BROOKHAVEN BULLETIN
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BROOKHAVEN NATIONAL LABORATORY

New AUI Benefit: Flexible Spending Accounts

A new employee benefit — flexible spending accounts — will be available to BNL employees starting January 1, 1990. Associated Universities, Inc. (AUI), will be offering two types of accounts:

- Health Care Reimbursement Account
- Dependent Day Care Reimbursement Account

Both accounts enable participants to deposit money voluntarily through automatic salary reductions, to one or both accounts. Participants can then draw out money from the appropriate accounts to reimburse themselves for health care and/or dependent day-care costs that they have incurred.

The big advantage to these accounts is that participants contribute "before-tax" dollars. In other words, they set aside money through salary reduction *before taxes are taken out of their paychecks.* By paying for their health care and dependent day care expenses with before-tax dollars, employees reduce their gross earnings. This, in turn, lowers the amount of federal income, state income and Social Security taxes they pay on their earnings. As a result, employees who use these accounts increase their spendable pay.

Health Care Reimbursement Account

This account allows employees to pay a wide range of health care costs with before-tax dollars. Eligible expenses include:

- Medical and dental plan deductibles, coinsurance (the amount the employee must pay over the 80% allowed by Major Medical), and expenses over medical and dental plan limits.
- Miscellaneous health-care expenses not covered by insurance, such as eyeglasses, cosmetic surgery and physical examinations.

In short, employees may use this account to pay any health-care expenses on the IRS list of approved expenses, provided the expense has not been reimbursed under a group insurance program or taken as a deduction on the employee's income-tax return.

In any calendar year, an employee may deposit any amount from $300 to $1,500 in the Health Care Reimbursement Account. Reimbursement forms will be available from Personnel Services, Bldg. 185, and will be processed by Connecticut General Life Insurance Company. For medical or dental claims, forms should be submitted, along with the Explanation of Benefits from the insurance company showing the unreimbursed portion of the claim. For expenses that were clearly not covered under the medical or dental plans, itemized bills must be attached to the form.

Dependent Day Care Reimbursement Account

This account may be used to reimburse expenses incurred for providing day care to eligible dependents so that employees (and their spouses, if married) can work. Expenses may be claimed for a child under 13 who is claimed as a dependent on the employee's income tax return, as well as any dependent claimed for income tax purposes who requires day care because of physical or mental inability.

Eligible expenses include:

- Licensed nursery or day-care centers.
- Individuals who provide care for eligible dependents in or out of the home
- Housekeepers hired to care for an eligible dependent.

Any amount from $300 to $5,000 may be deposited in the Dependent Day Care Reimbursement Account each year. However, in accordance with Internal Revenue Service (IRS) rules, if an employee is married and files a separate tax return, the maximum annual deposit is $2,500. Also, the maximum deposit to this account cannot exceed the employee's annual earnings, or, if less, the spouse's annual earnings.

Reimbursement forms will be available from Personnel Services, and will be processed by Connecticut General Life Insurance Company. Forms should be submitted regularly, along with itemized bills and the name, address and Social Security or Taxpayer Identification number of the dependent day-care provider.

The same information on the dependent day-care provider is required by the IRS when the participating employee files an income-tax return.

The IRS also prohibits "double dipping." Thus, if an employee claims a dependent day-care expense as a tax credit, that expense may not be reimbursed through this account.

How the Accounts Work

The following apply to both the Health Care and Dependent Day Care Reimbursement Accounts:

- All contributions will be made by salary reduction from the employee's paycheck, in equal monthly or weekly amounts, depending on the employee's pay status.
- The salary reduction amount may not be changed during a calendar year unless an employee experiences a change in family status, such as marriage, birth, death or change in employment status.
- The IRS maintains a "use it or lose it" policy with flexible spending accounts. Therefore, if there are any remaining funds in either of these accounts at the end of the plan year, they must be *forfeited.*

Look for more detailed information about these new benefit options to be

(continued on page 4)

A Meeting For Many Interests

Some 110 scientists came to BNL October 25-27 for the third biennial Symposium on Electroresponsive Molecular and Polymeric Systems.

This field has been growing rapidly over the last five years because it enables scientists to synthesize molecules and polymers that have special electrical and optical properties, for applications in catalysis, biosensors and nonlinear optical systems. Given this wide spectrum of interests, the meeting brought together scientists of such varied backgrounds as physics, chemistry, biology and medicine, to discuss the latest theoretical developments and current experimental capabilities for characterizing these new materials.

Shown here are the workshop's organizers: (from left) Terje Skotheim, Allen Goland and Betty Ivero, all of BNL's Department of Applied Science; and Yoshi Okamoto, of Polytechnic University.

Gen Shirane

DOE Honors Shirane

The world's leading expert in using neutron scattering to probe problems in solid state physics — BNL Senior Physicist Gen Shirane — has again been honored, this time by the U.S. Department of Energy (DOE) with its Distinguished Associate Award.

