned beef sandwich	2.85
Grill: Grilled cheese & bacon w/fries	2.45
Friday, May 11	
Soup: Manhattan clam chowder	.75/.95
Entree: French bread pizza	2.25
Entree: Fried clams on soft roll w/1 veg.	3.10
Fitness: Broiled flounder w/1 veg.	3.10
Carvery: Hot turkey sandwich w/cranberry sauce	2.85
Grill: Whaler sandwich w/French fries	2.95



On Saturday, June 16, join the BERA Art Society-sponsored bus trip to Delaware, and steep yourself in flowers and beautiful furniture. Wander round the 350-acre Longwood Gardens — including rose arbors, Italian water gardens, topiary, fountain, hillside and home-gardener-idea gardens, and the spectacular conservatories.

Close by is the renowned Winterthur Museum and gardens. There, housed in one of the DuPont family mansions, antique room settings range through two centuries of American craftsmanship in styles from the 17th century to Chippendale, Federal and Empire periods. Outside are more glorious gardens — which can be visited by tram if your feet need a rest.

The bus will leave BNL from the parking lot opposite the Cafeteria at 6:30 a.m. sharp. After a coffee stop, it should arrive at Longwood Gardens at about 11 a.m. A picnic area and restaurant are available.

Leaving Longwood at 2:30 p.m., arrive at Winterthur in time for a 3 p.m. garden tram ride — or walk if you prefer. The museum tour is at 4 p.m., and the bus will leave at 5:30, to be back at the Lab about 10 p.m., after a short food stop.

Bus tickets cost $18.50 each; Longwood Gardens fees, $6 each; Winterthur Museum and gardens, $6.50 each. Only one bus will go, so reserve quickly. Call Liz Seubert, Ext. 2346.

Nursery School

The Upton Nursery School is now registering children for the 1990-91 school year. Enrollment is open to three-and four-year olds whose parent or relative is a BNL employee. Classes are held on site in the Recreation Building, on Monday, Tuesday and Thursday mornings.

The preschool is a cooperative run by parents and experienced teachers. The non-academic program provides an opportunity for three-and four-year old children to experience learning in a creative and social atmosphere. Children participate in many activities, including art, music, cooking and outdoor play. The school also provides a unique opportunity for parents to be actively involved in their children's learning.

A limited number of children is assigned to each class, but there are still openings for September. For information and enrollment forms, call Kathy Hershcovitch, 331-3785.

Arrivals & Departures

Arrivals

Richard Alles.....Cent. Shops
Donald W. Dains.....S&EP
Dwayne E. Eleazer.....Plant Eng.
John J. Grogan.....Cent. Shops
Kenneth M. Johnson.....DAS
Denis B. McWhan.....NSLS
Paul O'Connor.....Instrumentation
Lawrence E. Rosenberg...Cent. Shops
William A. Schmitz.....Plant Eng.
David A. Stock.....DNE

Departures

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

Nicholas B. Brookes.....Physics
Max A. Schmaeler.....Medical
Anthony Spiteri.....DNE
James G. Vogel.....Staff Serv.

Classified Advertisements

Placement Notices

The Laboratory's placement policy is to select the best-qualified candidate for an available position, with consideration given to candidates in the following order of priority: (1) present employees within the department and/or appropriate bargaining unit, with preference to those within the immediate work group; (2) present employees within the Laboratory as a whole; and (3) outside applicants. In keeping with the Affirmative Action plan, selection decisions are made without regard to age, race, color, religion, national origin, sex, handicap or veteran status.

Each week, the Personnel Office lists new personnel placement requisitions. The purpose of these listings is, first, to provide open placement information on all non-scientific staff positions; second, to give employees an opportunity to request consideration for themselves through Personnel; and, finally, for general recruiting purposes. Because of the priority preference policy stated above, each listing does not necessarily represent an opportunity for all candidates. As a guide to readers, the listings are grouped according to the anticipated area of recruitment.

Except when operational needs require otherwise, positions will remain open for one week following publication date.

For further information regarding a placement listing, contact the Employment Manager, Ext. 2882.

The vacancies listed below have been exempted by the Director's Office from the current freeze on open requisitions.

LABORATORY RECRUITMENT - Opportunities for Laboratory employees only.

