BROOKHAVEN BULLETIN
Vol. 43 - No. 21 May 26, 1989
BROOKHAVEN NATIONAL LABORATORY

# Research and Upgrades Shine at NSLS Users' Meeting

As Michael Knotek, Chairman of the National Synchrotron Light Source (NSLS) reported to the 1989 Annual NSLS Users' Meeting, May 17-18, it is easier to talk about what has not changed than what has changed over the last 18 months during the Phase II construction and hardware-upgrade project.

The annual meeting was preceeded by two new workshops, each of which drew over 125 participants: one on new frontiers in vacuum ultraviolet science with synchrotron radiation and the other on x-ray absorption fine structure.

At the users' meeting itself, nearly 400 users received reports on the lastest results from the complementary research on high-temperature superconductivity at the NSLS and BNL's High Flux Beam Reactor, as well as from NSLS surface studies, x-ray lithography program, and chemical and nuclear physics research.

Regarding the synchrotrons that provide the light for all this science, only half of the original vacuum chambers and all of the original dipole, quadrupole and sextupole magnets are left in the x-ray and vacuum ultraviolet (vuv) rings. The replacement of the rest of the original hardware and electronics was only upstaged by the installation of five insertion devices, bring the total to seven, and 26 new beam lines, bringing the total to 97.

"We now have an order of magnitude more capability — and so we are ready for the next generation of science," Knotek stated. "We want to be a full-science facility — more than just a place where users come to take data and go home. To become a mature facility, we have to provide the technical, intellectual and support resources that will enable our users to do their science better."

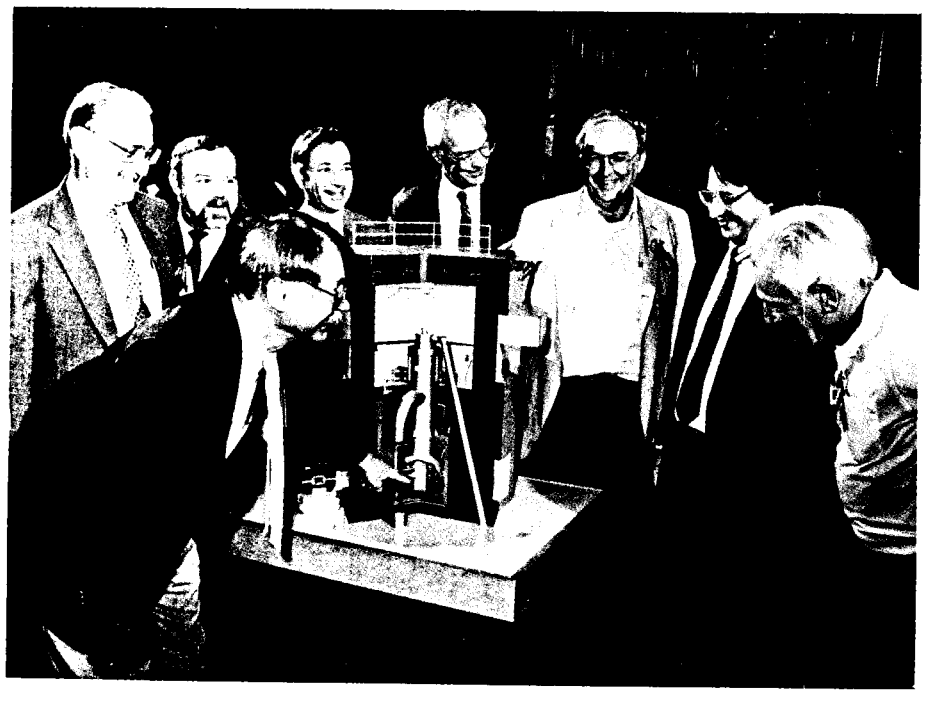
In a step toward better accommodating NSLS users, Knotek announced the naming of physicist William Thomlinson to the newly created position of Associate Chairman for Experimental Programs. In this capacity, Thomlinson will be responsible for beam-line research and development, the support of experimental programs and beam lines, and user administration.

During the last year, Thomlinson had cochaired the in-house committee that took a look at the NSLS from its users' point of view, from its user policy, staffing and stockroom to housekeeping, vending machines and coffee. Of the Scientific Program Support Committee's 67 recommendations, 35 have been implemented and 20 are in progress.

"The twelve not approved were a question of money, as this is a tight and tough year," reported Thomlinson. "However, the NSLS budget for next year looks better, with a doubling of capital and upgrade dollars."

**Under the big top reserved for meals and coffee breaks during the 1989 annual National Synchrotron Light Source Users' Meeting are: (from left) William Thomlinson, the new NSLS Associate Chairman for Experimental Programs; Michael Knotek, NSLS Chairman; Denis McWhan of AT&T Bell Labs, Murray Hill, New Jersey, who is the new chairman of the NSLS Users' Executive Committee (UEC); and Dale Sayers of North Carolina State University, past chairman of the UEC.**

Added the Users' Executive Committee's past chairman Dale Sayers, of North Carolina State University, "What's evident from this meeting is not only the productivity of the facility, but also the solid partnership that has evolved between the user community and the Light Source staff — a partnership that has enabled all those involved to profit scientifically from our mutual interest and investment."



# Taking a Look at the HFBR

The Department of Energy's (DOE) Advisory Committee on Nuclear Facility Safety paused for this photo outside the High Flux Beam Reactor (HFBR) on Wednesday, May 24. Chaired by former Nuclear Regulatory Commission Chairman John Ahearne (third from right), the committee came to BNL to hold a public meeting on May 25 on the status of the HFBR and other issues.

Though the HFBR has always operated safely since it began operating in 1965, a 1988 report on DOE's research and test reactors by the National Academy of Sciences and the National Research Council recommended a new analysis of the possibility that HFBR operators might be exposed to radiation in the unlikely event of a loss-of-coolant accident during 60-megawatt operation. The preliminary results of BNL's subsequent detailed assessment of these concerns confirmed that, under those extreme conditions, the potential exists that reactor operators could be exposed to an unacceptably high level of radiation.

As a result, Secretary of Energy James Watkins directed that the current scheduled shutdown at the HFBR for maintenance and refueling be extended. He also charged Ahearne's committee to examine the potential response of the HFBR to loss-of-coolant accidents and to provide him with the committee's independent recommendations on appropriate conditions for safe restart.

Thus, as it begins its investigation, the committee stopped at the HFBR for a first-hand look at the facility. To start things off, Reactor Division Head Michael Brooks went over a model of the HFBR with (from left) Hilary Rauch, Manager of DOE's Chicago Operations Office; Jerry Bellows, Manager of DOE's Brookhaven Area Office; BNL Deputy Director Martin Blume; Gerald Kinne, BNL's Assistant Director for Reactor, Safety and Security; John Ahearne; BNL Director Nicholas Samios; and advisory committee member Hal Lewis, of the University of California, Santa Barbara.