Presented by Robert Hunter, then Director of DOE's Office of Energy Research, during his visit to the Lab in September, the award cites Shirane: "For the creativity, dedication and research accomplishments which have led to the establishment of neutron scattering as a uniquely powerful probe of the magnetic structure and vibrational properties of solid materials. His research on structural phase transitions, lattice dynamics and magnetism has profoundly influenced the development of condensed matter physics in the United States and abroad."

At present, Shirane's research is centered on understanding the high-temperature superconductors first discovered in 1986. Since then, he has been a principal investigator in several experiments at BNL's High Flux Beam Reactor that have added insight into the nature of these new materials.

Shirane first came to Brookhaven in 1956, as a visiting researcher from Westinghouse; he joined BNL's Physics Department in 1963.

This year alone, Shirane was named a member of the National Academy of Sciences and was honored by his colleagues on his 65th birthday with the Symposium on Neutron Scattering, held at the Lab in June.

Photos on this page by Roger Stoutenburgh.

Child-Care Assigned To Personnel

Another important milestone for BNL's future child-care center came last month when responsibility for the child-care function at the Laboratory was assigned to the Personnel Division.

Within Personnel, Employee Relations Counselor Susan Foster was designated to chair the selection committee for choosing the contractor to operate the 100-child center that will soon be built in the apartment area.

Joining Foster on the selection committee are Michael Bebon, Plant Engineering Division; Frank Federmann, Associated Universities, Inc.; Renée Flack, Affirmative Action Office; Michael Goldman, BNL Legal Counsel; and Mary-Faith Healey, Contracts & Procurement Division.

The committee's first order of business is to solicit proposals from prospective child-care providers. Towards this end, Foster said, requests for proposals will be sent out within a few weeks.

On the Lecture Circuit . . .

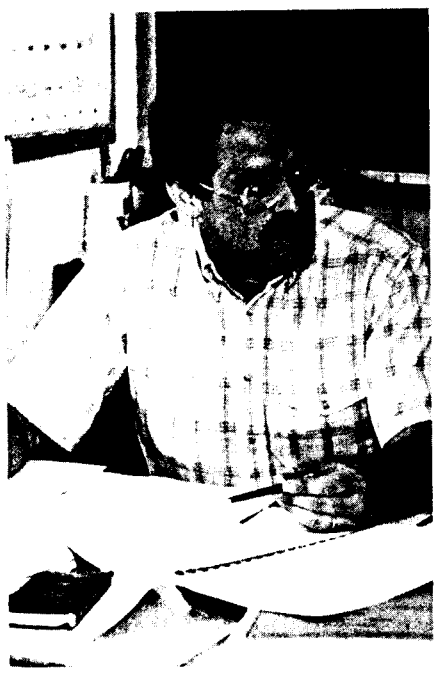
BNL Lecture: The Fifth Force

We're all used to the idea of gravity — that relentless, obvious force we overcome with every footstep. But, is there another force of which we're not normally aware — one that modifies the effects of gravity ever so slightly?

If such a subtle force exists, it would be a fifth force, because four others — gravity, electromagnetism and the strong and weak forces — are already well known.

The physics community has been thinking about the fifth force since January 1986. That's when physicists Samuel Aronson, BNL; Ephraim Fischbach, Purdue University; and others published findings in *Physical Review Letters*, which first suggested the existence of a new force.

Whether or not its existence is eventually proven, the force of the fifth force has already been felt, as Aronson will explain in the 256th Brookhaven Lecture, when he addresses the question, "The Fifth Force — Is It Still With Us?" Aronson, who is Deputy Chairman of the Physics Department, will speak on Wednesday, November 15, at 4 p.m. in Berkner Hall, following an introduction by Physics Department Chairman Peter Bond.



Samuel Aronson

Aronson will begin his talk with a review of the brief history of the fifth force: how he and Fischbach came to reexamine a 1910 study of gravitational effects by Hungarian scientist Roland von Eötvös, and why their findings cast some doubt on the fundamental principle put forth by Galileo — that all falling bodies accelerate at the same rate.

He will also review the various experiments that have been conducted to test their findings. A fair number of important results have already been reported, mostly negative, though there are some experiments with positive results that have never been proved wrong.

Aronson himself is involved with such an experiment, now located in Seattle. He and his University of Washington collaborators are in the process of building a computer-controlled version of their equipment to commission soon and to run next summer on the Palisades in New Jersey.

Though the small group is now in the process of analyzing their latest data and have no new answers yet, Aronson will share what this experiment has taught him about the process of doing experimental physics. He will contrast this project, so small in terms of size and cost, with high energy physics experiments that involve large numbers of people and high budgets.

While conceptually simple, the kinds of experiments required to test for a fifth force have called for extremely sensitive instrumentation. Now, instruments developed in pursuit of the fifth force can be used to pursue other questions — such as the equivalence principle of the general theory of relativity, with ten times or more sensitivity than could be done in the past. So, Aronson will conclude, even if there is no fifth force, the spin-off instrumentation can be used to do some fundamental physics.