4219. MAIL CLERK - (temporary - o/a 5/14/90 to 8/30/90) Staff Services Division.

4220. ADMINISTRATIVE/ACCOUNTING POSITION - Requires AAS in accounting or related field and a thorough knowledge of Laboratory policies and procedures. Previous experience with IPAP, J-CARS, and accounting and budget systems is highly desirable. Responsibilities will include monitoring of accounts and budgets, assisting with budget development, and handling all aspects of the purchasing and ILR functions. Familiarity with Lotus 1-2-3 and XyWrite is desirable. Excellent communication skills and the ability to obtain and maintain a DOE security clearance are required. Reactor Division.

OPEN RECRUITMENT - Opportunities for Laboratory employees and outside applicants.

4221. BIOLOGY ASSOCIATE - Requires BS in biology or a related field or its equivalent, and training in thin sectioning, immunogold labeling and other electron microscopy skills including the various operations of a transmission electron microscope. Will participate in research using new organometallic immunolabels and their application to cellular studies and chromosome mapping. (Reposting of Job #4213) Biology Department.

4222. NUCLEAR REACTOR OPERATOR TRAINEES (2 positions) - Requires AAS or equivalent experience in reactor operations as well as demonstrated mechanical ability. Previous reactor experience desired, with naval reactor experience preferred. Ability to obtain and maintain DOE "Q" clearance required. Must be able to work rotating shifts. Reactor Division.

4223. ENGINEERING POSITIONS (2 positions) - Requires BA/BS in instructional technology or several years' experience as an instructor at a nuclear reactor facility. Must be able to design, develop, conduct and evaluate general employee, emergency planning and other technical training programs. Must have experience with PCs, and good written and verbal communication skills. The ability to obtain and maintain a DOE "Q" clearance is required. Familiarization with INPO guidelines and/or DOE accreditation requirements and reactor operator certification is desirable. Reactor Division.

4224. REACTOR SHIFT SUPERVISORS (2 positions) - Requires BS in physics, an appropriate field or the equivalent experience, and previous nuclear operating experience. Responsibilities involve directing, training and coordinating work efforts of reactor operators. Ability to obtain and maintain a DOE "Q" clearance is required. Must be able to work shifts. Reactor Division.

4225. DRAFTING POSITION - Requires thorough knowledge of standard drawing projections and working knowledge of mechanical/electrical drafting procedures. Familiarity with AUTOCAD highly desirable. Will prepare detail and assembly drawings from a design layout; may draw schematic diagrams. Ability to obtain and maintain a DOE "Q" clearance is required. (Reposting of Job #4168). Reactor Division.

Motor Vehicles & Supplies

89 HONDA ACCORD DX - white, a/t, low mi., assume lease; '88 Honda Accord LX, navy, 5-spd., low mi., fully loaded. 588-0302 or 862-7648.

89 KAWASAKI KX250 MOTORCYCLE - dirt bike, fast, regularly maintained, excel. cond., $2,400. Bob, Ext. 4672/4904 days or 929-4753 eves.

88 SUZUKI - convertible, 23k mi., red, 7k/5 yr./50 warranty. 929-3638 after 5 p.m.

88 HYUNDAI EXCEL GL - h/b, 3-dr., white, 4-spd., am/fm cass., excel. cond., $4,000. Debbie, Ext. 2876.

88 MITSUBISHI MIRAGE - 4-dr., dark gray, p/s, p/b, a/c, am/fm, mint cond., Chris or Tom, 758-1711 days or 399-4221 eves.

87 DUSTER - 5-spd., a/c, am/fm, more, red, mint cond., best offer. 744-2671.

86 TOYOTA SUPRA - white, sport pkg., loaded, 5-spd., sunroof, excel. cond., priced right. 724-7758.

86 OLDS CALAIS - 4-dr., 4-cyl., 26k mi., in storage 2 yrs., super clean cond. 727-1074.

86 HYUNDAI - h/b, 38k mi., 4-dr., silver, 5-spd., am/fm cass., sunroof, rear wiper, a/c, new clutch & trans., warranty, $3,500. Ext. 2468.

86 NISSAN MAXIMA SE - V-6, 5-spd., power, ac, cruise, am/fm stereo cass., sunroof, alarm, 50k mi., $7,900 neg. Gary, Ext. 4532 or 369-8150.

See Supplement for more Classified Ads.

Classified Ads (cont'd)

86 SUBARU GL-10 - 4wd, turbo, 5-spd., loaded, 1½ yrs. unlimited mi. warranty, 80k mi., mint cond., $6,750. Henry, Ext. 4547 or 727-7227.