# Two Patents to BNL Employees

**Richard Witkover** of the Alternating Gradient Synchrotron Department has been awarded U.S. Patent No. 4,633,523 for inventing an optical analog data link with a unique self-test feature.

The circuit was built to solve problems that arise when experimental equipment gives out analog data signals that vary continuously. Analog data are more easily distorted than digital data, which vary in steps.

In the process used previously, voltage-to-frequency converters change analog signals to a string of digital pulses of a frequency that is proportional to the input voltage. The signals are then converted to pulses of light, which travel through a fiber-optic light guide to a photo-detector. This converts the signals back to voltage pulses, which are reconstructed to give the original analog voltage signal.

The disadvantage of this simple method is that input signals that are around zero volts produce a frequency near zero and cannot be rapidly identified.

To eliminate this problem, the new circuit offsets the zero by a fixed frequency, while compensating for the offset at the receiving end in order to retain sensitivity.

This offset frequency in the new invention, in addition to allowing rapid identification of signals near zero, led to a unique feature.

Since even a near-zero signal has at least the fixed frequency, an absence of the offset or higher frequency would only happen if there is a transmission problem. So the negative voltage is useful to indicate transmission failure.

The feature is especially useful in a system with many channels, since an indicator light for each circuit allows immediate location of a failed channel. This avoids costly operating-time delays.

The invention was developed and is now used for improved data communications across the high-voltage interface for the Alternating Gradient Synchrotron linac ion sources.

•

U.S. Patent No. 4,780,238 has been awarded to **Eugene Premuzic**, Department of Applied Science, for his invention of a way to prepare new, naturally produced chelating agents by a method that uses microorganisms to generate these compounds in a bio-available form. Chelating agents produced in this manner can then be used as detoxifying agents that can remove metals from other living organisms.

Chelating agents are compounds containing functional groups that can bind with one or more metal species in a cyclic structure. The newly invented chelating agents are nontoxic, selective and fast-acting. So, in addition to being useful in heavy-metal recovery processes, they can ensure quicker treatment for people at risk of metal poisoning.

This involves industrial workers in mining, transportation, production and waste disposal of heavy metals or the manufacture and use of radioactive materials. It also includes those who live near such industrial facilities and might be affected by contamination in the case of equipment failure.

In the past, research has centered around the production of synthetic chelating agents, which have been used, for example, in treating lead poisoning in children. Another method was to use chelating agents produced during normal metabolism of microoranisms. However, when using metabolites, a random search must be made to find a chelating agent useful for a specific metal.

The new invention uses microorganisms which, when challenged by a metal, produce chelating agents that are highly selective in detoxify-

(Continued on page 2)

# Fair Appraisals for Science Projects

Competition was stiff at the 1989 BNL Elementary School Fair, held Saturday, May 20, in Berkner Hall to encourage children's interest in science: 326 projects representing the efforts of some 700 students from 79 schools were narrowed down to seven first-place winners, one each for kindergarten through sixth grades.

Corey Sack of the Brookhaven Elementary School, South Country, shown here with her project "A Squirrel's Tale," took first place among kindergarten entrants. Grade winners were: 1st grade — Christina Hanson, Ridge School Annex, Longwood, "Separating Colors"; 2nd — Derik Hoerning, Tamarac Elementary School, Sachem, "What Affects Browning of Apples?"; 3rd — Alix Gmur, Kraemer Street Elementary School, South Country, "Which Liquid Evaporates Fastest?"; 4th — Jessica Smith, Sound Beach School, Miller Place, "Orbit Beans"; 5th — Tara Haberle, John F. Kennedy School, West Babylon, "How Plants and Vegetables Are Used for Dying Clothing"; 6th — David Neubert, Hiawatha Elementary School, Sachem, "Does the Color of a Liquid Affect People's Taste Perception?"

These young scientists may not have won a prize, but it looks as if they won a friend.

Photos in this issue by Roger Stoutenburgh.

Scientific thought, creativity, thoroughness and clarity were the project attributes evaluated by the teams made up of these BNL scientists and local elementary school teachers who were judges at the fair: (front, from left) Shirley Lehman, Brookhaven Elementary, South Country (SCSD); Peter Wanderer, BNL, Accelerator Development; Kathleen Griffin, BNL, Biology; Victoria McLane, BNL, Nuclear Energy; Derek Lowenstein, BNL, Alternating Gradient Synchrotron (AGS); (second row, from left) Robert Simione, Boyle Road Elementary, Connetquot; Erik Johnson, BNL, National Synchrotron Light Source (NSLS); Claudia McGuire, Coram Elementary, Longwood; Richard Scheidet, BNL, Plant Engineering; Nancy Lazarz, BNL, NSLS; Alan Kuehner, BNL, Safety & Environmental Protection; (third row, from left) Louise Hanson, BNL, Applied Science (DAS); Linda Sill, Mount Sinai Elementary, Tina Steiner, Verne Critz Elementary, SCSD; Carol Jansen, Kreamer Street School, SCSD; Avril Woodhead, BNL, Biology; (top, from left) Richard Thomas, Helen B. Duffield School, Comsewogue; Gerry Bunce, BNL, AGS; Paul Kalb, BNL, DAS; and Charles Flagg, BNL, DAS.

# Service Awards

The following employees received service awards during the month of May 1989:

**Forty Years**

**Irving L. Feigenbaum** ..... Physics
**Mary Sowiak** ..... Sup. & Materiel

**Thirty Years**

**Emil J. Caiazza** ..... Photo & G. Arts
**Paul J. Klotz** ..... App. Science
**Robert B. Marr** ..... App. Science
**Eugene C. Mohlmann** ..... DCP

**Twenty-Five Years**

**Worth O. Austin Jr.** ..... Sfgrds. & Sec.
**Oscar E. Blevins** ..... Plant Eng.
**Victor J. Emery** ..... Physics
**Elizabeth M. Jellett** ..... Chemistry
**Sol Pearlstein** ..... Nuc. Energy
**Theodorus J. Sluyters** ..... AGS

**Twenty Years**

**Louis J. Addessi** ..... AGS
**George E. Malcolm** ..... MIS
**James R. Sanford** ..... AGS

**Ten Years**

**Steven Bennett** ..... NSLS
**Peter L. Boyle** ..... Plant Eng.
**Victor Cassella** ..... Plant Eng.
**Nicholas J. Franco** ..... MIS
**Timothy G. Freeman** ..... MIS
**Stephanie H. Lamontagne** ..... ADD
**Diana R. Langhorn** ..... Plant Eng.
**Paul J. Larsen** ..... S&EP
**Salvatore N. Morano** ..... Biology
**Michael J. Nekulak** ..... ADD
**Jean P. Petterson** ..... Chemistry
**Slobodan Pjerov** ..... NSLS
**Steven R. Schroder** ... Sup. & Materiel
**Charles Spataro** ..... AGS
**Royal E. Thern** ..... AGS
**Linda J. Thompson** ..... Tech. Info.
**Richard F. Wiseman** ..... NSLS

# Speakers Bureau

**Martha Heine,** S&EP; **Charles Seaton,** SMD; Career Day at Brookhaven Learning Center, in Bellport, "Careers at BNL," February 1.

