BROOKHAVEN BULLETIN
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BROOKHAVEN NATIONAL LABORATORY

# Radiation Therapy Facility at BNL Now Serving Cancer Patients and Medical Researchers

In being used by clinicians to treat today's cancer patients with the most advanced radiation therapy available and by researchers to develop the cancer treatments of tomorrow, the Radiation Treatment Facility (RTF) located in BNL's Medical Department is unique in the nation.

Located in Pavilion 4 of Bldg. 490 and opened on September 9, the RTF is the first U.S. cancer-radiation center to be established within a national laboratory. A joint venture of BNL and the University Hospital at Stony Brook, the RTF is considered to be a satellite of Stony Brook's Department of Radiation Oncology.

The RTF is also unique to Long Island: The radiation used at the RTF for treatment and research is delivered by a powerful Philips SL-25 linear accelerator. The most advanced medical linear accelerator in the world, the SL-25 at the RTF is one of only 135 worldwide and the only one on the Island.

"Any and all cancers that are treated with radiation therapy can be treated with the SL-25 accelerator at the Radiation Therapy Facility," states Lucian Wielopolski, the University Hospital medical physicist stationed at BNL to oversee the RTF's clinical use and direct the RTF's collaborative research program.

The RTF's clinical director is physician Tae Parke, an assistant professor of radiation oncology at Stony Brook.

Additional RTF staff from Stony Brook's Department of Radiation Oncology, which is headed by physician Allen Meek, include: physician Yat Lau; radiation therapists Helene Iorio and Benjamin Williams; nurse Georgiana Visceglio; medical dosimetrist Ellen Paghidas; graduate student Xuiemin Ren; and patient coordinator Vivian Claeson.

Noelwah Netusil and Kari Johannesen are two BNL nurses who rotate through the facility, under the supervision of nursing supervisor Veronica Brooks.

### Complementary Treatment

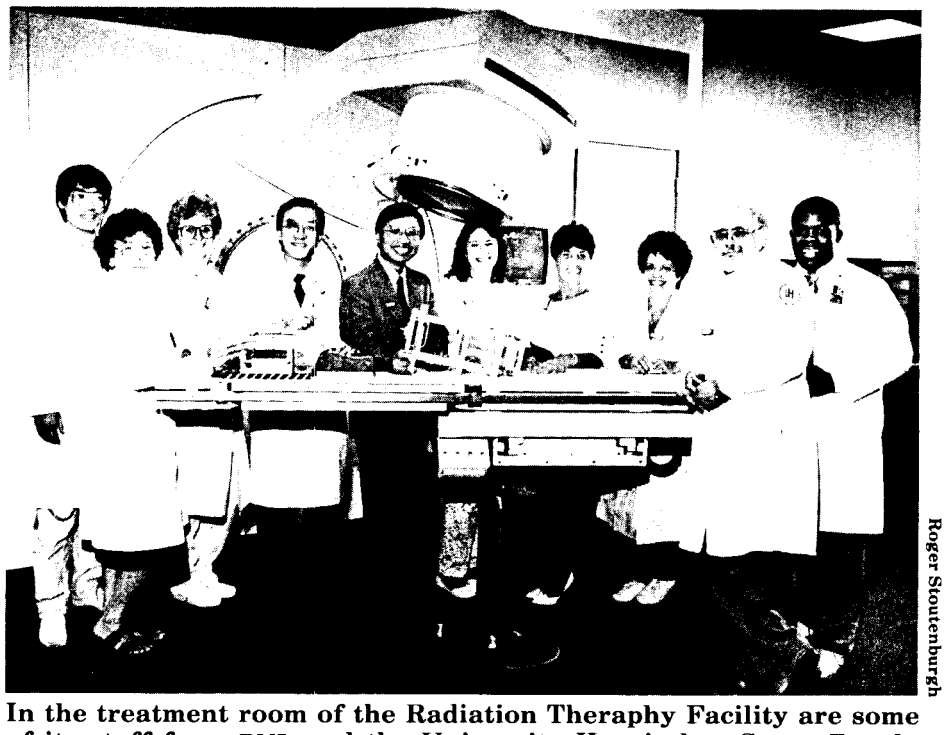
Complementing surgery and chemotherapy in the battle against cancer, radiation treatment consists of exposing cancerous tumors to external beams of electrons from accelerators, or photon beams from accelerators or cobalt sources. Photons are used to treat deeper tumors, while electron beams are used for more superficial cancers.

Once absorbed by the tumor, the energy from these forms of ionizing radiation causes chemical reactions within the cancer cells that can cause the demise of the tumor.

About 20 cancer patients per day from eastern Long Island will be treated at the RTF. They are being referred to the facility by private physicians and hospitals such as Brookhaven Memorial, Central Suffolk and Southampton, as well as University Hospital.

Until now, eastern Long Islanders with cancer have been treated using either of two linear accelerators at University Hospital or with beams of gamma rays from cobalt-60 sources at other East End hospitals.

Linear accelerators like the SL-25 have more powerful, more intense, and better collimated photon beams than cobalt-60 sources, giving more effective treatment. The RTF's SL-25 delivers 400 rad per minute. The usual treatment of 4,000-6,000 rads is delivered over four to six weeks.



Roger Stoutenburgh

**In the treatment room of the Radiation Theraphy Facility are some of its staff from BNL and the University Hospital at Stony Brook: (from left) Xuemin Ren, Noelwah Netusil, Kari Johannesen, Yat Lau, Tae Park, Ellen Paghidas, Vivian Claeson, Georgiana Visceglio, Lucian Wielopolski and Benjamin Williams.**

"This accelerator will not only provide cancer patients from eastern Long Island with the best radiation therapy available today, but it will also serve as a research tool for both Brookhaven and Stony Brook scientists and as a training device for Stony Brook graduate and medical students," explains Wielopolski.

Once the clinical program is fully operational, about 50 percent of the RTF's beam time will be reserved for BNL collaborative research. Projects within BNL's Medical Department that may use the RTF include: photon activation therapy research, boron neutron capture therapy, and research to complement PET, SPECT and whole-body composition studies.

### Certified Up to Spec

After ground was broken in June of 1989, the RTF was constructed by BNL for about $850,000. To advance clinical research use, the manufacturer of the linear accelerator, Philips Medical Systems, Inc., of Connecticut made a significant contribution to the RTF, enabling Stony Brook to purchase the SL-25 for about half its $1.5-million price.

After the SL-25 was delivered last December and assembled by Philips personnel, Wielopolski tested it and certified this April that its manufacturer's specifications and standards set by the American Association of Physicists in Medicine had been met.

The SL-25 linear accelerator produces gamma-ray photon beams of two energies: either 6 or 25 million electron volts (MeV), compared to the single photon energy of 6 or 15 MeV available at the University Hospital's two linear accelerators, respectively. The Philips SL-25 also produces electrons with nine energies: 4, 6, 8, 10, 12, 15, 18, 20 or 22 MeV, compared to only five electron energies available at University Hospital.