86 TOYOTA PICKUP - 59k mi., 5-spd., alarm, am/fm stereo, tinted, 31" tires, excel. cond., $5,995. Danny, Ext. 4988 or 286-8541.

86 FORD ESCORT - a/t, ac, p/s, p/b, 2-dr., 43k mi., excel. cond., G. Warner, Ext. 2343 or 563-2889 after 6 p.m.

85 CAMARO- a/t, p/s, p/b, am/fm cass., tinted windows, asking $4,200. 874-2387 after 6 p.m.

85 MAZDA GLC - 4-dr. sedan, a/t, cass., recently inspected, high mileage, $1,000. Nancy, Ext. 4530 or 261-2719 after 6 p.m.

85 FIREBIRD - a/t, T-top, power, ac, 8/5.0, am/fm stereo cass., tint, white, w/gray int., mint cond., $6,450. Joe, 244-2752.

84 VOLVO 760 - turbo, 80k mi., all options, graphite exterior, black leather int., excel. cond., $6,800. Marv, Ext. 2153.

84 FORD ESCORT - a/t, 88k mi., 4-dr., am/fm cass., clean in/out, $1,500. 864-1729.

84 OLDS CUTLASS SUPREME - full power, 6-cyl., 67k mi., excel. cond., $4,200. Ext. 2827 or 423-8384 after 6 p.m.

84 CHEVY C30 SILVERADO PICKUP - 454, V-8, a/t, ac, tow pkg., 411 posi rear, dual tanks, cap, asking $5,950. Walter, Ext. 3848 or 281-9299 eves.

84 YAMAHA RZ350 SPORT BIKE - red/white, 9k mi., new Metzlers, tank pack, garaged, v.g. cond., $1,500. Scott, Ext. 7110.

83 CHEVY S-10 PICKUP - 4-spd., long-bed, 67k mi., v.g. cond. 325-0447.

82 T-BIRD HERITAGE - loaded, gray velour int., high mileage, good cond., $1,900. Mike, 878-0487.

82 BUICK REGAL - 2-dr., p/s, p/b, p/w, 65k mi., ac, am/fm, $1,900. 363-6940.

81 KAWASAKI 440 LTD - new brakes, chain, sprockets, tires, battery, sissy bar, 12k mi., v.g. cond., must sell, $700. 474-5715.

81 CHEVY MALIBU - brown & tan, clean, 60.3k orig. mi., asking $2,000. 924-8143 after 6 p.m.

81 VIKING POP-UP - sleeps 8, $1,700 neg. 744-9387.

80 DATSUN 210 - 93k mi., 5-spd., many new parts, runs well, $400. Dong, Ext. 5510.

80 CHEVY CITATION - rusty but reliable, $500. 671-3975.

80 DATSUN - 4-spd., am/fm cass., runs well, asking $650. Ext. 3537 or 399-4399.

79 SUNLINE TRAVEL TRAILER - sleeps 6, new tires, brakes & battery, awning, stands, $4,100 neg. Artie, Ext. 4988 or 325-0743.

79 CHEVROLET SURBURBAN 4x4 - complete new brakes, a/t, overhauled, p/s, p/b, $3,000. 589-3372 after 4 p.m.

79 HORIZON TC3 - new battery & exhaust, body good, runs well, needs clutch, $350. Ext. 7707 or 821-0125 eves.

77 PONTIAC FIREBIRD - T/A, 400 c.i.d. motor, fully worked, black, alum. rims, TH-350 worked, 2,500 rpm stall spd., asking $3,700. Tim, 281-7873.

73 VW BEETLE CONVERTIBLE - 10k mi. on rebuilt engine, good mech. cond., fun summer car or restoration project, $475. Mike, Ext. 2500.

76 VOGUE MOTOR HOME - 90% rebuilt, motor, trans., complete interior, 32', Dodge 440, $30,000 neg. Tallon, Ext. 4847 or 473-3987.

75 DODGE - $250. Gerry, 281-7230 after 2 p.m.

75 NOVA - h/b, 2-dr., 350, a/t, p/s, p/b, runs well, body fair, $450. Ext. 4692 or 878-2040 after 6 p.m.

74 HONDA CB360 - rebuilt engine, good running cond., garaged, $450. Pete, Ext. 4100.

69 GTX 440 - a/t, 390 rear, body mint, mech. excel., int. fair, w/spare parts, 323 complete rear, 355 gears, fender, etc., $10,000. Ted, 928-1445.