Sam Aronson received his M.A. and Ph.D. in physics from Princeton University, in 1966 and 1968, respectively. He was an undergraduate at Columbia College.

From 1968-72, he was at the University of Chicago's Enrico Fermi Institute for Nuclear Studies, as a research associate. He then moved to the University of Wisconsin, where he stayed until 1977 as an assistant professor of physics in the Physics Department.

Aronson joined BNL's Accelerator Department in 1978, as a physicist with the ISABELLE Project. He joined the Physics Department in 1982. In 1986, at the time of the publication of the paper on the fifth force, Aronson was on a sabbatical at CERN, the European particle physics laboratory. After his return, in 1987, he was named Associate Chairman of the Physics Department, then Deputy Chairman in 1988.

In addition to his administrative duties and his work on the fifth force, which he considers more of a hobby, Aronson shares responsibility with Omega Group Head Howard Gordon for developing and building the central calorimeter for the massive D0 detector now being assembled at Fermilab's Tevatron I for experimentation in 1991.

After the lecture, those attending are invited to join the speaker for discussion and hors d'oeuvres. In addition, anyone interested in joining the lecturer for a dinner at a restaurant off site should call William Morse, Ext. 3859.

Haworth Distinguished Scientist

Lee to Lecture on Ions, Lasers

Nobel laureate Yuan T. Lee, a professor of chemistry at the University of California, Berkeley, returns to BNL next week for his second visit as a Leland J. Haworth Distinguished Scientist, in the Chemistry Department.

During his stay, Lee will deliver two lectures. The first is a technical talk, "Systematic Investigation of IR Absorption Spectra of Ammoniated Ammonium Ions, $NH_4^+(NH_3)_n$ (n = 1-10)," on Monday, November 6, at 11 a.m. in the Hamilton Seminar Room, Chemistry Department, Bldg. 555.

The second, "Chemical Lasers and Laser Chemistry," is a general talk for a Lab-wide audience, on Wednesday, November 8, at 4 p.m., in Berkner Hall, to be followed by a reception at 5 p.m.

Infrared (IR) spectroscopy is a technique for studying the properties of materials through their interaction with IR radiation; after passing through the material, the radiation is dispersed into a spectrum.

While IR spectroscopy of molecules is a standard technique, IR spectroscopy of cluster ions is relatively new because, until recently, it has been hard to concentrate enough cluster ions in a gas.

Ionic clusters are molecules with a central, charged species, which is surrounded by neutral molecules. Cluster ions are good models to study solvation, the surrounding of solute ions by one or more solvent molecules in liquid solutions.

IR spectroscopy of cluster ions was pioneered by BNL Senior Chemist Harold Schwarz, Chemistry, in the late 1970s, using pulsed radiolysis and conventional IR absorption spectroscopy to detect hydrated hydronium ions $H_3O^+(H_2O)_n$ and $NH_4^+(NH_3)_n$.

Using ion trapping and two lasers, Lee and his colleagues have extended Schwarz's work to look at the spectra of larger clusters, having up to ten neutral molecules surrounding the charged species. In his first lecture, Lee will discuss the results obtained using this method to understand the spectra of the series of $NH_4^+(NH_{3n})$cluster ions.

Yuan T. Lee

In the Lab-wide lecture, Lee will explain how chemical reactions not only consume energy, which can be supplied by lasers, but also produce energy, which can be in the form of laser light.

In addition to his UC Berkeley professorship, Yuan T. Lee is Principal Investigator in the Materials and Chemical Sciences Division of Lawrence Berkeley Laboratory. For his extensive contributions to physical chemistry, he has been awarded the 1986 Nobel Prize in Chemistry, the 1986 National Medal of Science and the 1981 Ernest O. Lawrence Award. Lee received his Ph.D. from UC Berkeley in 1965.

The Haworth Distinguished Scientist appointments were established in 1984 to honor the memory of Leland J. Haworth, BNL's second Director, who died in 1979. Recipients are expected to spend from one to three weeks per year, for three consecutive years, in residence at Brookhaven; during their stay, they are to hold scientific discussions with the staff and present seminars, including at least one of Lab-wide interest.

Yuan T. Lee is the Lab's fifth Haworth Distinguished Scientist and the second in the Chemistry Department.

Brookhaven Women In Science Lecture

Images of Technology in Art

From the beginnings of the Industrial Revolution through the present nuclear age, Western society has viewed new technology with an uneasy mixture of optimism and pessimism. This view has been reflected in the works of Western artists, who have both celebrated and satirized the modern technological era.

The "Artists' Responses to Technology" — a talk illustrated with slides reviewing how artists during the 19th and 20th centuries have both admired and feared new technology — will be presented by art historian Julie H. Wosk. Associate Professor of Art and English at the Maritime College of the State University of New York in the Bronx, Wosk will speak on Tuesday, November 14, at 5:30 p.m., in the Brookhaven Center.

Hosted by Brookhaven Women in Science, Wosk's lecture is sponsored by the Speakers Program of the New York Council for the Humanities and is open to the public, without charge. Refreshments will be offered before the talk, and a dinner with the speaker will be held afterwards.