"The greater range of energies and the greater maximum energies available at the RTF allows for more flexibility in treating patients," comments Wielopolski. "The maxium photon energy of 25 MeV allows us to treat the most deeply seated tumors, while the electron energy range enables us to treat superficial tumors more accurately, thus causing less injury to the skin and the healthy tissue behind the cancer."

One measure of the effectiveness of radiotherapy is the ratio of dose to tumor versus dose to healthy tissue; the higher the ratio, the higher the chance that the tumor will be controlled without damaging healthy tissue surrounding the cancer. With its finely collimated beam and the movement of its four computer-controlled, beam-shaping jaws, the dose ratio of the SL-25 is higher than that of the two University Hospital accelerators and much higher than those of cobalt sources.

In the future, optional features will be added to the SL-25 to increase the dose to 5,000 rads per minute; allow real-time imaging of beam position; enable computerized templates of the collimator's shape to be stored for each patient; and permit radiosurgery, using gamma rays instead of a scalpel. — Marsha Belford

# Steinberg Is First Recipient Of 21st Century Earth Award

In the inaugural year of the "21st Century Earth Award" competition, established in Japan but open to competitors worldwide, BNL's Meyer Steinberg has won the Nihon Keizai Shimbun, Inc. Award, in the category of general study.

Steinberg's winning thesis — which addresses global change — proposes the use of biomass in conjunction with fossil fuel and a special technology called HYDROCARB to reduce carbon dioxide ($CO_2$) emissions by fossil fuels to the atmosphere. Now in the Department of Nuclear Energy, Steinberg has worked on the development of HYDROCARB for the last several years in the Department of Applied Science.

The award carries with it a certificate of merit, a plaque and two million yen — roughly $16,000. Steinberg will receive the award in Japan in December.

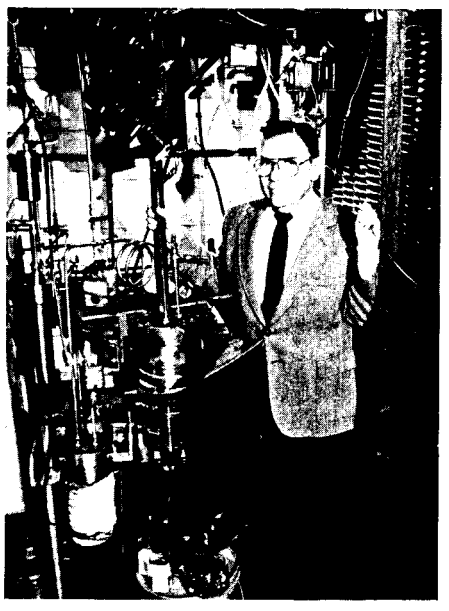
The competition was organized by Nihon Keizai Shimbun, Inc., one of Japan's leading business newspapers, and the Global Industrial and Social Progress Research Institute. They called for visionary solutions to environmental problems such as global change that affect the entire world.

Global change has been attributed largely to atmospheric $CO_2$. Produced by the burning of fossil fuels, atmospheric $CO_2$ traps infrared radiation, which would otherwise escape from the earth's atmosphere. This causes an increase in global temperature — a phenomenon known as the "greenhouse effect."

According to Steinberg, all scenarios put forth thus far to address the problem tend either to slow down the rate of atmospheric $CO_2$ emissions or to level out the concentration in the atmosphere. His proposal offers a method of reducing the $CO_2$ concentration in the atmosphere while still generating energy from fossil fuels.

"The only economically and technically reasonable method for removing $CO_2$ from the atmosphere is by photosynthesis," says Steinberg, "where carbon is taken from atmospheric $CO_2$ to form plant matter, or biomass. If nothing is done with the biomass, it will eventually decay and put $CO_2$ back into the atmosphere. However, reacting biomass with fossil fuels in the efficient HYDROCARB process produces the clean fuels carbon black and methanol. Either all or part of the carbon is returned to the earth for long-term storage, while the methanol is used as fuel."

According to Steinberg, methane gas and oil coprocessed with biomass results in a net removal of $CO_2$ from the atmosphere of about 78 pounds of $CO_2$ for every million Btus of methanol-generated energy. And, he says, "In combination with coal, the $CO_2$ removal, although less, allows the use of the world's largest fuel resource in an environmentally acceptable manner."



Roger Stoutenburgh

**Meyer Steinberg with a model of the HYDROCARB process.**

Steinberg's HYDROCARB research has been supported in part by the Office of Fossil Energy of the U.S. Department of Energy and the Atmospheric and Environmental Engineering Research Laboratory of the U.S. Environmental Protection Agency.

ADULT FLUORIDE STUDY

# Free Toothbrushes For Those 45 and Older

Free toothbrushes and toothpaste could be yours for the next four years if you are age 45 or over, have at least 15 natural teeth, brush your teeth daily and would be willing to use a fluoride gel or mouthwash after brushing.

To find out how effective fluoride mouthwashes and gels are in preventing tooth decay in adults, a four-year dental decay-prevention study is being conducted by the School of Dental Medicine at the State University of New York at Stony Brook. Sponsored by the National Institute of Dental Research and directed by the Forsyth Dental Center in Boston, the study will involve 4,500 adults age 45 and older who meet certain dental criteria.

While 3,500 will be recruited from the greater Portland, Maine area, the remaining 1,000 are supposed to be BNL volunteers. So, all employees, retirees and spouses age 45 and over are invited to participate in this program.

Upon signing up for the program, BNL volunteers will receive a free dental exam, and follow-up exams will be given at BNL at no cost, at 16-month intervals over the four years of the study. No x-rays will be taken.

Everyday after brushing, participants will be expected to use the mouthwash or gel they will be provided by the study. Free toothbrushes, Colgate toothpaste and the mouthwash or gel will be sent to each volunteer's home during their four-year involvement.

To sign up, return the bottom portion of the study flyer sent to all employees to Health Promotion Specialist Mary Wood, Bldg. 490, or call Ext. 5923.

## Deadline Extended For FSA Enrollment

Because of the Thanksgiving holiday, the enrollment deadline for the Flexible Spending Account (FSA) program has been extended to Wednesday, December 4.

Both the Health Care and Dependent Day Care Reimbursement Accounts will be effective January 1 through December 31, 1992, and are available to all regular Lab employees who work 20 or more hours per week.

Under IRS rules, employees currently participating in one or both reimbursement accounts who wish to continue participation for calendar year 1992 must complete a new enrollment application form even if they don't want to change their contribution amounts.

Other employees wishing to enroll in an FSA for 1992 can obtain an application form at Personnel Services, Bldg. 185, Ext. 2877.

Completed forms must be returned to Personnel Services by December 4.

## Weight Watchers

New and continuing Weight Watchers can sign up for another set of eight-week sessions, to be held on site on Mondays, noon to 1 p.m. at the Brookhaven Center.

Registration will be held there on Monday, November 25, and sessions will begin the following Monday, December 6. The cost of the eight weeks is $80, but since the Lab pays $10 per participant, each employee's cost is only $70. For more information, contact Health Promotion Specialist Mary Wood, Ext. 5923.