65 DODGE DART - slant 6 motor, good for parts, best offer. Frank, Ext. 2314 or 567-5131.

55 CHEVY - rear complete w/brakes & drums, put it in and go, $75. Frank, Ext. 2343 or 732-5950 after 5 p.m.

TIRES - 3, 195/75R14, one new, 2 w/5k mi., all on GM wheels, $100. Tony, Ext. 3658 or 929-4903.

TIRES - 4, Goodyear Tiempo, P235/75R15, 2 slightly worn, 2 v.g. cond., $60 all 4. 821-0469.

TIRE - Goodyear, L78-15, Power Streak II, like new, mounted on Ford rim, $25. Mike, Ext. 4988.

SNOW TIRES - F78/14, plenty of tread, on rims from '74 Nova, $25/pr. Tom Joos, Ext. 7707.

CLASS-THREE TRAILER HITCH - for GM car, $50. Pinto, Ext. 4140.

CAR-TOP CARRIER - canvas, like new, $25. Vinnie, Ext. 2483.

TIRE - Goodyear Arriva, P175/70R13. Milind, 821-5259.

HEADS - 2 pr., new Ford big block heads, new chrome gas pedal; Crane double spring for small bock heads; GT steer. wheel. Wayne, Ext. 3084.

CAR STEREO - radio cass., digital, synthesizer, auto-tuning, auto-reverse, almost new, $80. Jim, Ext. 7735.

Boats & Marine Supplies

28' DORY CAPE SAILBOAT - 1975, includes cradle, Volvo diesel, fully equipped, great shape, $23,500. Roger, Ext. 2382.

24' C&C MIRAGE - 6 sails, rigged aft, new 8-h.p. Evinrude, painted, custom, extras, immac. cond., ready for water, $8,500. Damian, 744-5079.

24' SEA RAY SUNDANCER - 1976, repowered 1989, new int., h.w., dockside power, frig., stove, Merc Cruiser O.D., very clean, $10,000. 654-2617.

19' PEN-YEN - 1969, w/1976 115-h.p. Johnson, Coast Guard pkg., rebuilt trailer w/elec. winch, many extras, excel. cond., $3,000. Vito, 243-2743.

19' O'DAY MARINER - fiberglass, c/b, G.H.P., canvas, cuddy, excel. cond., $2,750. Ext. 2109 or 472-9199.

19' O'DAY MARINER SAILBOAT - fixed keel, 6-h.p. o.b., 3 sails, $3,500. Walt, 473-3295 eves.

19' BAYLINER BOWRIDER - 1988, 125-h.p. Force, trim, am/fm cass., low hrs., full canvas, galv. Escort trailer, $7,500. Ext. 7125 or 929-8641.

18' GLASSPORT BOWRIDER - 1983, w/90-h.p. Evinrude, trailer, mooring cover, approx. 110 hrs., ask. $2,800. Chris, Ext. 2022 or 395-6112.

17' FLEETCRAFT - w/Evinrude o.b., trailer, elec. winch, as is, $750. Don, 929-6646.

EVINRUDE MOTORS - 18-h.p.; 9/9 h.p.; electric winch, model 7-12C 3,000 PD; three 6-gal. Evinrude gas tanks; 6-gal. Mercury gas tank. 732-3002.

AMPAC INFLATABLE - 5-pass., w/18-h.p. Merc., 10 hrs. max., depth/fish finder, trailer, $2,700 all. Henry, Ext. 4547 or 727-7227.

15' WINDSURFER - fiberglass, w/Dacron sail, alum. mast, v.g. cond. Al, Ext. 2043.

Furnishings & Appliances

WATER BED - king size, 5 mo. old, w/3 sets of sheets, does not fit in new house, $220. Nancy, 744-1610.

DISHWASHER - portable, $79; doghouse, 32"x48", like new, $25; kitchen sink, fittings & cabinets, neg. Bill, Ext. 2378 or 758-3284.

CHEST OF DRAWERS - large, very good cond., $85. Ext. 3705 or 689-1877.

COFFEE TABLE - & 2 end tables w/glass tops, $85; Musey 2-burner hot plate, $15; king-size waterbed w/leather rails, $175. 589-3072.