**Donald Gardner,** Phys.; Suffolk County Boy Scouts Career Awareness Day, at Harborfields High School, "Careers in Mechanical Engineering," February 13.

**William Marcuse,** DO; Rotary Club of Islip, "Technology Transfer," March 2.

**Janet Tempel,** DO; SUNY at Stony Brook Graduate Studies for Teachers, "Science Fairs," March 8.

**David Diamond,** DNE; Miller Place High School Career Night, "Careers in Science," March 13.

**Richard Scheidet,** PE; Eagle Scouts Court of Honor Award Ceremonies, Patchogue, presenter of BNL Award, March 18.

**Mary Ann Castrogivanni,** S&EP; National Women's History Month at Centereach High School, "Careers for Women in Science," March 20.

I-CON VIII: Science Fiction, Fact & Fantasy Convention, SUNY at Stony Brook, April 22: **Andrew Hull,** S&EP, panel on Chernobyl; **Walter Kato,** DNE, lecture and panel on Chernobyl; **Gerry Morgan,** ADD, **James Powell** (DNE), panel on superconductivity; **James Murphy,** NSLS; **William Thomlinson,** NSLS, lecture on synchrotron radiation sources; **David Welch** (DAS), panel & lecture on superconductivity.

**Meyer Steinberg,** DAS; L.I. Forum for Technology (LIFT), "Understanding the Greenhouse Effect and What Can Be Done About It," April 7.

**Jeffrey Taylor,** Pers.; Newsday Volunteer Recognition Day, BNL representative, April 7.

**Robert Thomas,** DO; Wyandanch High School Career Day, "Careers in Science," April 27.

# Attention: LIRR Riders

The schedule of the Long Island Railroad (LIRR) changed on Monday, May 22 — and the change is affecting BNL staff and visitors who ride the rails.

The biggest change is for afternoon riders to New York City: Beginning Tuesday, May 30, those bound for the Big Apple must be at the Public Affairs Office, Bldg. 134, by 3:55 p.m. A BNL driver will chauffeur all passengers to the Mastic-Shirley station to meet the new 4:25 p.m. train, which arrives at Pennsylvania Station at 6:19 p.m.

Those who wish a ride to the Mastic-Shirley station to board the 4:25 *must* reserve a seat in the Lab car by calling Public Affairs, Ext. 2345.

Morning riders to the Lab, also please note: A Brookhaven driver will meet the 10:57 a.m. train at the Patchogue station, picking up Lab-bound passengers who left Penn Station at 9:31 a.m.

For more information about the new LIRR schedule, call BNL's Transportation Office, Ext. 2535, or LIRR information, 234-LIRR.

# Stony Brook Event

A concert of South Indian classical music, known as Carnatic music, by the Bombay Sisters, C. Saroja and C. Lalitha, will be held on Saturday, June 3, in the Stony Brook Auditorium, State University of New York at Stony Brook, at 5 p.m. Tickets for this farewell concert are $7 per person, $5 for students. Contact Mulki Bhat, Ext. 2814, for more details.

# Patents

(cont'd)

ing that particular metal. This method, called challenge biosynthesis, effectively narrows the selection down to the compounds most appropriate to the needs of living organisms. Also, because they are so specific, the agents act very quickly, thus improving the treatment possible for a patient.

## *Look! A Limerick!*

*There once was a camp that's called Upton,*
*Where soldiers both trained at and supped in*
*It turned like a cab*
*Into Brookhaven Lab,*
*A place that research would erupt in.*

*— Morris Strongson*
*Computing & Communications*

# *Return to Camp Upton*

**Forty-eight years ago, the men shown here were all inducted into the U.S. Army at Camp Upton. Last Friday, they returned to the site of their 1941 inductions to visit the Camp Upton Historical Collection at the Exhibit Center at BNL. Most of the World War II artifacts on display were channeled to the collection by Arthur Lyons, who stands closest to the case displaying WWII-era uniforms. Lyons heads the organization of which this group is a part, called "The 41'ers of Camp Upton." For this pre-Memorial Day remembrance, the visiting veterans came from New York, New Jersey, Connecticut, and as far away as Arizona.**

# Leaving the Lab — After 35 Years or More

Mary Sowiak

*At the end of each month, the Bulletin wishes the best of luck to employees who are retiring from the Lab with 35 or more years of service.*

**Mary Sowiak** retires May 31 — 40 years and six days after she first came to BNL on May 5, 1949. At the Lab, she became secretary to a buyer in the Division of Contracts & Procurement Division (DCP).

After 11 years in DCP, Sowiak transferred to the Supply & Materiel Division (SMD). She has been with SMD ever since and is now a senior clerk — until Wednesday, that is, when she leaves the place, she says, "was like my second home. I loved it. I always looked forward to coming to work."

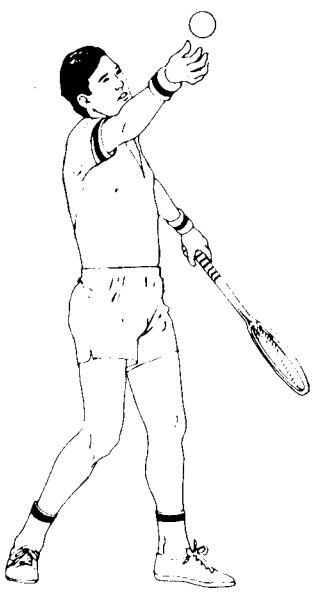
She's planning to spend her retirement at her home in Center Moriches, where, she says, "I've got to do a lot of catching up and just learning how to relax. But I'm going to have fun doing it. I love yard work and my two-mile walks."

## Tennis News

**Court Reservations**

Two tennis-court reservation systems will go into effect on Monday, June 5, with sign-up on Friday, June 2. The rules for court use are posted at courtside and in the BERA Sales Office, Berkner Hall.

Under the **advance reservation system A,** three of the courts may be reserved for weekday play the day before play (thus Friday for Monday play). If two players are not on court within ten minutes of the reserved time, the court reservation is forfetited. For this system, time of lunchtime play is limited to one hour for both singles and doubles.



The **on-court scheduling system B** offers the three remaining courts on a first-come, first-served basis to players who sign the blackboard at courtside at time of play. For this system, time of lunchtime play is limited to 1½ hours for both singles and doubles.