## *Panel Discussion On Eastern Europe*

Some members of Brookhaven Women in Science (BWIS) will offer individual perspectives on the profound changes that have been occurring in Eastern Europe, in a panel discussion to be held on Tuesday, November 26, at noon, Room A, Berkner Hall. Please bring your lunch.

Panel members will include Victoria McLane, Department of Nuclear Energy, and Eva Emmerich, Alternating Gradient Synchrotron Department. McLane recently returned from her third working visit to the U.S.S.R., having previously gone in 1973 and 1983. A native of Czechoslovakia, Emmerich recently revisited her homeland.

BWIS also anticipates that several guests who have recently left Eastern European countries will offer their responses and answer questions.

## In Memoriam

Theo Sluyters

**Theodorus J. Sluyters**, who retired at the end of June after a 27-year career with the Alternating Gradient Synchrotron (AGS) Department, died of a heart attack on November 17, while vacationing in his native Holland. He was 63 years old.

Said AGS Chairman Derek Lowenstein, "The entire department was shocked and saddened to hear of Theo's death. He was much more to us than just a colleague: He was a dear friend and a gentleman and scholar in the finest tradition. We will miss him."

Sluyters earned his Ph.D. in physics from the University of Amsterdam in 1958. After working as an assistant physicist, first at F.O.M.-Laboratorium voor Massaspectrografie in Amsterdam, then at CERN, the European particle physics laboratory, he came to BNL in May 1964. As an associate physicist, he worked on the 200-million-electron-volt linear accelerator, which would become the new proton injector for the AGS. He was named Physicist in 1968.

After the linac reached its design energy in November 1970, Sluyters began combining his two research interests — accelerator physics and fusion physics. He specialized in ion sources, many of which could find application as injectors not only for high-energy accelerators and storage rings, but also for fusion reactors.

With Krsto Prelec and Alfred Maschke, Sluyters formed the Plasma Group, which began pioneering work on negative hydrogen ion ($H^-$) sources in 1973. The group first proposed in 1972 that $H^-$ ions might be used to create a better proton beam in the AGS — an innovation that was initiated in 1982.

By 1977, when Sluyters and Prelec held the first International Symposium on Production and Neutralization of Negative Ions & Beams, the group had been renamed the Neutral Beam Development Group. Held at BNL every three years since then, these meetings are recognized by the world community as the most important in the field.

Experimentation with polarized protons began at the AGS in 1984, after the AGS Advanced Source Development Group that Sluyters began heading in 1982 created a source that could generate a beam of polarized $H^-$ ions, in which all particles have the same spin alignment.

Awarded tenure in 1975, Sluyters was named Senior Physicist, as well as Deputy Head of the AGS Accelerator Division, in 1983. A member of the Brookhaven Council, 1985-6, he became Head of the AGS Accelerator Division in 1986, then Deputy Chairman of the AGS Department in 1990, overseeing the ongoing AGS upgrade program begun in 1984.

A visiting professor at the KEK laboratory in Japan, 1971-72, Sluyters was also a member of the Dutch Physical Society, the British Interplanetary Society and the American Physical Society.

Sluyters not only enjoyed working at BNL, he also enjoyed coming and going to work: He was an avid bicyclist who rode the 15 miles to and from his East Patchogue home on all but the most bitter winter days.

Theo Sluyters was buried in The Netherlands on Wednesday. He is survived by his wife Erika and sons Julian and Romuald.

## Equipment Demo

Edwards High Vacuum International will exhibit vacuum equipment at Berkner Hall, on Wednesday, December 4, from 11 a.m. to 4 p.m.

On display will be: mechanical pumps, the new EXT turbo magnetic bearing, the new Coolstar cryo pump, pressure and flow instruments, components and vacuum hardware, the Spectron 300E portable leak detector, and vacuum fluids, oils and greases. In addition, a cryo pump presentation will be held from 1-1:30 p.m.

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The IBM PS/2 Van will return to the Berkner Hall parking lot around 10 a.m. on Thursday, December 5. The van holds a variety of IBM personal computers installed with the latest academic software. Ask about 50 percent discount on personal purchases.

### *Office of Educational Programs Seminar*

## Researchers & Science Education

Brian Schwartz

Brian Schwartz, professor of physics at Brooklyn College, will present the next seminar in the luncheon series sponsored by BNL's Office of Educational Progams. His talk on "The Role of the Research Scientist in Science Education" will begin at noon on Wednesday, December 4, in Room B, Berkner Hall. All are invited; please bring your lunch.

In addition to his teaching duties, Schwartz conducts research in superconductivity and magnetism. He is also responsible for coordinating the education programs of the American Physical Society. His article on pre-college physics education programs from the research community appeared in the September 1991 issue of *Physics Today*.

### *Outreach Workshop*

## Managing Stress Effectively

Stress is widely believed to be the leading health problem for adults today — and the large attendance at last year's Outreach workshop on stress management showed how eager BNL employees are to lessen the stress in their daily lives.

By popular demand, a second Outreach workshop on "Stress Management" will be offered by the Employee Assistance Program (EAP) on two consecutive Tuesdays, December 3 and 10, from noon to 1 p.m. in Berkner Hall. Norman Kanter of the Center for Effective Living will provide the means for identifying stress and its symptoms in everyday life, and for managing stress day to day.

Norman Kanter was awarded his Ph.D. in psychology in 1975 from the State University of New York at Stony Brook. In private practice since 1976, he has had his office in Smithtown since 1979. In addition to stress management, his areas of expertise include treating anxiety, depression and marital difficulties.

The Center for Effective Living in Commack and Smithtown was established in 1987 by Kanter and his partner Dennis Gallo, to teach people how to reduce stress and learn other coping skills.

To register for this two-part program, return the Outreach flyer recently sent to all employees to EAP Staff Psychologist Diane Polowczyk, Bldg. 490, before December 2. If space permits, registration will be accepted at the door. For more information about EAP or its Outreach workshop series, call Ext. 4567.

## Hospitality News

Helen Braccia, a member of the Dix Hills Garden Club, will be the guest speaker at the next Hospitality Committee monthly get-together on Tuesday, December 3, at 9:30 a.m., in the Brookhaven Center. She will demonstrate how to make a pressed-flower picture by securing dried flowers to a mat and then framing it.

If you would like to make a picture, bring small tweezers and, if possible, a small tack hammer. Braccia will furnish the rest of the supplies.

Spouses of Lab employees and guests are welcome, so please come and bring the children. Refreshments will be served, and baby-sitting will be provided.

## Two Opera Tickets

Two tickets are still available for the Friday, November 29 performance of *Die Entfuhrung aus dem Serail*. If you are interested, call Carolann Zebrowski at the BERA Sales Office, Ext. 3347.

## UNIX Course

An "Introduction to UNIX" course will be offered by the Computing & Communications Division (CCD) in six sessions, on Tuesdays and Thursdays, December 3-19. All classes will be held in the CCD seminar room, Bldg. 515, from 10 to 11:30 a.m.