AIR CONDITIONER - Whirlpool, 8,000 Btu, used 1 week, still under warranty, energy efficient, $400 neg. Betty, Ext. 7126.

KITCHEN SET - oak/brass/glass, seats 4; bedroom set w/triple dresser, chest, mirror, night table, bed, excel., $450. 244-2752 after 6 p.m.

DESK - $50; chairs, $10; crib, $30; bicycles, $25-$60. Ext. 3702 or 751-1042 after 7 p.m.

PRINCESS DRESSER - antique, oak, 2-drawer w/original oval mirror, asking $475. Henry, Ext. 4547 or 727-7227.

REFRIGERATOR - 2-door, good cond., good for office use, $80. Jim, Ext. 7735.

DRESSER MIRROR - walnut, $65; lamps, $10; large desk, $150; steel shelf, $10; oak cabinet, $20. Kathy, 744-2203.

FREEZER - Gibson, upright, reas.; Singer sewing machine & cabinet, restored, elegant. 363-7032.

RATTAN WALL UNIT - $275; end tables & coffee table, glass top, $300; Westwood lamps, brass w/ivory shades, like new, $75/each. Ext. 2231.

ENTERTAINMENT CENTER - oak, excel. cond., $150; assorted home furn. Johanna, 878-6378.

DOUBLE BED - mattress, box spring, almost new, $100. R. Ince, 286-0682.

CONVERTIBLE CHAIR/BED - $25; La Machine food processor, $10. 878-0514.

Tools, House & Garden

LAWN MOWERS - Lawnboy, 21" cut, self-drive, w/mulcher, $175; Jacobsen, commercial, 2-cycle engine, $50. Dan, Ext. 4987 or 698-7322.

TOPSOIL - screened, can be delivered, 15 yrds. minimum for delivery. Bob, 654-4800.

TOPSOIL - screened & delivered. 696-6011, leave message.

LAWN MOWER - Craftsman, 22", 4 h.p., used twice, high rear wheel, $125; 21" Toro lawn mower, $25. 325-0567.

SPRAYER - 5 g.p.m. at 600 p.s.i., 5 h.p., direct drive, dual piston pump, skid mounted, like new, $250 neg. 473-7667.

TOOLS - & ladders, make offer; Solar Flex kerosene heater, brand-new, w/drum, $65. 724-7758.

BARBEQUE GRILL - $50. 475-2509.

PICNIC TABLES - 2'x6', solid cedar, delivered, fully assembled, $150. 744-8279.

WOOD-BURNING STOVE - Franklin, mint cond., asking $150. Jim, 643-5402.

Sports, Hobbies & Pets

BURMESE PYTHON - 10', w/100 gallon tank, 6'x1½'x1½', screen top, 2 hot rocks, best offer. Hans, 298-4148 after 6 p.m.

BUNNIES - $6. John, Ext. 2675 or 924-3528.

GOLF CLUBS - Wilson, 3 PW, 1-3-5 woods, $50. Culwick, Ext. 4930.

BIRD CAGE - w/stand & accessories, $10. Joe, pager 0925 or 728-1859 eves.

ROWING MACHINE - Precor, new cond., $150. Ext. 2041.

WATER SKIS - $20; steel tennis racket, $10; rubber swim fins, $10; man's bowling ball, $20; woman's golf clubs, $10/each. Kathy, 744-2203.

FISH TANK - 55-gallon, w/all accessories, like new, real bargain. 878-0516.

RABBIT CAGE - large, w/removeable drip pan, good cond., $60. Johanna, Ext. 5799 or 878-6378.

POOL - 21' round, alum. frame, filter, pump, solar cover, ladder, disassembled, $250. Mark, Ext. 2957.

Audio, Video & Computers

STEREO SPEAKERS - 2, excel. cond., $30; Smith Corona typewriter, manual, portable, excel. cond., $20. Ext. 3699.

COMPUTER - Amstad laptop 640 Dd w/2400 internal modem, $400; Magnavox laser video player, $200; Okimate 20 printer, $75. 929-6646.

COMPUTERS - Apple IIE, dual disk, printer, extras, $1,200; Atari 300XE, disk, color printer, $200. Frank, Ext. 2022 or 399-4480.

TV ANTENNA - Radio Shack, large, $25. Mark, Ext. 2957.