These reservation systems are in effect weekdays from 11:30 a.m.-2 p.m. and 4:30 - 7 p.m.

Reservation sheets for system A are held at the BERA Sales Office from noon to 1:30 p.m. on the day preceding play. One of the individuals intending to play must sign up. Reservation sheets for the day's play will be posted at courtside in the morning, where players may reserve any courts that remain open. Only group 1 from the priority players list below may use system A. Only groups 1 and 2 may use system B. Groups 3 and 4 may play during non-reservation times.

1. Laboratory employees, including visiting and guest appointees, and BNL retirees.
2. Laboratory employees playing with family members or personal guests.
3. Immediate family members of Laboratory employees.
4. Personal guests of Laboratory employees.

**Annual Tournament**

The tournament will get under way on Saturday, July 22, and players can sign up at the BERA Sales Office beginning Friday, June 16. Further details will be given in a later issue of the Bulletin. Tournament play will take precedence over other play during the weekends of the tournament.

**Trip to U.S. Open**

The Tennis Committee is contemplating running a second bus on the trip to the U.S. Open in Flushing Meadows on Tuesday, September 5. The final decision will depend on ticket availability and on the number of immediate, paid reservations. Those now on the waiting list, as well as any new participants, should sign up and pay immediately at the BERA Sales Office.

The cost of $28 per person includes a ticket for the day matches and round-trip bus transportation. The bus will leave the Lab at 8:30 a.m. and make one or two pickups at Park & Rides along the Long Island Expressway. Return from the National Tennis Center is scheduled for 7 p.m.

**Tennis Committee**

Tennis committee members are chairperson Eena-Mai Franz, Gerry Bunce, Nick Combatti, Ed Gill, Marilyn McKeown, Ken Perkins, Carol Roberts, Steve Shapiro, Om Singh and Neal Tempel.

BROOKHAVEN BULLETIN

Published weekly
by the Public Affairs Office
for the employees of
BROOKHAVEN NATIONAL LABORATORY

ANITA COHEN, Editor
MARSHA BELFORD, Assistant Editor
LIZ SEUBERT, Reporter

35 Brookhaven Ave., Upton, N.Y. 11973
(516)282-2345

## Correction

In last week's article "Talking About Ticks and Lyme Disease," Bulletin readers were advised to dab a hard-to-remove tick with petroleum jelly. While this could eventually kill the tick, loosening its bite, it may also cause it to release bacteria. Most ticks can be removed by grasping them with a tweezers near the skin and pulling straight up, slowly and smoothly, being careful not to puncture the tick's abdomen. If any part of the tick remains embedded, consult a physician.

## Farmers' Market Opens Next Week

The Wednesday Farmers' Market at BNL will begin its eighth season on May 31. Local farmers will truck fruits, vegetables and floral products to the same spot as in previous years — north of the tennis courts in the parking lot along Brookhaven Avenue. The market, which is not open to the public, will be held every Wednesday through November 25, from 11:30 a.m. to 1:30 p.m.

## Artificial Intelligence Group Meeting

"Application of Artificial Intelligence and Expert Systems" will be the topic presented by Inn S. Kim, Department of Nuclear Energy, at the next Artificial Intelligence Group (AIG) meeting on Thursday, June 1, in the Computing & Communications Division conference room, in Bldg. 515, at 1 p.m.

Kim will introduce AI and expert systems, their characteristics and merits, and discuss developing a prototype expert system and methodology for an on-line, fault-diagnostic expert system. For more information call Ralph Fullwood, Ext. 2180.

## Holiday Notices

The Laboratory will be closed Monday, May 29, for Memorial Day. Over the three-day weekend the following schedules will be in effect:

- **Brookhaven Center** — Will be closed Sunday and Monday, May 28 and 29, and will reopen Tuesday evening, May 30.
- **Cafeteria** — Will be open from 9 a.m. to 2 p.m., Saturday through Monday, May 27-29.
- **Vended Food, Bldg. 912** — Will be in continuous operation.
- **Pool & Gymnasium** — Will be closed for the Memorial Day holiday from Saturday, May 27, through Monday, May 29. Normal hours will resume on Tuesday, May 30.

## Cafeteria Menu

**Monday, May 29 — Memorial Day**
Snack bar service — 9 a.m. to 2 p.m.

**Tuesday, May 30**

| | | |
|---|---|---|
| Soup: Spinach | (cup) | .75 |
| | (bowl) | .95 |
| BBQ chicken wings & ribs w/veg. or pot. | | 4.25 |
| Baked ziti w/garlic bread | | 3.10 |
| Lite-line: Broiled whitefish w/veg. or pot. | | 3.10 |
| Hot deli: Corned beef | | 2.85 |

**Wednesday, May 31**

| | | |
|---|---|---|
| Soup: Cream of asparagus | (cup) | .75 |
| | (bowl) | .95 |
| Ham à la king | | 3.10 |
| Sauerbraten w/veg. | | 3.10 |
| Lite-line: Steamed ham w/pot. or veg. | | 3.10 |
| Hot deli: Open turkey sandwich | | 2.85 |

**Thursday, June 1**

| | | |
|---|---|---|
| Soup: Minestrone | (cup) | .75 |
| | (bowl) | .95 |
| Chicken chow mein w/rice | | 3.10 |
| Braised lamb chops w/pot. or veg. | | 3.10 |
| Lite-line: Salad plate | | 2.25 |
| Hot deli: Meatball hero | | 2.85 |

**Friday, June 2**

| | | |
|---|---|---|
| Soup: Mushroom & clam bisque | (cup) | .75 |
| | (bowl) | .95 |
| Fried chicken w/pot. or veg. | | 3.10 |
| Broiled whitefish Florentine w/pot. or veg. | | 3.10 |
| Lite-line: Steamed whitefish w/pot. or veg. | | 3.10 |
| Hot deli: Pastrami | | 2.85 |

## Physical Review Has Job Opening

The American Physical Society (APS) has an opening on *The Physical Review* for an Editorial Assistant. This position requires: B.A. or B.S. in physics or mathematical sciences, good command of English grammar, communications skills and concern for detail needed to perform varied duties for editorial processing of manuscripts for physics journals.

APS is an equal opportunity employer and offers a competitive salary and excellent benefits package. Send resume to Personnel Department, APS, 1 Research Road, Box 1000, Ridge, NY 11961.

## Bowling

**Red/Green League**

The Designers are the champs with the Bionics taking second place. High games were bowled by S. Dimaiuta 211, E. Sperry 201, J. Ferrante 211, C. Scarlett 207.

**Pink League**

The Apple Blossoms took first place. Ann Ostheimer had a 164.

## No AA Meetings This Summer

Alcoholics Anonymous (AA) meetings will not be held on site this summer. Watch the Bulletin for notice of the resumption of AA meetings after Labor Day or call the Employee Assistance Program, Ext. 2733.