UNIX may be the fastest-spreading computer operating system on the planet. Course topics will include basics, vi editor, communications, filters, shell programming and the file system.

No prior knowledge of UNIX is required. To register, send e-mail to Ron Wittlock at wittlock@bnl.gov.

## PSI Social

All are invited to join the Upton Chapter of Professional Secretaries International for their December Social on Wednesday, December 4, from 5:30 to 9 p.m. in the Brookhaven Center. The $5 cost includes entertainment by a magician. PSI will also be collecting food, women's articles, toys and so on for a local women and children's shelter. For more information, call Sharon Jones, Ext. 2493.

# Coming Up

**Winter Holiday Sales**

The Winter Holiday Sales at the Science Store of the Exhibit Center/Science Museum in Bldg. 701 will be held this year on three consecutive Fridays: December 6, 13 and 20, from 10 a.m. to 3 p.m.

For a preview of items on sale, watch the *GLANCE* that will be playing in the Cafeteria from 11:30 a.m. to 1:30 p.m., for the week beginning Tuesday, December 3.

**BERA Concert**

The Gregg Smith Singers, a 16-member vocal group, will appear in concert in Berkner Hall on Wednesday, December 11, at 8 p.m. Their diverse program includes early American music, 17th-century French chansons, a tribute to Aaron Copland, contemporary jazz arrangements and a selection of international Christmas carols.

Tickets can be purchased at the door for $12, general admission; $9, students and people over 65; $5, youths under 18.

# BERA Toy Drive Now Under Way

For the eighth year, BERA is participating in the annual toy drive organized by Brookhaven Town to provide happy holidays for needy young people in our local communities. The 1991 Toy Drive has just begun and will run through Friday, December 20.

Bring donations to the BERA Sales Office weekdays, from 9 a.m. to 2 p.m. New toys are preferred and are needed for children of all ages — infants through teens.

For more information, call M. Kay Dellimore, Ext. 2873, or Carolann Zebrowski, Ext. 3347.

# Volleyball

**Standings as of November 13**

| Open League | | League I | |
|---|---|---|---|
| Magnum | 9-0 | Network News | 9-3 |
| G-Team | 5-4 | Upfagrabs | 10-5 |
| Phoenix | 5-4 | Rude Dogs | 8-4 |
| Leftovers | 3-6 | Dinkers | 9-6 |
| Penetrating Vollies | 3-6 | Six Pack Attack | 5-7 |
| Me and the Boys | 2-7 | Setups | 6-9 |
| | | Bump & Sets | 1-14 |

| League II | | League III | |
|---|---|---|---|
| Mon. Night Live | 9-0 | Renegades | 11-1 |
| Net Wits | 9-0 | High Volley'em | 7-2 |
| Nuts & Bolts | 4-2 | Nutcrackers | 8-4 |
| Night Court | 4-5 | Over the Top | 8-4 |
| Fossils | 3-3 | Good Timers | 5-7 |
| Upton Ups | 3-6 | Interns | 5-7 |
| Muffits | 2-7 | Sourcerers | 2-7 |
| Volley of the Dolls | 1-5 | Silver Bullets | 1-8 |
| Just Up | 1-8 | Undertakers | 1-8 |

# Arrivals & Departures

**Arrivals**

**Albert C. Boerner**.....Reactor
**Terri E. Lacker**.....Reactor
**Michael J. Loftus**.....Accel. Dev.
**John F. Skonieczny**.....Reactor

**Departures**

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

**Robert A. DeBiasse**.....Instrum.
**Wen Tao**.....App. Science

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# Holiday Notes

The Lab will be closed for the Thanksgiving holiday on Thursday and Friday, November 28 and 29. The following schedules will be in effect:

- **Brookhaven Bulletin** — There will be no Bulletin next week. The classified ad deadline for the Brookhaven Bulletin of Friday, December 6, is 4:30 p.m., on Wednesday, November 27. Also, be on the lookout for the special six-page address listing of retirees, to be distributed soon.
- **Credit Union** — The Teachers Federal Credit Union will be closed on Thursday and Friday, but the automatic teller machine in the foyer of Berkner Hall will be open throughout the long weekend.
- **Food Services** — At the Cafeteria, snack bar service will be offered from 9 a.m. to 2 p.m., Thursday through Sunday, December 1. The Brookhaven Center will be closed Thursday through Saturday, but will reopen at 5 p.m. on Sunday. The vended food service in Bldg. 912 will be in operation continuously.
- **Pool & Gym** — The pool and the gymnasium will be closed all weekend, Thursday through Sunday, resuming normal hours on Monday, December 2.

# Tai Chi Club

The Tai Chi form is a gentle, flowing exercise developed centuries ago to promote physical and mental health, longevity and stamina. Within that form, numerous postures are intertwined to produce a silent symphony of movement and meditation.

A new ten-week session of Tai Chi will begin on Monday, December 2. Led by instructors Dejun Xue, Ext. 2846, and Chuan-Zheng Yang, Ext. 5790, classes will be held from 12:15 to 12:45 p.m., in the Recreation Building in the apartment area, as follows:

- **Monday & Wednesday** — Instruction in the Yang Long Form of Tai Chi, along with training in the complementary Push Hands.
- **Thursday** — Slow exercise in the complete, 88-posture Tai Chi form, to develop control, inner tranquility and uniformity in movement.

New members are welcome and, as an incentive, are invited to observe or participate in one free trial session before committing to the instructional fee and membership. The fee for ten weeks is $30, payable at registration during the first class.

For more details, call either instructor, or club vice president Dave Phillips, Ext. 4671, or secretary Jerry Tanguay, Ext. 2198.

**Note to Employees:**

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

# IBEW Meeting

Local 2330 IBEW will hold its regular monthly meeting on Monday, November 25, at 6 p.m., in the Knights of Columbus Hall, Railroad Avenue, Patchogue. On the agenda will be regular business, committee reports and the president's report.

# United Way Total Grandest Ever

Roger Stoutenburgh

A magnificent $102,332 — and still more coming in! — has been raised by generous BNLers, making the total for this year's United Way two-week fund drive the greatest ever collected at the Lab.

Celebrating this event with fund drive organizer Mike Hurley (second from left) are some of the lucky winners whose early pledge cards drew dinners for two, gift certificates or the grand prize of a theater weekend for two in New York City: (from left) Bob Malachowsky, Reactor; grand-prize winner Marsha Kipperman, Personnel; Nedy Santiago, Nuclear Energy; retiree Marilyn McKeown, Physics; Philip Baker Jr, Plant Engineering; and Chris Saxen, Safeguards & Security. Other winners were: Thomas Clifford, Alternating Gradient Synchrotron; Louis Figueroa, Safeguards & Security; and Deborah Maresca, Medical.

Said Hurley, "It's great that, in these hard economic times, so many Lab employees put others' needs ahead to make the drive so successful. I would also like to thank Associated Universities, Inc.; Local 2230 IBEW; Local 8-431 OCAW; and LIGU Local 37 for making the early pledge-card prizes possible. Don't forget, any other contributions are always welcome — whatever the amount, it makes a difference."