WALKMAN - Sharp, am/fm 8-graphic equalizer, w/o head phone, 1 year old, excel. cond., $35 neg. Manami, Ext. 3190.

COMPUTER - Tandy 1000TX, 20 meg hard disk, 640k ram, color mon., dot matrix printer, software, IBM PC/AT compat., $1,200. Doug, Ext. 5857.

TV STAND - w/VCR pullout shelf & storage cabinet below, $35. 475-2509.

ALBUMS - 50s & 60s; 19" Sanyo color TV, remote, $175; Criterion 3000 speakers, 12" woofer, 4½" mid-range, 2" tweeter, $95/pair. 724-7758.

Miscellaneous

PAINT - Benjamin Moore, 1 gallon, lilac, $20; 2 bedspreads, 1 beige & 1 green, new, twin, $10/ea.; 2 bucket seat covers, $10. Kathy, 744-2203.

TANNING BED - 6', ultra high bulbs, adjusts for easy storage, orig. $850, sell for $300. B. Lanyi, Ext. 4087 or 289-7902.

Free

WOOD PANELING - dark, hundreds of square feet, very good cond. Ady, Ext. 4531 or 331-3785.

REFRIGERATOR - 21 cu. ft., GE, top freezer, works well, fair cond. Culwick, Ext. 4930

Yard & Garage Sales

PATCHOGUE - Sat., May 5, 9-4 p.m., rain date, May 6, treasures of a lifetime, 185 Maple Ave.

Car Pools

BABYLON - new car pool forming, interested in sharing ride w/1-2 other drivers. Ray, Ext. 3680.

MORICHES - need ride, 7-4:30 p.m. Ext. 3084.

Real Estate

Real Estate advertised for sale or rent is available without regard for the race, color, creed, sex or national origin of the applicant.

For Rent

CALVERTON - 2-bdrm. townhouse, 1½ baths, w/w, appl., patio, deck, $750. 878-0874 after 5 p.m.

CORAM - 3-bdrm. Cape, l/r, eik, refrig./stove, use of ¾ acre, outside maint. included, $800/mo. Grace, 732-3549.

LAKE RONKONKOMA - 1-bdrm. apt., 2nd floor, l/r, eik, full bath, $600/mo. includes all. Gene or Barbara, 588-9096 after 6 p.m.

MEDFORD - 1-bdrm. apt., priv. bath, priv. ent., microwave, small refrig., no children, no pets, nonsmoker, $100/wk. + sec. 475-7250.

PATCHOGUE - 1-bdrm. apt., priv. ent., full kitchen, full bath, furn. or unfurn., use of yard, no pets, $600/mo. + sec. 289-7902.

PORT JEFFERSON, STA. - 2-bdrm. ranch, 2 baths, l/r, kitchen, ½ bsmt., gar., on 1½ acre, $875/mo. + util., 2 mos. sec. 473-6432.

RIDGE - new 1-bdrm. apt., full bath, l/r, w/w, cable, priv. ent., 5 min. to Lab, mature working person, $600/mo. incl. all, + 1 mo. sec. Mike, Ext. 7625 or 924-0341.

ROCKY POINT - 3-bdrm. ranch, l/r, dinette, finished bsmt. w/wood stove, OHWH, city water, 100'x100' lot w/fenced back yard, avail. July 1, $850 + util. Mike, Ext. 2500.

SELDEN - Village in the Woods, 1-bdrm. deluxe co-op, upper unit, eik, d/r, l/r, priv. balcony, ask. $800/mo. + 1 mo. sec. 696-5386.

SHIRLEY - 1-bdrm. apt., l/r, eik, full bath, 15 min. to Lab., mature working person, $575/mo. incl. all, + 1 mo. sec. 281-1840 after 5 p.m.

SOUND BEACH - 1 bdrm., bath, kit.-l/r combo, cable, priv. ent., $600/mo. all; 2-bdrm. apt., bath, l/r, kit., in S.B., near shops, beach, $675/mo. + elec. Ext. 2671 or 744-3284 after 4 p.m.

HILTON HEAD, SC - 2-bdrm. condo, sleeps 6, 2 baths, tennis, golf, beach, pool, Apr.-Sept. $425/wk. 689-5373.

For Sale

CENTERPORT - 220' waterfront on Northport Harbor, 4-5 bdrms., 4 baths, 0.6 acre, dock, $625,000. Bob, Ext. 4044 or 261-3890.