## Arrivals & Departures

**Arrivals**

**Stanley Alter** ..... S&EP
**Frank G. Heimroth** ..... AGS
**Michael A. O'Donnell** ..... Accel. Dev.
**Nancy J. Sherlock** ..... Biology

**Departures**

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

**Bruce W. McDowell** ..... Accel. Dev.

## Local Users Group

"Low-Cost Mini (Graphics) Supercomputers and Workstations" will be the topic discussed at the next meeting of the Upton Local Users Group, on Wednesday, May 31, at 10:30 a.m., in Room B, Berkner Hall. Time for questions will be available after the presentation. All computer users are welcome to attend. For more information, call Zohreh Parsa, Ext. 4748.

## 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.

**LABORATORY RECRUITMENT** - Opportunities for Laboratory employees only.

4051. SECRETARIAL POSITION — (part-time, term appointment) Requires excellent, accurate typing and IBM PC word-processing skills. Previous experience with WordMarc or TeX preferred. Will prepare technical reports and correspondence, make travel arrangements and process vouchers. Physics Department.

4052. OFFICE SERVICES POSITION - (term appointment) Requires a good knowledge of office practices and accurate typing skills. Previous IBM PC experience desired. Will perform a wide range of clerical duties in various administrative sections of the Physics Department. IPAPS/J-CARS experience helpful. Previous data-entry experience requried. Physics Department.

4053. SECRETARIAL POSITION - (term appointment) Requires AAS in secretarial science or equivalent and a knowledge of Laboratory policies and procedures. Previous word-processing experience required. IBM PC WordPerfect desired. The ability to prioritize work and to perform duties with minimum direct supervision is essential. Will perform diverse secretarial duties including preparing correspondence, maintaining files, scheduling meetings and conferences, arranging travel and processing vouchers. Director's Office.

4054. MAIL CLERK - (temporary to 8/14/89) Staff Services Division.

4055. ADMINISTRATIVE/BUDGET POSITION - Requires a bachelor's degree in business or engineering and substantial experience in cost analysis, budget preparation and control, project planning and scheduling. Knowledge and experience in PC-driven business programs is essential. Responsibilities will include preparing and monitoring budgets, controlling costs, coordinating subcontracting and preparing management reports for several divisions within the Department. Experience in an engineering environment is highly desirable. Department of Nuclear Energy.

**OPEN RECRUITMENT** - Opportunities for Laboratory employees and outside applicants.

4056. TECHNICAL POSITION - Requires an AAS in engineering science or equivalent experience and a minimum of five years' experience in processing methods related to radiation detector and electronic readout development, including hybrid layout and production techniques. The ability to independently design details of readout systems and detector-readout integration on CAD system desired. Familiarity with vendors in micro- and mini-electronics industry, as well as the ability to interface with a wide variety of detector users, is highly desirable. Additional responsibilities will include the institution of clean-room procedures and some processing equipment installation and maintenance. Instrumentation Division.

4057. ENGINEERING POSITION - Requires BS/MSME and a minimum of ten years' experience in particle accelerator engineering or related fields. Strong background in stress and thermal analysis, as well as extensive experience in the design of electromechanical equipment, such as magnets, collimators and accelerator diagnostic equipment required. Familiarity with soft and hard vacuum systems necessary. Alternating Gradient Synchrotron Department.

## Motor Vehicles & Supplies

89 HONDA ACCORD LXi - 4-dr., 1 mo. old, w/ extras, negotiable. Jerry, Ext. 4487 or 363-6908.

87 NISSAN SENTRA - 5-spd., new brakes, muffler, & tires, excel. cond., asking $3,700. Chang, Ext. 4059.

87 HONDA CRX - 5-spd., mint, Blaupunkt, am/fm cass., 20k mi., alarm, 4-yr. warranty. Chris, 924-0484.

87 MAZDA B2000ES PICKUP - 5-spd., bed liner, cap, am/fm, sliding window, black, low mi., excel. cond., $6,000. Gary, 821-3244.

86 CHEVROLET PICKUP - ½ ton, 4x4, s/t, 59k mi., good cond., $7,000. George, 878-1178.

85 TOYOTA CAMRY - 70k mi., 4-cyl., a/t, a/c, new trans., tires, battery, $4,200. Mike, Ext. 3434.

85 PONTIAC GRAND AM - s/t, a/c, am/fm cass. p/s, p/b, 17k mi., excel. cond., $6,900. 665-4499 after 5 p.m.

85 FIREBIRD 3800 - red, T-top, a/c, alarm, cloth int., 5-spd., mint, must sell, getting married, $7,000 neg. Kevin, 735-7940 after 5 p.m.

84 MAZDA RX7-SE - all power, leather, 4-wheel disks, sunroof, VR Eagles, new clutch, brakes, shocks, $8,200. Ext. 4719 or 751-8240 eves.

84 FORD F250 - 35k mi., a/c, a/t, p/s, p/b, cap, super clean, $8,300. 331-4472 after 6 p.m.

84 EAGLE - 4x4, 4-dr. wagon, a/t, a/c, am/fm/tape, excel. cond., $5,400. 473-2473.

84 HONDA ARKO 125 MOTOR SCOOTER - 12k mi., red, new battery, good cond., $600. Frank, Ext. 7519, or Vita, 277-0464.

83 NISSAN STANZA - h/b, 4-dr., a/t, p/s, p/b, a/c, 70k mi., clean in & out, runs well, excel. cond., $3,600. Ext. 4606 or 654-5049.

83 NISSAN SENTRA - h/b, lt. blue, clean, 5-spd, s/t, avg. 35 mpg, am/fm stereo cass., asking $1,800. Sharon, Ext. 3995.

83 RENAULT ALIANCE - low mi., new clutch, $950. Ext. 3867 or 399-1249.

83 YAMAHA VIRAGO MOTORCYCLE - 750cc, black, mint cond., garaged, low mi., extras, asking $1,900 neg. Charles, Ext. 5211.

82 NISSAN STANZA - h/b, a/t, p/s, p/b, am/fm, high mi., sunroof, one dent otherwise clean, runs well, $900. Lenny, Ext. 4467.

81 MAZDA - gray, 2-dr., 5-spd., a/c, am/fm cass., moonroof, 90k mi., excel. cond., $1,000. Ext. 3426.

81 BUICK SKYLARK - 6-cyl., 4-dr., gray, a/c, p/s, p/b, 80k mi., $1,900. Ramesh, Ext. 4410/7684 or 924-0443.

81 PLYMOUTH SAPPORO - 2.6L eng., a/t, a/c, p/s, p/b, am/fm stereo, 95k mi., good cond., $2,000. Ed, Ext. 2526 or 765-2017 after 6 p.m.