As Wosk will explain, technological advances since the Industrial Revolution dawned in the 1750s have been greeted with both elation and alarm. Through their expression of themes and selection of materials, artists have simultaneously embraced and rejected this new age, as machines and technology have changed the notions of what is beauty and art.

For example, in the early decades of this century, artists celebrated the automobile, electric light and other extraordinary engineering feats. While Precisionist and Futurist artists worshipped the machine, Dada artists satirized the machine age — lampooning a world of human automatons overly dependent upon their own mechanical inventions.

Wosk will go on to explain how contemporary artists continue to express their concerns about the dangers of technology, while also continuing to explore the new technological materials — computers, fiber optics, video, plastics, lasers and neon lights — that can be utilized in artistic expression.

Wosk will conclude her talk with a discussion of the images of women and technology in art, including those by women artists who comment upon or use contemporary technology to express themselves.

Julie H. Wosk received an M.A.T. from Harvard University and a Ph.D. in English from the University of Wisconsin. As her primary research is concerned with artists' responses to technology, she has published extensively on the topic, including the recently completed book *Technology and the Visual Arts* and has developed courses for students with technical backgrounds.

Julie H. Wosk

To make reservations for dinner, at $14.50 per person, contact Carmen Benkovitz, Ext. 4135.

Note to Employees:

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

Van Slyke Lecture

A Model for Studying The Immune System

Lymphokines are the hormones of the body's immune defense system, and these proteins control the function of lymphoid cells of immune system. Secreted by white blood cells called lymphocytes, lymphokines are synthesized when foreign molecules called antigens invade the blood stream.

Among other functions, lymphokines signal lymphocyte genes to initiate the production of immunoglobulin, blood proteins commonly known as antibodies. Each immunoglobulin antibody binds with a specific antigen to eliminate infection from the body.

"Lymphokine Signaling of Immunoglobulin Gene Expression" is the topic of the 1989 Van Slyke Lecture, to be delivered by Marian Koshland, Professor of Immunology at the University of California, Berkeley. Her talk will be presented on Thursday, November 9, at 8 p.m. in Berkner Hall, and the public is invited to attend.

Gene expression is the process by which the genetic code is deciphered and transcribed to give instructions for the making of proteins such as immunoglobulin. In studying how lymphokines regulate the expression of lymphocyte genes encoded for immunoglobulin, Koshland and her colleagues are interested in understanding how signals to produce immoglobulins are generated at the surface of T and B lymphocytes. In addition, they want to know how these signals are transmitted to the lymphocyte nucleus to induce transcription of the immunoglobulin genes.

Koshland's laboratory has developed a model system that overcomes a major difficulty: Lymphokines moderate the immunological responses of both B and T lymphocytes; however, one lymphokine not only can stimulate the growth of these lymphocytes, but also can affect their differentiation — and the lymphokine's effects vary depending upon the lymphocyte's stage of development and the interfering presence of other lymphokines.

Koshland's system utilizes interleukin 2, the T-cell lymphokine, and a cloned lymph-cancer cell line. Koshland found that, by growing the lymphoma cells under different culture conditions, interleukin 2's signals for growth and differentiation can be uncoupled and, thus, examined independently.

Marian Koshland received her Ph.D. in immunology from the University of Chicago in 1949. After a postdoctoral fellowship in the Department of Bacteriology of the Harvard Medical School, 1949-51, she joined BNL's Biology Department. From 1952-62, Koshland worked as an associate bacteriologist; in 1963, she became a bacteriologist.

In 1965, Koshland moved from Brookhaven to the University of California, Berkeley. In 1970, she was named a professor in the Department of Microbiology and Immunology; Koshland served as Chairman of that department, from 1982 until earlier this year.

Marian Koshland is a member of the National Academy of Sciences, American Academy of Microbiology, and Sigma Xi. In addition to being affiliated with the American Society of Biological Chemists, she served as President of the American Association of Immunologists, 1982-83.

Marian Koshland

Koshland is the second Van Slyke lecturer, following the establishment in 1987 of this series in honor of the late biological chemist Donald D. Van Slyke.

Known as the initiator of modern clinical chemistry, Van Slyke served as BNL's Associate Director for Life Sciences, 1948-51. In 1956, Van Slyke resumed full-time research at BNL, until his death at age 88 in 1971. The Van Slyke lectureship is funded by private sources, with a donation from Associated Universities, Inc.

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TID Demo Series to Introduce Data-Base Research Service

Keeping up with the Jones's new jacuzzi may not be worth the effort. However, keeping up with the latest information in your professional field is a very different matter, particularly if your desk is piled high with journals waiting to be read.

That's where the Technical Information Division's (TID) data-base research service can help. It offers BNL staff access to commercial data bases on subjects ranging from science and technology to medicine, law, current events, management and government activities.