# Calling all Carolers

Plan to sing with the BNL Choral Group on Wednesday, December 18, at the Christmas special luncheon in the Cafeteria, and at one or two other places around the Lab site.

The first rehearsal will be Tuesday, November 26, at Berkner Hall, at noon sharp! Subsequent rehearsals will be on Wednesdays and Fridays, December 4, 6, 11, 13, and Tuesday, December 17, at Berkner Hall. Rehearsals must end by 12:45 p.m., so please be on time!

Singers are needed in all parts — soprano, alto, tenor and bass. For more information, call John Weeks, Ext. 2617, or Janet Sillas, Ext. 2345.

# Bowling

**Red/Green League**

A. Warkentien had a 257/234/688 scratch series, R. Raynis 246, R. Eggert 223, M. Guacci 223, R. Sick 222, R. Larsen 219/217/630 scratch, E. Sperry IV 215, C. Bohnenblusch 210, R. Jansson 209, S. Dimaiuta 205, K. Asselta 204, E. Meier 204, A. Sauerwald 202, H. Marshall 201, G. Meinken 201, F. Hohmann 200, L. Jacobson 200, A. Pinelli 200.

**White League**

Dick Adams bowled a 214, Joe Ferrante 207, John McCarthy 204, Tony Romano 201, Elaine Zukowski 199, Ruth Sheehan 195, Denise Monteleone 185; Boyzie Singh converted the 4/10 split.

**Purple League**

Jim Meier had a 216, Phil Raduscwicz 201, Mary Ellen Hubner 185, Caryl MacDougall 183.

# Take a Frivolous Trip

Can-can dancers, penguins and polar bears, children's toys, Fabergé jeweled eggs and Christmas decorations — enjoy these frivolous things on the BERA Art Society's bus trip to New York City on Saturday, December 7.

The bus will leave BNL promptly at 7:45 a.m. to visit the Forbes Magazine Art Gallery and the tiny but great Central Park Zoo, and then to see Paris by Renoir, Picasso and more great artists at the IBM Art Gallery. From there, view Rockefeller Center all lit up and wander until the bus leaves at 4:30 p.m.

Bus tickets are $15 each, the zoo is $2.50 and the art galleries are free.

Sign up now! If 36 tickets are not sold by December 1, the trip must be canceled. Call Liz Seubert, Ext. 2346.

# Indoor Tennis

The gym is reserved for tennis on Tuesday evenings from 5 to 9 p.m. and Sunday afternoons from 1 to 5 p.m. Make reservations at the BERA Sales Office at noon on the day preceding play. Reservations are limited to one hour for singles and two hours for doubles, once a week for each group. Other sports activities are permitted on a first-come, first-served basis if the courts have not been reserved.

# Cafeteria Menu

**Luncheons**

| | |
|---|---|
| **Monday, November 25** | |
| Soup: Split pea | .75/.95 |
| Entree: Beef & broccoli over rice | 3.10 |
| Entree: Linguine w/white clam sauce | 3.10 |
| Fitness: Baked herb chicken w/1 veg. | 3.10 |
| Carvery: Hot pastrami sandwich | 2.85 |
| Grill: 3-cheese melt w/fries & cole slaw | 2.85 |
| **Tuesday, November 26** | |
| Soup: Turkey & rice | .75/.95 |
| Entree: Pork Creole over rice | 3.10 |
| Entree: Macaroni & cheese w/1 veg. | 3.10 |
| Fitness: Eggplant Parmesan w/1 veg. | 3.10 |
| Carvery: Roast beef sandwich | 2.85 |
| Grill: Reuben w/cole slaw | 2.85 |
| **Wednesday, November 27** | |
| Soup: Beef barley | .75/.95 |
| Entree: Chicken cordon bleu w/1 veg. | 3.10 |
| Entree: Pasta marinara | 3.10 |
| Fitness: Broiled fish w/1 veg. | 3.10 |
| Carvery: Hot ham sandwich | 2.85 |
| Grill: Tuna melt w/fries & cole slaw | 2.85 |

**Thursday & Friday, November 28 & 29**
Snack bar service — 9 a.m. to 2 p.m.

# 1992 Holidays

| Holiday | Holiday Observed: Day | Date |
|---|---|---|
| New Year's Day | Wednesday | January 1 |
| Floating Holiday (Martin Luther King Jr.'s Day) | Monday | January 20 |
| Presidents' Day | Monday | February 17 |
| Memorial Day | Monday | May 25 |
| Floating Holiday | Thursday | July 2 |
| Independence Day | Friday | July 3 |
| Labor Day | Monday | September 7 |
| Veterans Day | Wednesday | November 11 |
| Thanksgiving Day | Thursday | November 26 |
| Day after Thanksgiving | Friday | November 27 |
| Christmas Eve | Thursday | December 24 (½ day) |
| Christmas Day | Friday | December 25 |

# Classified Advertisements

## Placement Notices

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

Each week, the Personnel Division lists new placement notices. The purpose of these listings is, first, to give employees an opportunity to request consideration for themselves through Personnel, and, second, for general recruiting under open recruitment. Because of the priority policy stated above, each listing does not necessarily represent an opportunity for all people.

Except when operational needs require otherwise, positions will be open for one week after publication.

For more information, contact the Employment Manager, Ext. 2882, or call the JOBLINE, Ext. 7744 (282-7744), for a complete listing of all openings.

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

MK 0135. CONSTRUCTION SUPPORT SUPERVISOR (Electrical) - Requires experience and knowledge in the electrical trade. Will be responsible for assisting in the control and administration of electrical contract labor in support of construction, improvements, and modifications of buildings and grounds. Will determine work schedules, work distribution and staffing requirements, and coordinate work between Laboratory and outside trades. Plant Engineering Division.

MK 0844. TECHNICAL POSITION (term appointment) - Requires AAS in electronic technology and some relevant experience. Will assist in the development and assembly of a multi-charged cluster-ion source, and in the construction and operation of a high-vacuum system, assembly and debugging of an ion source, and maintenance of the source and related systems. Chemistry Department.

DD 8365. SECRETARIAL POSITION - Requires an AAS in secretarial science or equivalent experience, excellent communication skills and a thorough knowledge of Laboratory policies and procedures. IBM/PC WordPerfect experience also required; knowledge of IPAP Travel System is desirable. Will provide secretarial support including preparation of technical reports and correspondence and arranging foreign and domestic travel. Department of Nuclear Energy.

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

MK 0675. TECHNICAL POSITION - Requires an AAS/BS or equivalent in optics or laser electro-optical technology, experience with lasers and precision optical measurement equipment, and experience with DOS or Macintosh computer systems. Mechanical design with CAD systems is highly desirable. Will be responsible for making measurements with surface-profile measurement equipment, maintaining computer databases, setting up optical test equipment, and trouble-shooting electronic equipment. Instrumentation Division.