80 DATSUN 310 - many new parts, excel. running cond., $1,495. Ext. 3206.

80 DATSUN 210SL - h/b, a/c, 85k mi., 5-spd., good for commuting, $500. 589-3072.

79 INTERNATIONAL SCOUT - 4wd, new rear, alternator, tires, am/fm cass., off-road lights, many new parts, $3,100 or best offer. Ext. 4638.

78 CHEVY NOVA - 4-dr., a/t, p/s, r/h, good cond., orig. owner, $990. Sandy, Ext. 3369 or 286-1022.

78 MOTOR HOME - 18', sleeps 4, 45k mi., excel. cond., $8,900. 689-8793.

78 ALLEGRO MOTOR HOME - 23', 360 eng., a/t, p/s, p/b, a/c in cab, sleeps 6, rear bath, clean in/out, make offer. Andy, Ext. 5265 or 732-8904.

76 DATSUN 280Z - 4-spd., mint body, white lacquer paint, must sell, $1,875 neg. Paul, 467-6239.

76 VOLVO 244DL - beige, a/t, 4-dr. sedan, hit in front, repairable, good engine & trans. 878-4513.

73 JEEP MAIL TRUCK - 2wd, L.H.D., 6-cyl., a/t, $250 neg.; 1 pr. 12:00x15 tires, $40 or best offer. John, Ext. 2172 or 744-4386.

72 DODGE DART - runs well, $300. Ext. 3870 or 281-0152.

69 CAMARO R.S. - p/s, p/b, fresh 350, 4-spd., solid, rust- free, $5,500 neg. Rob, Ext. 2012.

67 YAMAHA MOTORCYCLE - 180cc, 11k orig. mi., new battery, excel. cond., $150. Dan, 698-7322 or Ext. 4987 eves.

64 CHEVROLET IMPALA - 6-cyl., 88k mi., engine, orig. owner, excel. cond., asking $1,500. Ext. 7929 or 286-1205.

MOTORCYCLE HELMET - size L, excel. cond., $20; Yamaha sissy bar for motorcycle, $20. 589-0625.

68 APACHE POP-UP CAMPER - good cond., $375. 878-2577.

TIRES - Bridestone Desert Dueler, P21575R15, brand-new on 6-lug rims, $200. 821-2875 eves.

FORD FACTORY CAP - 8' bed, asking $350; snow plow, 8', power angle, fits Ford '73-'79, asking $500. 474-5715.

SLIDE-ON CAMPER - Scamper pop-up, sink, stove, propane tank, reefer, sleeps 3, excel. cond., fits small pickup, $1,300. John, Ext. 3082 or 3083.

TIRE - Firestone Supreme, 235R75x15, extra-load, blackwall, $25. Ext. 2799.

SPEAKERS - Clarion 830, triaxial, 100 watts, new in box, list $200, sell $100. Ext. 2799.

WHEEL RIMS - 4 Keystone Klassic chrome wheel rims, 14", w/locks, best offer. 928-1942.

TIRES - 4 truck tires & rims for Ford truck, size LT235R-16. Dick, Ext. 4251.

TIRE - new 721 Firestone, 235/75R15, Eldo rim, $75 neg. Ernie, 588-4987.

NISSAN AIR-FLOW BOX - brand-new; T-top; 4 orig. Datsun 280 trim-ring Z tires; 2 black bucket seats, make offer. Janet, Ext. 2345 or 929-3910.

LUGGAGE CARRIER - auto roof top, H.D., almost new, $15. 924-2726.

## Boats & Marine Supplies

23' COLUMBIA SAILBOAT - 1976, 1986 Yamaha 6 h.p., very clean, must see. 924-2016 after 6 p.m.

22' CATALINA SAILBOAT - 3 sails, trailer & motor, good cond., asking $4,800. 929-8912.

21' ANGLER - 1977, cuddy, pedestal seats, large full tank, great fishing boat, $2,100 or best offer. 286-3196.

19' BAYLINER BOWRIDER - & trailer, 1984, 125 h.p. Volvo I/O, many options, rarely used, must be seen, $6,500. Don, Ext. 2981.

18½' FIBERFORM SPEEDBOAT - rebuilt 120 h.p. O.M.C. I/O, full canvas, battery, power winch, more, gal. Shoreline trailer, $5,450. 567-1358.

16' BAYLINER - 1986, w/trailer, 85 h.p. Force o.b. engine, 20 hrs., marine radio, many extras, must see. 472-0430.

15' M.F.G. RUNABOUT - w/40 h.p. electric start Evinrude motor & trailer, many extras, $400. Rich, Ext. 3239.

12' M.F.G. ALUMINUM BOAT - w/6 h.p. Evinrude, good cond., many extras, $500 firm. John, 821-3739 after 6 p.m.

12' INFLATABLE ACHILLES - 15 h.p. Evin., Shoreline gal. trailer, used 4 times, all 1988, $2,925, will sell sep. Jim, Ext. 7971 or 286-1358.

V-BOTTOM BOAT - 1980, w/1986 110 h.p. Johnson o.b., both excel. cond., great for clamming, fishing, $4,000. 589-3072.

BATTERY - commercial, heavy duty, 6V, $100 new, asking $25. 878-2577.

MOTOR - 1988 Yamaha 2 h.p., never used, $350; Apelco 9900 radar head, no antenna, new, $200. Ext. 3341 or 981-9474.

## Audio, Video & Computers

TURNTABLE - Garrard, needs minor wiring, $25. Roger, Ext. 3578, 395-1969.

AUDIO COMPONENT STAND - for stereo/turntable, etc., never used, $60. Doreen, Ext. 2456.

MACH 20 - 8 Mhz, 80286 Microsoft Speed-up Board, DOS & OS/2 compat., $225, 8 Mhz Turbo XT 128k Motherboard, $90. Bernie, Ext. 4842.

COMPUTER - XT clone w/20 MB hard disk, 2-300k floppies, 640k RAM, color monitor, NLQ printer, more. Alan, Ext. 2928, 821-1389.

TAPES - Intellevision tapes, 15 assorted, all in good condition, $25. Lou. 928-4013 eves.

SCOTT STEREO SYSTEM - turntable, dual cassette, tuner, amp., speakers, 150 W/channel, $600. 821-2875 eves.

STEREO - Stromborg-Carlson w/BIC turntable, $25. 878-2577.

PORTABLE VCR - Panasonic PV5800, Olympus VX-305-U video camera, excel. cond., cases, instructions, new $1,200, make offer. 589-0625.

## Furnishings & Appliances

BED - w/mattress, full-size, $60; window a/c, excel. cond., $40; sand filter, $10. Roger, Ext. 3578 or 395-1969.

SOFA & LOVE SEAT - Early American maple wood, peasant print cushions, good cond., must sell $125. Frank, Ext. 7519 or Vita, 277-0464.