EAST PATCHOGUE - 3 bdrm., 1 bath, l/r, eik, appl., full bsmt., ag pool, deck, excel. location, P-M school district, $127,000, neg. 654-5609.

MATTITUCK - 3-bdrm. house, 1½ baths, fin. bsmt. w/fp, bar, ¾ acre, low taxes, $139,000. 298-8537.

MANORVILLE - 3-bdrm. Colonial, d/r w/cath. ceiling, skylights, solar panels, barn, f/p, w/w, sprinklers, gar., igp, 1¼ acres, cul-de-sac, $171,900. 878-4265.

MEDFORD PINES - 2-bdrm. ranch, new kitchen, all cedar Florida rm. w/skylights, woodstove, shop, solar HW, gar., Andersen windows, fuel bill $300/year, 9 miles to Lab. 654-2617.

MIDDLE ISLAND - Lake Pointe, 2 bdrm., cac, all appl., w/d, lr/dr area, gas heat, wood deck off master bdrm., pool, tennis, clubhouse, maint. fee 85% tax ded., ask. $78,500, neg. Bob, 924-7316.

RIDGE - 2-bdrm. duplex, 1½ baths, eik, cac, w/w, all appl., 5 min. to Lab, $79,900. Erik, Ext. 2437 or 924-2898.

RIDGE - 3-bdrm. townhouse, 1½ baths, cac, w/w, all appl., upstairs newly carpeted, encl. redwood patio, storage room, low monthly main., 5 min. to Lab. Mary, 924-4328.

RIDGE - 4-bdrm. Colonial, 2½ baths, eik, d/r, l/r, w/w, gar. deck, ½ acre, minutes to Lab, $150,000. 924-7520.

SELDEN - Village in the Woods, 1-bdrm. deluxe co-op, upper unit, eik, d/r, l/r, pvt. balcony, ask., $72,000. 696-5386.

SHIRLEY - 3-bdrm. hi-ranch, ½ acre, eik, l/r, 2 baths, den, gar., util. room, ½ bsmt., new furnace, 10 min. to Lab., rent w/option, $150,000. 473-6432.

YAPHANK - 2-bdrm. condo, 1½ baths, l/r, d/r, kit., fin. bsmt., gar., f/p, cac, carpeted, appl., pool, tennis, ask., $120,000. Ext. 3954 or 924-2446.

YAPHANK - 2-bdrm. townhouse, fin. bsmt., cac, gar., ask., $118,500. 444-3921 days or 924-8630 eves.

PALM BAY, FL - 2-bdrm. condo near Melbourne, 2 full baths, l/r, d/r, kitchen, w/d, pvt. screened patio, completely furn., heated pool, near beach, malls, ask. $65,000. 698-8514 after 5 p.m.

TAMPA, FL - Paradise Village Mobile Home Park, 1982 Liberty mobile home 14'x56', 2 bdrms., 1 bath, fam. park, all appl., cac & heat, awning & shed, excel. cond. Glenn, 477-8699.

Wanted

LAWN MOWERS - old, will buy depending on cond., etc. Dan, 698-7322 days, or Ext. 4987 eves.

LIONEL & AMERICAN FLYER TRAINS - & access., top $ paid. Bruce, 924-4097.

BOBCAT - any condition. Tony, 698-9274.

HOUSE TO SIT - free, experienced, reliable, any period after May 15, enjoy peace of mind while on vacation. J. Allentuck, Ext. 2412.

DESK - oak teacher's desk for restoration, reas. cond. & price. Bill, Ext. 2378 or 758-3284.

GROCERY RECEIPTS - Finast & King Kullen for BNL food drive, ask others to save them. Send to Carole Kerr, Bldg. 460.

TUBED AUDIO COMPONENTS - working or not, by Marantz, Macintosh, Futterman, Western Electric or Altec. Jim, Ext. 4584.

TRAILER - for lightweight inflatable boat, also need outboard motor, OMC preferred, about 9 h.p. Paul, Ext. 7697 or 689-2829.

TI-99-4A COMPUTER - for parts. Bob, Ext. 2104.

APARTMENT - small Manhattan apt., co-op or condo, for purchase. John, Ext. 7671 or 765-1299.

Services

*Services are listed in the first **Bulletin** of every month as a courtesy to BNL employees. They are neither screened nor recommended by the Bulletin. Services forms are available in the Bulletin lobby, Bldg. 134.*

CUSTOM WINDOW TREATMENT - Dominique Dionne's designs, curtains, blinds, shades, professionally designed, made to fit. 722-5740.