DD 0176. CONTRACTS POSITION - Requires BBA or equivalent experience, knowledge of Federal Acquisition Regulations for architect-engineer services and construction, and R&D contracts experience. Extensive experience in all aspects of procurement including drafting RFPs, proposal evaluation, cost and price analysis, negotiations, preparation of contracts and modifications is required. Responsibilities will include the administration, coordination and control of contracts for architect-engineer services, construction, fabrication, R&D, and related supplies. Division of Contracts and Procurement.

DD 8109. ENGINEERING POSITION - Requires BS in science or engineering and a minimum five years' experience in hazardous waste management. Demonstrated knowledge of RCRA, TSCA and NYS environmental regulations is essential. Previous waste-minimization experience is desired. Demonstrated organizational skills, excellent oral and written communication skills, and computer skills are also required. Responsibilities will include development and submittal of regulatory/compliance documents, and coordination of waste minimization and regulation activities. Safety and Environmental Protection Division.

DD 6118. TECHNICAL POSITION - Requires AAS in electronic technology or equivalent and experience with electronic test instruments, high-voltage and/or high-current power supplies and computer operations. Will work from electronic schematics, verbal instructions and rough sketches. Knowledge of electronic test instruments and hand tools desirable. Alternating Gradient Synchrotron Department.

DD 1004. TECHNICAL POSITION - Requires AAS in electronic technology or computer science and system-related experience, as well as the ability to assist with applications program software, data manipulation and control-room faultfinding. Responsibilities will include test setup of superconducting and room-temperature magnets using computer codes; and the installation, maintenance, implementation and construction of test facility components and systems using analog and digital concepts. Demonstrated mechanical ability, excellent communication skills and the ability to work from schematics and verbal instructions also required. Shift work required. Accelerator Development Department.

NS 0649. NUCLEAR REACTOR OPERATOR TRAINEE - Requires an AAS degree or equivalent and a minimum of five years' technical experience. Previous reactor experience desirable; naval reactor experience preferred. Mechanical aptitude, and the ability to work shifts and obtain and maintain a security clearance is necessary. Reactor Division.

NS 8112. TRAINING POSITION - Requires BS in education training or a technical field, substantial training background, and experience using Instructional System Development methodology. Duties will include managing a program to maintain an accredited training status for health physics technicians and radiation workers. Safety and Environmental Protection Division.

## Motor Vehicles & Supplies

90 CHEVY SS PICKUP - ½-ton, 454, a/t, ac, am/fm cass., p/w, p/l, cruise, tilt, fog lights, fully loaded, 5k mi., $14,000. Rich, 727-1429 eves.

88 DODGE DAYTONA - 76k mi., am/fm stereo, excel. cond., burgundy, $3,200. Jim, Ext. 2152/7601.

87 SUZUKI SAMURI - 30k mi., excel. cond., asking $3,500. Dick, Ext. 4313 or 722-4094.

87 SAAB 900S - loaded, sunroof, CD player, low mileage, factory installed, alarm, mint cond., $8,000. Ext. 5919 or 722-3010.

87 MAZDA 4x4 PICKUP - 37k mi., custom wheels, alarm sys., fiberglass cap, extended warr., $6,500. 369-2716.

87 CADDY BROUGHAM - loaded, blue, black vinyl top, excel. cond., $7,000. Ext. 3083.

86 ISUZU PICKUP - 4-spd., 74k mi., cap, am/fm cass., good gas mileage, runs well, $2,700. Tom, Ext. 4563.

86 DODGE D-100 PICKUP & 87 MERC SABLE LS - both in excel. cond., must sell by Dec. Tom, Ext. 7287 or 744-4535.

86 FIERO - ac, 4-spd., 6-cyl., cass., moonroof, alarm, 80k mi., $2,600. 924-4128 after 5 p.m.

85 NISSAN PULSAR NX - black, 5-spd., ac, moonroof, 89k mi., new brakes & clutch, excel. cond., $2,700. Nick, Ext. 2251 or 744-2836 eves.

84 MALLARD MOTOR HOME - dual, ac, self-contained, excel. cond., 878-1178.

83 FORD ESCORT - a/t, new parts, runs well, $1,300. Mauro, Ext. 4234 or 2160.

82 GMC JIMMY - 6.2L, V-88, p/s, p/b, ac, a/t, cruise, p/l, good cond., clean, $3,800. Jack, Ext. 7869.

81 FORD GRANADA - 6-cyl., p/b, p/s, 4-dr., new brake system & exhaust, body in good shape, $1,250. Gesine, Ext. 4493.

81 BUICK CENTURY - V-6, 4-dr., a/t, ac, p/s, p/b, 90k mi., $1,100 or best offer. Martin, Ext. 3137.

79 TOYOTA CELICA - 5-spd., v.g. cond., asking $575. Lou R., Ext. 3499 or 369-1683.

78 OLDS CUTLASS SUPREME - 2-dr., V-8, p/s, p/b, new radiator, exhaust, battery, body fair, runs well, asking $650. Tony, Ext. 7214 or 423-9750.

78 OLDS 88 - looks good, runs well, $700 or best offer. Ext. 7897 or 331-0807.

78 AMC CONCORD - a/t, low mileage, good tires, $500. Bob, Ext. 4489.

78 BUICK REGAL SPORTS COUPE - needs head gasket, best offer over $300. 395-3485, leave message.

76 CHEVY SUBURBAN - 6-cyl., a/t, runs well, $500. Frank, Ext. 7519 or Vita, 277-0464.

76 CADILLAC DEVILLE - 100k+ mi., no rust, one owner, v.g. cond., ask. $1,000. George, Ext. 2296.

66 CHEVY IMPALA - 283 engine, a/t, p/s. Frank, 653-6489.

SERVICE MANUAL - for '85 Honda Civic CRX/SI, best offer. Pat, Ext. 2836.

CHROME WHEELS - Superior, set of 4 w/baskets, centers & lug nuts, 15"x7" uni-lugs, reasonable. Ken, Ext. 4514 or 289-8212.

TIRES - Pirrelli P6 195/60R-14, three for $50. Steve, Ext. 4211.

TIRE - and rim, spare, '86 Buick Regal, best offer. Rich, Ext. 2550.

RIMS - 4, 14"x7", Chevy rims, some chrome rings, $50. Rich, Ext. 2043.

JACK - side-lifting frame, new, $15; tire, P195/75R14, mounted, $10; P185/70R14, $5. Ext. 5080.

RADIO - am/fm, 6-station preset, new, from Toyota Celica, $35. Ext. 4247.

TIRES - 8.75x16.5, mounted on 8-lug Ford rims, excel. cond., 5 for $150; battery, new, $35. Ext. 4719 or 751-8240.

## Boats & Marine Supplies

24' CHRIS CRAFT LANCER - cuddy cabin, 2 bunks, newer V-8 engine, less than 30 hrs., new canvas. Ron, Ext. 5905 or 298-5625.

17' BOAT - f/g, full canvas, new int., windshield, all access., plus galv. trailer, excel. cond., 60-h.p. Evin. needs work, $1,500. Vic, 878-8302 after 6 p.m.