Madeline Windsor coordinates these user services at the Research Library and works with Harriet Martin and Rosemary Cohen to fill user requests. Though it has been well used since its introduction in the early 70's, the Library service is being expanded and refined.

To help BNL staff become more familiar with the wealth of new information now available, Windsor has arranged demonstrations of the systems now accessed by the Library: DATATIMES, DIALOG International, Mead Data Central, ORBIT and STN International. There will also be a session on the use of PRO-CITE, a software package that is used to gather citations and produce bibliographies in correct journal format.

Data-Base Demo

The series kicks off next Thursday, November 9, with a demonstration of Mead Data Central's LEXIS/NEXIS system at 10 a.m. in the Computing & Communications Division conference room, Bldg. 515. All are welcome.

- **LEXIS** is the nation's largest on-line, full-text data base of legal information, incorporating files such as American Bar Association, Federal Tax, Federal Labor Law, U.S. Patent and Trademark Office, as well as data from printed sources such as *Journal of Business Lawyer* and *Patent, Trademark and Copyright Law*. LEXIS should be especially useful to people in administrative offices.
- **NEXIS** data bases provide information for general reference, business and industry, news, marketing, finance, and science and technology news. NEXIS files cover the full text of over 350 newspapers, magazines, wire services, newsletters and trade and professional journals, and should be particularly helpful to anyone involved in research and development projects.

Doing a Search

Those who have participated in a data-base search know that good preparation is the key to success.

Said Windsor, "The first, vital step is the reference interview, when the user describes in detail to the research librarian what information is needed and why. This very precise analysis prevents our spending time on unwanted information. So much data is available on any subject that working with a planned focal point is the only way to avoid unnecessary cost."

It's also important that the librarian know just what kind of information is needed. Within each subject, some data bases are bibliographic, some contain full texts of various publications, and some provide numeric data, such as the thermochemical data on a compound.

"The final step is feedback," said Windsor. "We'd like to hear how users feel about the search, to provide quality control and give us ideas for improving our procedures."

ID Card Pickup

The Safeguards & Security Division is now in the process of issuing new identification cards to the entire Lab. If you have already had your picture taken, your card may be ready: All those who have uncleared cards with blue backgrounds, or Q or L clearance badges with red or yellow backgrounds that are *not* PIN-coded for access into any secured areas of the Laboratory can pick up their cards in Berkner Hall, Room D, starting Monday, November 6, from 3 to 4:30 p.m. Bring your old ID card with you.

Equipment Demos

Leslie Supply Company, an independent office-equipment distributor, will show a sampling of their product line on Monday, November 6, from 11 a.m. to 3 p.m., in Berkner Hall. Representatives from Leslie will demonstrate new copiers and facsimile equipment from Canon, Xerox and Murata.

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Cosine, Inc., technical representatives for process and environmental instrumentation, will demonstrate the following products on Wednesday, November 15, from 10 a.m. to 3 p.m., in Berkner Hall: multipoint toxic-gas monitoring system, individual fixed-system toxic-gas monitors, portable toxic-gas monitors, gas detector tubes and precision level measurement equipment. Applications for personal safety, process control, and pipe and underground-tank leak detection will also be demonstrated.

Pianist Takes Center Stage In Next BERA Concert

Pianist Christopher O'Riley, a major talent acclaimed for his original interpretations and unconventional programming, will perform at Berkner Hall on Thursday, November 16, in the second concert of BERA's 1989-90 series.

A graduate of the New England Conservatory of Music where he studied with Russell Sherman, O'Riley is one of the major young talents of his generation. He has appeared as a soloist with such noted symphony orchestras as Boston, Pittsburgh and San Francisco; the Los Angeles Philharmonic; and the National Orchestra of New York in Carnegie Hall.

O'Riley has also been presented in recital at New York's Alice Tully Hall and the 92nd Street Y, and Washington's Kennedy Center. In Europe, he has appeared in recital in London, Amsterdam and Frankfurt, among other major cities.

O'Riley has won top prizes in some of the world's most prestigious musical competitions, including the Montreal Competition, the Leeds Competition and the Van Cliburn International Competition. He was also a recipient of the Avery Fisher Career Grant in 1982.

The varied and innovative program for the BERA concert will include selections from Bartok's Sonata (1926) and Bagatelle Op. 6, No. 12; Beethoven's Bagatelle in E-flat, Op. 126, No. 3, as well as selections from Beethoven's Sonata No. 32 in C Minor, Op. 111; Todd Brief's Nightsong (1985); Prokofiev's Romeo et Juliette Avant Leurs Adieux (1935); and selections from Stravinsky's Trois Movements de Petrouchka (1921).

Christopher O'Riley

The concert will begin at 8 p.m., and tickets will be available at the door for $9, general admission; $6, students and those over 65; and $5, children under 18.

United — All the Way

Roger Stoutenburgh

Every day, 400 meals are prepared in BNL's Medical Department kitchens and sent out to local senior-citizen nutrition centers.