BALLOON DECORATING - balloon arches, hearts, centerpieces, limousine releases, more, for weddings, showers, etc. Linda, 821-3009.

MOTHER'S DAY FLOWERS - bud vases, plants, arrangements, $8-$30, delivered to Lab Fri. 5/11, Cindy, 821-1560.

PHOTOGRAPHY - Personal Touch photography, specializing in weddings, special occasions, portraits. Patricia Kriss, 298-5648.

LOAN AMORTIZATION SERVICE - schedules for home, car, etc. loan, fixed, variable rate, fixed, variable payment, balloon. 395-3251.

AUTOMATIC LAWN SPRINKLERS - free estimates, professional layouts, repairs, alterations and additions. Lou, 928-7042.

CERAMIC TILE - installation, quality work, cheap. Patrick, 475-8504.

PAINTING - interior/exterior, BNL references, reasonable, dependable and free estimates. Pat, 924-2298 eves.

VIDEO - Flair Video now with 2 more videographers, all spring, summer and fall dates open, from $500 up. Ray. 878-1947.

NAILS - Lamp gels, solar acrylic, $25 for full set; $15 for fill-ins., eve. and weekend appt. avail. Johanna, 878-6378.

HOUSE CLEANING - Shoreham, Wading River, Miller Place, Mt. Sinai, Ridge, honest and reliable, free est. Rosemary, 924-6761.

ROTOTILLING - lawns and gardens, Troybilt, tiller hills and furrows, no job to small. Jim Wright, 654-5049 after 5:30 p.m.

YARD MAINTENANCE - lawn mowing & trimming, town water hook-ups, inside & out, Wading River, Shoreham & Baiting Hollow. 929-8876.

RUG SHAMPOOING - very reasonable, Lab discount. Jerry, 924-6019 days.

LAND CLEARING - using excel. rake on 450 loader, $70/hr. w/ operator. Tom, 878-1060.

TYPING - complete desktop publishing, 20 yrs.' exp., Lab discount. 281-0268 until 9 p.m. daily.

WORD PROCESSING - professional, fast results, 8 year's secretarial experience, IMB PC Wordstar, letter quality. Ext. 928-7571 after 6 p.m.

BABY-SITTER - responsible, reliable 12-yr.-old baby-sitter w/exp., Wading River area. Stacy Durnan, 929-5945.

ROTOTILLING - will till your garden w/Troy-prof. tiller. Tony, 727-6515.

LAWN MOWER REPAIR - reasonable rates, also small engines. Dan, 698-7322.

BRICKWORK - patios, walks, swimming pools, retaining walls, landscaping ties, Belgian block, 20 yrs. exp., Lab discount. Tony, 698-2974.

SHEETROCKING & SPACKLING - free estimate. Kevin, 563-9855.

PARTY TENTS - we set up and take down. Fred Kuehl, 588-2268.

ROTOTILLING - Troybilt rototilling, custom service, lawns and gardens. Bob, 732-9517.

SEAMSTRESS - clothes made or altered at reasonable rates. Donna, 924-1684.

AU PAIR POSITION - French girl, 18 yrs. old, daughter of summer visitor, for summer. G. Bunce, 286-8747.

CONTRACTOR - carpenter, extensions, dormers, gar., conversions, bsmnts., decks, kitchens, licensed, free estimates. 698-2501.

YARD WORK - and mowing, good, steady seasonal job for high school student, Bellport Village. Ext. 2914 or 286-3742 eves./wkends.

ELDERLY PATIENTS - on weekends, in their home, I will give TLC and stay overnight, a break for the family, reasonable. Susan, 286-4225. eves.

ELECTRICIAN - all wiring jobs, from changing switches and outlets to major service changes, neat, dependable service. Steve, 586-1440.

DJ SERVICE - Skitxoid man, for weddings, parties, whatever, guarantee success at your next function. 744-7157.

WINDOW CLEANING - all work squeaky clean, free estimates. 928-3189 after 4 p.m.

KEYBOARDS REFURBISHED - Commodore 64, circuit board and keys cleaned, contacts replaced as nec., $12 + 30¢ per contact. Brian, 929-6634.

Classified Ad deadline is 4:30 p.m. Friday for publication Friday of the next week.