TEA CART - w/server, dark pine Ethan Allen, $135; bedrm. set, cherry, $375; dining set w/hutch, $550; dark pine dry sink, $125 all. 862-7326.

CHEST - w/5 drawers, oak, decorative back, $150. Ext. 5130 or 878-3652.

TUB - Kohler C.I., lt. green; 19" sink w/vanity, $100 delivered, price neg. if picked up. Jim Taylor, 286-9190.

DRESSER - solid oak, w/5 drawers, $100. 689-7326.

REFRIGERATOR FREEZER - G.E., 13 cu. ft., bronze, good cond., $200. 281-7844 after 4 p.m.

SOFA & LOVESEAT - striped brown, soft velvet, good cond., moving, $400. Ext. 4743 or 286-4910 eves.

CHEST - dark pine, double, w/mirror & night side table to match, $65; small maple hutch, $85; hall stand w/etched glass mirror, $150 all. 862-7326.

LIVING ROOM SET - 3 pc. Italian Prov., $400; coffee table, marble top, $125; end table, marble top & lamp, $125; more. 585-1360.

DRESSER - Bassett, girl's, hutch top, $85. 878-2577.

BROILER/ROTISSERIE - Farberware Open Hearth, good cond, $20; wood frame mirror, 22"x36", $10. 744-3792.

DISHWASHER - Whirlpool, 24", built-in, gold, needs work, best offer. Rich, Ext. 7013.

SOFA BED - queen-size, dark green w/floral print, like new, $200. 472-4087 after 6 p.m.

## Tools, House & Garden

SUBMERSIBLE PUMP - all brass, like new, excel. cond., $75. Ext. 2238.

MACHINIST'S TOOLS - micrometers, 12" vernier, dial indicators, telescoping gauges, etc., U.S.A. made, $1,200 value, asking $500. Doug, Ext. 4175.

TABLE SAW - 10" table extension blades, $250. 727-7515

LAWNMOWER - Snapper ride-on w/plow, good cond., $475. JoAnn Ext. 4120 or 689-7963.

LAWNMOWER - 5 h.p. Briggs & Stratton, 21" rotary mower, $75, many more. Dan, Ext. 4987 eves. or 698-7322 days.

TUNE-UP CENTER - Snap-on, 3 meters, asking $250; brake bleeder, $125; 20-ton hydraulic jack, air assisted, $200. 474-5715.

GENERATOR - 4 kW, from BERA purchase, never used, additional muffler, $400. Ext. 7505

WATER PUMP - multistage jet type, new motor, w/pressure tank, used 3 yrs., good cond. 821-3925.

LAWNMOWER - Silent Yardman, push reel, $25; generator, Niagara General, 4000 W, never used, sealed in carton, $400. 744-3792.

LADDER - 28', Werner, fiberglass, $150. 286-4801.

WINDOWS - thermal vinyl, new, 44"x69", ideal for greenhouse, 4/$500. Ext. 5312 or 289-4119.

FLOWERS - tall bearded iris, daylilies, hosta; many colors & variations. 732-5451 after 5 p.m.

GENERATOR - Niagara General, brand-new, still in orig. box, 4000 watts. Jim, 661-5695.

## Sports, Hobbies & Pets

BICYCLES - boy's 26", 10-speed, $15; woman's, 26", 3-speed, $10. Al, Ext. 5128.

POOL - supplies, vacuum hose, head & pole, 1 h.p. motor, 35 lb., dia. earth, dia. earth filter, etc. Raka, Ext. 4727.

BIKE - girl's 3-speed, 27", good cond., $50; outboard motor, 6- gal. tank, steel, $15. Tony, Ext. 2462.

DRYSUIT - Poseidon, man's large, like new, asking $500. 474-5715.

DIVING BOARD - 10', fiberglass, $75; stainless steel 3-rung ladder, $50. Ext. 2462.

TENNIS RACKET STRINGING MACHINE - Omega portable, asking $150; Head tennis rackets, graphite, $50; surfboard, 6'8", 589-0625.

PIANO - Lester spinet, bench, dark wood, $375. 924-3082.

## Miscellaneous

BOY SCOUT TRAIL CHEF -custom-made, sides open into table, removeable legs for transporting. 744-3069.

CESSNA 150 - 1¼ share, based at Brookhaven, new windshield, brakes, annualed 1/89, sound flyer, good availability. Bob, Ext. 4656.

ROMANCE NOVELS - $2 ea.; hard cover books, $1; glass collection, $10-$13 ea.; maple seedings, $11. Kathy, 744-2203.

MAPLE SYRUP - from my family's farm in Vt. Peter, Ext. 7687 or 744-1112.

PIPER CHEROKEE - 1970, 140-C, dual nav-coms, G/S, stereo, EGT, 3,700 TT, auto fuel, $17,500. Ext. 2012 or 277-8026.

## Free

FIREWOOD - you pick up. Diana, Ext. 4173 or 399-3910.

KITTENS - four weeks old. Ken, Ext. 3263.

KITTENS - male, female, Russian blue, 3-4 weeks old. Frank, Ext. 3120.

## Car Pools

ELWOOD/E. NORTHPORT/COMMACK - driver needed for on-time carpool, 8:30-5:00. Paul, Ext. 4156.

## Yard & Garage Sales

SHIRLEY - multi-family, 3 days, Memorial Weekend, 410 River Road. John, Ext. 4631.

SHOREHAM - June 3-4, 10 a.m.-4 p.m., something for everyone, 35 Robinson Street, Shoreham.

## 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. condo, 5 appl., c/ac, w/w, f/p, fenced patio, upper deck, avail. 7/1. 878-0874 after 5 p.m.

CENTER MORICHES - office space for rent, Main St., reasonable rent, recently renovated. George, 874-2934 or 878-1178.

E. SETAUKET - 4-bdrm. Colonial, 2½ bath, eik, l/r, d/r, fam rm., f/p, screened porch, fin. bsmt., 2-car garage, GHWH, avail. 8/1/89, 2-month sec. Shiue, Ext. 4395/3372 751-8224.

FARMINGVILLE - 1-bdrm., new large apt., in pvt. house, 2nd floor, pvt. entry, suitable 1 or 2, cable, avail. immed. no pets, $650 + elec., 1½-month sec., refs. Om, Ext. 5332 or 928-2994.

MASTIC BEACH - house to share w/owner, new 3-bdrm. w/w, cable, $475 includes all. Jonathan., 331-0901.

MASTIC - small, 1-bdrm. apt., furnished, separate ent., cable, $425/mo. + util., security, refs. 281-7844 after 4 p.m.

MOUNT SINAI - 2-bdrm. ranch, lr/, kitch., d/r, 1 bath, bsmt., oversized garage, large treed property, no pets, $875 + mo. Arnold, 473-6432.