The meals are part of Suffolk County's Office for the Aged's senior-citizen nutrition program, sponsored by the American Red Cross, which is one of the 140 agencies helped by the United Way to give assistance to over 1,000,000 Long Islanders — one in every three in our community.

The team preparing meals "to go" in the photograph includes: (from left) Pearlie Jones; Nancy Garrett, Assistant Manager; Virginia Sally Maynes; Novella Ferguson; Elaine Rubenstein; and Joan Burke-Kalivas, American Red Cross Manager, who is standing between Bernard McAlary, BNL's Business Manager (left), and Charles Geonie Jr., President of Local 2230 of the International Brotherhood of Electrical Workers (IBEW). The Lab provides the kitchens for this service, which supplies senior citizens as far apart as Bellport, East Moriches, Mastic, Patchogue, Shirley and Shoreham, with the day's hot meal.

Not present was Michael Hurley, President of the Long Island Guards Union, which, together with Associated Universities, Inc., and IBEW, is donating prizes for early pledges for BNL's United Way fund drive.

Every pledge card received by Monday, November 13, will be included in a drawing on Tuesday, November 14. First prize will be a weekend for two at the Marriott Marquis Hotel, New York City, including tickets for a show, dinner, room, brunch and parking. Other prizes include dinner-theater for four at the Island Squire Restaurant and dinners for two at popular Long Island restaurants.

The United Way fund drive started last Monday and by Wednesday, over $40,000 had been pledged. But there's still a long way to go to beat last year's total of $100,919. Keep those pledge cards coming!

Leaving the Lab — After 35 Years or More

The Bulletin salutes those employees who are retiring with 35 or more years of Laboratory service.

It was New Year's Day when Paul Hichborn arrived at the BNL site in 1951. Almost 39 years later, Hichborn left the Lab to begin his retirement on October 31.

His new job started Hichborn on more than a new year — it was the start of a whole new life. Until then, he had lived in Brooklyn, attending the RCA Institute in Manhattan.

After hearing about Brookhaven from a fellow student, Hichborn applied and was hired as an electronics technician at the Cosmotron. He came out on January 1, 1951, taking up residence in the dormitory for the job that would start the next day.

Hichborn was here about a year when he went to the old Cafeteria for lunch and met the woman who would become his wife — Joan Jehle, who then worked in the Safety Department. About one year later, she and Paul were married. They built a home in Wading River, and she left the Lab in 1954 to start raising their family, which came to include seven children.

When Hichborn started at the Cosmotron, BNL's first proton accelerator was still under construction. It started up in June 1952 and reached its full design energy of 3.3 billion electron volts (GeV) in January 1953.

When the Cosmotron began operating seven days a week, more control room operators were needed, and Hichborn stepped in. He has been in a control room ever since, noting, "I have been on shifts all that time."

He was on shift the evening of December 31, 1966, Hichborn recalled, when the Cosmotron was shut down. This was in deference to its more powerful successor, the 33-GeV Alternating Gradient Synchrotron (AGS), which had first reached its design energy on July 29, 1960.

From the Cosmotron, Hichborn went to the control room of the 50-MeV linac, used to inject protons into the AGS until 1972, when it was replaced with the 200 MeV linac.

Roger Stoutenburgh

Paul Hichborn

After five years at the 50-MeV linac, Hichborn moved to the AGS control room, in 1971. Though he has been there for 18 years, he still has a soft spot in his heart for the Cosmotron. "It was small and compact, and you knew all the experimenters," he recalled.

Hichborn recalls other good times at BNL, with various BERA groups. "In the very early days," he said, "I played some softball and bowled, but that was hard to do on shifts. Maybe I'll do some now."

He has also been a long-time member of the Rifle & Pistol Club, and he has participated in the fencing, judo and karate groups.

With one daughter still at home, Hichborn expects to stay in Wading River. So, he said, "I'll be coming back to the Lab to play tennis and use the pool." But he also expects to be doing some traveling, to visit his other children.

Though he can't believe that 39 years have passed this quickly, Hichborn is looking forward to his new life. But he's also leaving with fond memories. "I must say that I have enjoyed all my years here," he said, "and if I had it to do all over again — I would be right here!"

New Benefit (cont'd)

distributed through the Lab mail next week.

Info Meetings & Sign-Up

BNL employees will be able to enroll in one or both reimbursement accounts during the month of November, with coverage effective January 1, 1990.

Beginning next week, the Personnel Division will conduct four employee meetings in Berkner auditorium to explain these new benefit options and answer employees' questions. Meetings are scheduled for Thursday, November 9, and Tuesday, November 14, at 10 a.m. to cover the Dependent Day Care Reimbursement Account. Meetings on the Health Care Reimbursement Account will be held at 2 p.m. on those days.

To avoid undue disruption of work activities, employees wishing to attend these meeting should obtain prior approval from their supervisors.

Mountain Club Hike

The Mountain Club will meet at the Gunks near New Paltz, New York, tomorrow, Saturday, November 4. After meeting at 11 a.m., they'll watch the rock climbers for a while, then take a leisurely four-mile walk to the Mohonk Tower and Labyrinth. Everyone is welcome; there is a $4 hiking fee. Bring your lunch. Call Don David, Ext. 4821 or 286-2267, for more information.