## Furnishings & Appliances

BED - twin, mattress & frame, like new. 289-1855.

BED - queen, boxspring, best offer. Rich, Ext. 5045.

CEILING FANS - 2, w/light kits, $30/ea.; Amana Radarange w/manual, $75. Donna, Ext. 2716.

COUCH & CHAIR - $150/both; recliner rocker, $50. Paul, 727-4859.

COUCH - Ethan Allen, 7', excel. cond. 325-0447.

COUCH - & loveseat, pale yellow, good cond., $200; desk, $50; king size mattress & boxspring, $50. Anne, Ext. 2126 or 744-2836 eves.

DINING ROOM - dark wood, large china closet, table w/3 leaves, 6 chairs, will split, $500. Janet, Ext. 2345 or 929-3910.

DINING ROOM TABLE - oak, 42" wide, 2 leaves, opens to 108", 6 chairs, $300; dining room hutch, rock maple, $200. Bob, 467-4222.

DINING SET - Ethan Allen, dark pine, table w/4 chairs, excel., $200. 473-6546.

DINING SET - $75; bookshelf, $15; dresser, $20. Arvind, Ext. 3768 or 821-3519.

DRYER - Kenmore, elec., runs but needs work, good cond., $25. 472-3254.

ENTERTAINMENT CENTER - solid oak, chestnut color, 5½'x4½', 7 shelves, 3 drawers, 30" TV shelf, excel., $250. 474-3799 afternoons.

FREEZER - Sears, 9 cu. ft. chest, $150. 281-5505.

FREEZER - United, upright, $100. Phil, 732-8124.

HIGH RISER - v.g. cond., $75. Ext. 3866 or 286-0641.

LAMP - modern, brass bottom, cream background w/bronze & brown design, needs new shade, $10. Kym, Ext. 7247.

LIVING ROOM - old fashioned, reasonable. 363-7032.

LOVESEAT - style "This End Up", pine, factory-made, excel. cond., $250. Morris, Ext. 4192 or 751-7787.

MICROWAVE OVEN - Litton-Aire Generation II, fits over stove, w/light & fan, $100. John, Ext. 2667 or 821-2652.

PATIO FURNITURE - metal, 2 couches, 2 chairs, 2 tables, all w/cushions, $200. Bob, 467-4222.

REFRIGERATOR - 4 yr. old, 12 cu. ft., frost-free, $45. Greg, Ext. 3263.

ROCKING CHAIR - cherry, new cond., $25. Ext. 4103.

RUG - light green, 9'x12', good cond., $75 neg. Marie, 589-3020.

VANITY TOP - cultured marble w/shell design basin, beige, 30½"x19" deep, ask. $75. Theresa, Ext. 2907.

WATER BED - his/hers dressers, $650/all. John, Ext. 3499.

## Tools, House & Garden

BUG LIGHT - $25. John, Ext. 2667 or 821-2652.

POINSETTIAS - red, florist quality, various sizes, low prices. 727-6818.

SAW - Delta Sawbuck, frame & trim, miters/compound miters, 48-tooth carbide blade, excel. cond., $275 neg. 286-2843.

## Sports, Hobbies & Pets

BICYCLE - 20", boy's, $20. Joe, 929-5911.

BICYCLE - BMX, child's, blue, 16" wheels, $30. John, Ext. 2667 or 821-2652.

BICYCLE - Panasonic, women's, 10-spd., 2 yr. old, excel. cond. Tom, Ext. 5350.

BIKE - Huffy, 20", boy's, $25. Ext. 5080 or 751-1884.

BIKE - BMX Mongoose Expert, all chrome, mag rims, v.g. cond., 1983. Mike, 744-8933.

BOOTS - women's, leather, fashion knee-hi, size 6, 2 pairs, 1 brown, 1 black, look brand-new, were $70/ea., now $40. Euguene, Ext. 7113.

DOGHOUSE - blue siding, shingled roof, 32"x25"x36", $25. Mary, Ext. 2815 or 472-4087 after 6 p.m.

EXERCISE BIKE - Tunturi E504, recumbent cycle, comfortable, like new, orig. $400, asking $250. Brian, Ext. 7519 or 234-9487.

LEG PRESS MACHINE - new, orig. $425, asking $200. 821-1042.

PUPPIES - Golden Retriever, sire & dam on premises, AKC registered, 6 wk. old Dec. 1, 2 males, 4 females, $400/ea. Tirre, Ext. 3288.

ROWING MACHINE - Sears, v.g. cond., $50. Bob, 467-4222.

SLANT BOARD - like new, adjustable, folds for storage, cushioned, $35. Celeste, 878-4356.

WET SUIT - Henderson, man's large, ¼" thick, worn twice, $190. Keith, Ext. 5827.

## Audio, Video & Computer

AUTO ADAPTER - Archer Universal, output 3-9Vdc, 300MA, power supply adapter, 120 Vac to 7-3Vdc, $5/ea. Pete, Ext. 4581.

CAMCORDER - Hitachi, many access., works very well, takes reg. VHS tapes, asking $450. Rich, Ext. 2043 or 435-4316.

CAMCORDER - RCA, CMR 300, auto focus, plays through TV, date/clock display, extra lenses, $400. Al, Ext. 2372 or 331-1003 eves.

CD - Ricky Skaggs, *Waiting for the Sun to Shine*, never opened, $3. Morris, Ext. 4192.

CD ROM - Hitachi 15035, new, in box, w/disc & cable, $275. Al, Ext. 2043 or 878-8424.

COMPUTER - Commodore 64, color monitor, 1541 floppy, joysticks, fastload cartridge, extras, $250. Pat, Ext. 2836.

MONITOR - Goldstar VGA & card, color, $290; TEC 360K H.H. 5¼" drives, $35/ea.; MMC 4-drive controller card, $35, all $100. Jim, Ext. 4584.

STEREO - Fisher, w/double cassette, booster, turntable needs needle, radio, $150. Ext. 7247.

STEREO AMPLIFIER - Lafayette KT-250, excel., cond., $50. Jack, Ext. 7869.

STEREO RECEIVER - JVC am/fm, 60 wpc, only problem w/fm scan function, asking $60. Jim, Ext. 4584.

CONSOLE TV - stereo, radio, 8-track, turntable, cabinet 66"x20", needs work, $30. Mary, Ext. 2815 or 472-4087 after 6 p.m.

TURNTABLES - Electronics, Garrard & Pioneer, Fisher CR113, std. cassette deck, record player, am/fm, speakers, $10/ea. Pete, Ext. 4581.

## Free

ELECTRIC CLOTHES DRYER - John, Ext. 2667 or 821-2652.

RADIO/RECORD PLAYER - GE, console, fruitwood, 68"l x 30"h x 10"w, good for recreation area. 289-0687.

## Miscellaneous

CAR PHONE - paid $300, now $100. Kym, Ext. 7247.

CORDLESS PHONE - $10; cordless Dustbuster, $7; home 8-track tape player, $10; electronic microphone, new, $20. Ext. 3293.