SHIRLEY - 1-bdrm. apt., eik, l/r w/fp, bath, priv. ent., 10 min. to Lab, working couple or single, $650/mo. 399-1699 eves.

SOUTHAVEN - rent room, share house w/2 other professionals, roomy house on wooded lot, convenient to Lab. Randy, Ext. 3835 or 286-4028.

WESTHAMPTON/SPEONK - 1-bdrm., 1½ bath, 5 appliances, approx. 1000 sq. ft., 8 mos. old, immed. occup., 1 mo. sec., $850 + util. Rich, Ext. 4834.

HILTON HEAD, SC - 2-bdrm. condo, sleeps 6, 2 baths, tennis, golf, beach, pool, $425/wk. Guy, Ext. 3147 or 585-9149.

## For Sale

CALVERTON - ranch, eik, d/r area, partly furn., 24x24 garage & deck, ½ acre, fenced, Exit 71, LIE, 20 min. to Lab, $122,500. 727-7515.

CORAM - 9-rm. Colonial, cul-de-sac, 4-bdrm., 2½ baths, fam. rm., f/p, eik, d/r, l/r, mud rm., i/g pool & lawn sprinkler, 2-car garage, extras, $195,000. Ext. 2303 or 732-3902 after 5 p.m.

CORAM - Tanglewood Hills, 4-bdrm., 2-bath, California ranch, cathedral l/r, 2-car garage, gas heat, fenced ⅓ acre, professionally painted, $130,000. 928-7154 eves.

HOLBROOK - 3-bdrm. townhouse/condo, 5 appl., w/w, 1½ baths, tennis courts, swimming pool, clubhouse, balcony & fenced-in patio, 15-20 min. to BNL, $129,000. Ext. 2873 or 472-3236.

MANOR PARK - 4-5 bdrm. high ranch, 1½ bath, l/r, d/r, fam. rm., part. finished bsmt., garage, ½ acre, South Manor SD, 5 min. from Lab, new roof & heat, $155,000. Roger, Ext. 3578 or 395-1969.

MATTITUCK - wooded lot, Dutch Colonial, ½ acre, 4 bdrm., 2 baths, d/r, lr/fpl., den, oak plank floors, full bsmt., encl. breezway, 2-car garage, cul-de-sac, tidal creek, $252,000. 298-5383.

MIDDLE ISLAND - Artist Lake condo, 1 bdrm., l/r, kit., bath, a/c, new w/w, dw, pool, gas heat, 5 min. to Lab, sell for $80,000, rent $700/mo., heat included, avail. now. Ext. 3144 or 698-5046 eves.

MIDDLE ISLAND - 2-bdrm. condo, l/r, d/r, kitchen, gas heat, wood deck, pool, tennis court, Lake Point, asking $81,000. Bob, 924-7316 after 6 p.m.

PORT JEFFERSON VILLAGE - ½+ acre, cul-de-sac, 4 bdrms., l/r w/fp, d/r, eik, fam. rm., study, 2½ baths, ca/c, 2-car garage, excel. schools, walk to village, harbor, $279,000. Ext. 2085 or 331-3846.

RIDGE - 3 bdrm., 1½ baths, large fenced yard, oversized rooms, 8 min. to Lab, almost no closing cost w/assumable mort. (9½%). Ext. 7865 or 821-6945 eves. & weekends.

ROCKY POINT - 3-bdrm. ranch, 100'x100' lot, eik w/skylight, Andersen windows, half bsmt., large fenced yard, SCWA water, under 5 yrs. old, mint cond., all appl., beach rights. 821-3925.

ROCKY POINT - 2 story, alum. siding, ¼ acre, 2/3 bdrm., eik & den, 12'x18' l/r, 1½ baths, new kitchen cabinets, carpets, drapes, w/d, OHWH, city water, low taxes, $117,000. 744-3792.

STONY BROOK - near University & beach, 4 bdrms., 3½ baths, l/r, d/r, fam. rm., mint cond., excel. school district, 2-car garage. Ext. 4635 or 751-2860 eves.

WESTHAMPTON BEACH/SPEONK - Hampton Villas, 2-bdrm. townhouse, 1½ baths, ca/c, swimming pool, 5 appliances, $149,500. Rich, Ext. 4834 or 588-0507.

YAPHANK - 3-bdrm. townhouse, 2 baths, bsmt., garage, f/p, patio, 1 mi. from Lab, $130's. 924-2726.

HOLIDAY, FL - Sandpiper, 3-bdrm., 2 baths, 1½ car gar., cathedral ceilings, corner lot, sprinklers, clubhouse facilities, w/1 week time share, $75,900 firm. 474-5715.

LEHIGH ACRES, FL - 125'x80' lot, fully developed, nice surroundings, several golf courses, etc., 10 miles east of Fort Myers, $10,500. Ext. 4585 or 3011.

MADERIA BEACH, FL - 1 week time share Commodore Beach Club, Gulf view, sleeps 4 adults, pool, jacuzzi, asking $5,000. 474-5715.

## Wanted

HOUSE TO RENT - nonsmoking family of four, SWR School Dist., 1 July. Per, Ext. 3322 or 744-9351.

TO BORROW - Wallensak reel-to-reel recorder, to review old recordings. Janet, Ext. 2345.

HOUSEMATE - to share 3-bdrm. house in Coram, 20 min. to Lab, $300/mo. + ⅓util., avail. June 1. 928-8379.

MODEL RAILROADERS - members wanted for HO scale model RR club, new layout under construction in SMithtown area. Bob, Ext. 4656.

RECORDS - 45's and LPs of rock and roll, 50's and 60's plus others. Frank, Ext. 3120.

POOL SLIDE - for decked above-ground pool, reasonable. 281-0360 after 6 p.m.

HOUSE FOR RENT - Rocky Point, Sound Beach, 2/3 bdrm., w/d hook-up, mature father & son. 744-7487.

LAWNMOWERS - old, used, any condition. Dan, Day, 698-7322 or Ext. 4987 eves.

ALUMNI - BNL summer student program, for possible reunion in June. Carmen Benkovitz, Ext. 4135.

MOTORCYCLES - bent or broken, any age or cond. Kevin, 281-8031.

ELECTRIC MOTOR - ½-1 h.p., 1725 rpm. Ext. 3953 or 281-8274.

TRAILER - in good condition, boat trailer or landscape trailer, OK. Tom, Ext. 2372 or 281-2669 after 6 p.m.

HOUSING - for lab scientist or will housesit July 15-August 31 in Wading River-Shoreham area. Juris, Ext. 5482.

WHEEL RIM - for 72 Chevy Blazer, 15", 6-lug holes. 727-0364.

## In Appreciation

To all my friends and co-workers - my sincerest appreciation for your thoughtfulness at the time of my father's death. Bob Chanda and family.

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