To drive to the Gunks: Go north on the New York State Thruway (Rt. 87) to the New Paltz exit. Then go left through town, then six miles west on Rt. 299 to "T". Go right on Rt. 44, and go uphill around the hairpin turn. Park near the trestle. Walk back along carriage road to ranger truck. It's about a 3-hour drive.

Arrivals & Departures

Arrivals

Peggy Ann Von Achen ..... CCD

Departures

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

Sujit Banerjee ..... DNE
Stanford E. Carde ..... Plant Eng.
Nancy Delagi ..... Physics
John D. DeRicco ..... AGS
Paul R. Hichborn ..... AGS
Barbara Juliano ..... Fiscal
Michael G. Johnson ..... Sfgds. & Sec.
Fatah-Zouhir Khiari ..... Accel. Dev.
David Lissauer ..... Physics
Abdel-Hamid Moudden ..... Physics
James Pittman Jr. ..... Sup. & Mat'l.
Claire J. Shellabarger ..... Med.
Richard K. Stoehr ..... AGS
Stephen G. Usmar ..... DAS

Social Club

The BERA Social Club announces that tickets to Walt Disney on Ice Peter Pan on Sunday, December 3, at 3 p.m. at the Nassau Coliseum are still available at $13.50 each. Money is due by November 10.

ANS Meeting

"Glacial Radioactive Thorium Deposits of Long Island" will be the subject of BNL physicist Thomas Ward's talk at the next dinner meeting of the Long Island Section of the American Nuclear Society (ANS).

Ward's talk will take place on Wednesday, November 8, at the Brookhaven Center. Starting at 6 p.m., cocktails and buffet dinner will precede the talk. For more information or to make reservations, call Ellie Mitchell, Ext. 7328, by Monday, November 6.

See supplement for more notices and for classified advertisements.

BERA Art Show Opens Monday

Peter Horton

***Crocus Collage*, a watercolor by Carol Otto, will be one of the paintings on view in "Artists in the Family," the BERA art show of work by employees and their families, starting Monday, November 6 and running through Thursday, November 9, in Berkner Hall, Rooms B and C.**

Otto, a tour guide in the Public Affairs Office, is also a trustee of the South Bay Art Association and exhibits her work regularly in shows in Bellport and Huntington, as well as at many local banks and libraries.

The BERA show will also include sculpture and photography. Come and join us at the opening reception on Monday, 11:30 a.m. to 1:30 p.m., when home-baked goods and refreshments will be offered. Other times to catch the exhibition are Monday, 5:00 to 6:30 p.m.; Tuesday, Wednesday and Thursday, 11:30 a.m. to 1:30 p.m.

No Bulletin Next Week

As the Laboratory will be closed on Friday, November 10, in observance of Veterans Day, there will be no Brookhaven Bulletin published next week. The next issue will be on November 17. Classified advertisements for that issue must be submitted by 4:30 p.m. on Thursday, November 9.

Shopping Bus

For the convenience of on-site residents, a shuttle bus to the Shirley Pathmark shopping center leaves Fleming House parking lot every Saturday at 8:30 a.m., with the last bus returning from Shirley at noon.

On Tuesday and Friday mornings, by appointment only, a bus will leave at 9:45 a.m. from the children's lollipop-house bus stop in the apartment area, for either the Shirley Pathmark shopping center or the Village of Patchogue. Return from both places will be at noon.

For reservations, call Transportation, Ext. 2535.

Bowling

Red/Green League

E. Meier had a 233, H. Marshall 214, G. Meinken 204, H. Arnesen 202, P. Ouvrard 202, T. Prach 201.

White League

Ed Meier had a 233, Starr Mattone 197, Caryl MacDougall 187, Sandy Asselta 184, Joyce Pinelli 181, Buzz Jacobs converted the 6/7, Ed Sperry the 4/7/9/10, Al Pinelli the 6/7/10.

Purple League

Ben Belligan had a 240, Rich Scheidet 222, Ed Sperry IV 219, Skelly Frei 210, Dick Adams 208, Jim Vogel 207, Rob Simes 202, Karen Vogel 181, Pat Manzella 180.