CHRISTMAS TREE - artificial, 7½' tall, 3 yr. old, excel. cond., $30. Lloyd, Ext. 5225.

CHRISTMAS TREE - artificial, excel. cond., $50; electric heater, $20; toaster/broiler oven, $20; women's wool coats, $10. Kathy, 744-2203.

CHRISTMAS TREE - origami 12", origami decorations, $26; origami earrings, $7, brooch, $7, or $10/set. Doris Terry, Ext. 7610.

CHRISTMAS TREE SKIRTS - 48" w/3" eyelet ruffle, patchwork quilted, $50/ea. Henry, Ext. 4547 or 727-7227.

JACKET - woman's leather, full length, size 12, petite, $30. Pete, Ext. 4581 or 399-2813 after 5 p.m.

SUITCASES - 2, American Tourister, large, v.g. cond., $25/ea. Ext. 3589.

## Yard & Garage Sales

SHOREHAM - Sat. 11/30, 10 a.m.- 3 p.m., 31 Miller Ave.

## Car Pools

NORTH FORK - Are you interested in car pooling? Mike, Ext. 2499.

## Lost & Found

LOST - Golden retriever, female, 1½ yrs. old, blue collar, E. Moriches, brokenhearted 4 yr. old misses her. Ext. 7192 or 874-2614.

## 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

BROOKHAVEN HAMLET - large, sunny, studio apt., 2nd floor, sep. ent., eik, all new appl., full bath, w/w, 1 block to water, next to wildlife preserve, $500/mo. includes all. 286-8689.

CORAM - own room in a spacious private house, nice area, $350/mo. for single or $550/ huge master bdrm. w/bath. Ext. 7897 or 331-0807.

NORTH SHIRLEY - 1-bdrm. apt., full bath, large l/r, large kit., priv. ent., 1st floor in new hi-ranch, $650/mo. includes all. 399-3950.

PATCHOGUE VILLAGE - 2-bdrm. house, convenient location, nice area. 475-9083 after 6 p.m.

RIDGE - furn. studio apt., private, fenced-in yard, kitchen, bath, 5 min. to Lab., $490/mo. 744-8632.

RIDGE - immaculate 2-bdrm. condo, w/d, dw, w/w, $750/mo. 878-6016 eves.

ROCKY POINT - room in large house w/nice yard, w/d, kit., l/r, 10 min. to Lab, $350/mo. includes all, month to month okay. Dave, 821-7179.

ROCKY POINT - large 2-bdrm. apt. w/large yard, $800/mo. 744-8901 eves.

WADING RIVER - 3-bdrm. hi-ranch, 2 baths, 2-car gar., 1 wooded acre, 10 min. to Lab, appl. incl., country living, move-in cond. Mei, Ext. 4360, or Helena, 751-4098.

WADING RIVER - 2-bdrm. apt., full bath, l/r, kit., fp, priv. drive, 10 min. to Lab, no pets, no smokers, $650/mo. incl. all. John B., Ext. 4028.

ELKA PARK, HUNTER, NY - 3 bdrm., 3 baths, loft, fp, jacuzzi, furn., ski Hunter, Windham, Cortina, $8,000 Nov.-Apr., $2,000 monthly, $900 weekly, all + util. Phil. 732-8124.

## For Sale

CORAM - Strathmore East, 4-bdrm. ranch, 2 baths, cathedral l/r, 2-car gar., gas heat, fenced corner lot, $120,000. Ext. 3791 or 928-7154.

CORAM - N of Rt. 83, mint 4-bdrm. contemp. Colonial, l/r, d/r, fam. rm., fp, fin. bsmt. w/nightclub, 2-car gar., ⅓ acre, $139,900. Ext. 7897 or 331-0807.

EAST MARION - 1-acre bldg. lot adjacent to Greenbelt, walk to Sound. 325-0447.

HOLBROOK - 4-bdrm. ranch, l/r, d/r, eik, full unfin. basement, w/w, deck, fenced yard, ¼ acre, $119,900. Ext. 3809 or 588-9019 eves.

MIDDLE ISLAND - 3-bdrm. ranch, eik, den, d/r, l/r w/bay window, 1½ baths, screened porch, patio, full bsmt., wooded ½ acre, cul-de-sac, $124,900 neg. 924-6051.

N. PATCHOGUE - 2-bdrm. cottage, l/r, country kit., patio, fenced 90'x90', full bsmt., 22' x 24' gar., Pat.-Med. SD, $108,000, low taxes. 286-6844.

PATCHOGUE - lg. 4-bdrm. Victorian, mint, parlor, l/r, d/r, eik, sunrm., 1½ baths, fp, new roof & cesspools, updated elect., plumbing, heating, woodwork, ½ acre, $179,900. Tom, Ext. 4030.

SHOREHAM - 4-bdrm. Cape, attach. 2-car gar., 2 fp, 1½ baths, d/r, 1-acre treed lot, new appl., extras, estate, must sell. Vi, Ext. 5169 or 744-6043.

SHOREHAM - 3-bdrm. ranch, SWRSD, low taxes, 2 baths, ½ acre, large eik, d/r, l/r, den, fp, large storage rm., cac, gas heat, all appl., igs, prof. landscaping, $145,000. Ext. 2833 or 744-7172.

SHOREHAM - 4-bdrm. Colonial, 2½ baths, 2-car gar., bsmt., enclosed porch, fenced ⅓ acre, SWR SD, low taxes, low heat bills, large rooms, great storage, $165,000. 744-0960.

SOUND BEACH - 3-bdrm. ranch, 2 baths, l/r, eik, d/r, gar., cedar deck, agp, fenced yard, rental income, Miller Place Schools, $130,000. 821-1271.

WADING RIVER - 4-bdrm. contemp., den, 2½ baths, fin. bsmt., 7 skylights, balcony, ¾ acre, 2-car gar., taxes, $2,000, Shoreham schools, fp, Andersen windows, $235,000. John, 929-8142.

WESTHAMPTON BEACH - 3-bdrm. ranch, ½ acre, enclosed patio, fp, cac, oil, extra room, suitable for M/D apt. 821-0865.

SHAWNEE-ON-DELAWARE, PA - timeshare week #40, sleeps 6, dining area, kit., golf, riding, canoe trips, sightseeing. Tom, Ext. 5350.

## Wanted

CAR SEAT - for 3-yr.-old child, in good cond. Vlodek, Ext. 5665.

BABY-SITTER - for 2 children in my home, Center Moriches area, full time, M-F. Lori, Ext. 3046 or 874-8839.

MARINE RADAR - Loran, working cond., reasonable. Paul, 727-4859.

NINTENDO GAMES - used, at reasonable price. John, Ext. 5100.

SERVICE MANUAL - for Vespa motorscooter. John, Ext. 7671 or 765-1299.

SKI BOOTS - approx. size 8. Joe, Ext. 4139.

## In Appreciation

To all my friends at BNL: Thank you for your support and sympathy in the passing of my mother, Eleanor Anderson. —Arthur Anderson

**Ads left out of this issue due to lack of space need not be resubmitted to appear in the next issue.**