Volleyball

Standings as of October 27

Open League		League I	
Magnum	6-0	Dinkers	7-2
GTEAM	6-0	Upfagrabs	5-1
Dig It	4-5	Cannonballs	3-3
Jet Setters	3-3	Xrayted	3-6
Me and the Boys	3-6	Up-Setters	2-4
Phoenix	2-4	Rude Dogs	2-4
Penetrating Vollies	0-6	Network News	2-4
League II		**League III**	
Nuts & Bolts	5-1	Nutcrackers	6-0
Fossils	5-1	Lethal Women	5-1
Net Wits	4-2	High Volley'em	3-3
Pteropods	4-2	Misfits	3-3
Upton-Ups	3-3	Spikes	2-4
Slammers	1-5	Good Timers	2-4
Chunga's Revenge	1-5	Turkeys	1-2
Sourcerers	1-5	Renegades	1-5
		Bad Gnus	1-2

The Luck of the Draw

To celebrate their "New Beginnings" at the Cafeteria, Service America Corporation held a drawing at lunchtime each day of the week of October 2. Pictured here with Food Service Director Chris Fautas (second from right) are some of the winners: (from left) Arthur Anderson, Plant Engineering, who won the desk-sized fish tank; Pat Fox, Applied Science, who actually won the trip for two to Atlantic City, but is shown here holding the $25 Cafeteria gift certificate won by Frank Hartmann, Chemistry; and Chris Hanley, Plant Engineering, who won the Boar's Head ham, hat and apron. Also not pictured is Janet Tempel, Director's Office, who won the Cajun cookbook.

No AA Meeting

There will be no meeting of Alcoholics Anonymous (AA) on Monday, November 6. The next meeting will be held on Monday, November 13, at 5:30 p.m. All employees, others with current BNL identification cards and their spouses are invited to participate. To find out the meeting location, call the Employee Assistance Program, Ext. 2733. Participation in AA is confidential, so you will not be asked to identify yourself when placing the call.

Hospitality News

Riet Claus, a former chair of the BNL Hospitality Committee, will present an "Introduction to the Netherlands," at the next Hospitality Committee get-together on Tuesday, November 7, at 9:30 a.m., in the Brookhaven Center.

Spouses of Laboratory employees and guests are welcome. Refreshments will be served, and babysitting will be provided free of charge.

Cooking Exchange

"Exotic Indian Dishes" will be the theme at the next meeting of the BERA Cooking Exchange, on Wednesday, November 8, at the Recreation Building in the apartment area, from 12:30 to 2:30 p.m.

The Indian dishes, including her specialty *shani panir*, will be prepared by Sharda Sadni, who now chairs the Cooking Exchange. Please come to enjoy the demonstration and taste samples of this cuisine.

All are welcome. A fee of $2 will be charged to help defray the cost of the ingredients used. Babysitting will be provided at 50¢ per child.

Members are still needed. If you wish to join, or have any questions, please come to this meeting.

Cafeteria Menu

Luncheons:

Monday, November 6, 1989

Soup: Tomato Florentine	(cup)	.75
	(bowl)	.95
Entree: Sausage & peppers over rice		3.10
Entree: Chicken hunter-style w/1 veg.		3.10
Fitness fare: Sliced London broil w/veg.		3.45
Create-your-own: Hot dog	(each)	1.35
Carvery: Prime rib of beef w/veg.		4.95

Tuesday, November 7

Soup: Cream of spinach	(cup)	.75
	(bowl)	.95
Entree: Salisbury steak w/mushroom gravy		3.10
Entree: Shrimp Creole w/curried rice		3.10
Fitness fare: Vegetable casserole		2.85
Create-your-own: Sandwich	(ounce)	.50
Carvery: Hot turkey		2.85

Wednesday, November 8

Soup: Beef vegetable	(cup)	.75
	(bowl)	.95
Entree: Spaghetti w/meat sauce & garlic bread		3.10
Entree: Sauerbraten w/1 potato pancake		3.10
Fitness fare: Breaded chicken breast		3.10
Create-your-own: Taco	(each)	.90
Carvery: Corned beef		2.85

Thursday, November 9

Soup: Chicken seashell	(cup)	.75
	(bowl)	.95
Entree: Beef & broccoli over rice		3.10
Entree: Roast turkey w/stuffing & veg.		3.10
Fitness fare: Eggplant casserole		3.10
Create-your-own: Potato	(each)	2.00
Carvery: Roast beef		2.85

Friday, November 10 — Veterans Day
Snack bar open 9 a.m. to 2 p.m.

Breakfasts (all $2.65, including small juice & small coffee or tea):

Monday: The Lumber Jack — 2 eggs, 2 strips bacon, 2 pancakes

Tuesday: The Cowboy — Western omelette w/ french fries & toast w/jelly

Wednesday: The Spaniard — Spanish omelette w/home fries & toast w/jelly

Thursday: The Wall Street — Scrambled eggs w/cheese & chopped ham on a croissant

Dinners:

Monday: Fish nuggets w/veg.	2.85
Tuesday: Pot roast w/veg.	3.10
Wednesday: Virgina ham w/veg.	3.10
Thursday: Seafood Newburg over noodles	3.10

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

Travels With Buster

When he's not working at the Alternating Gradient Synchrotron as a technician, Marty Candito likes to ride around on his three-wheeled motorcycle. But he also likes company, so, when his new puppy Buster was three months old, Candito built a sidecar for him. The shepherd/collie mix took to the trike immediately and now accompanies Candito whenever possible. When Buster started biking, he could barely peer over the side of his box, but, by the time this photo was taken, he was seven months old and had grown considerably. So, since then, Candito has installed a windshield to give Buster some additional protection besides the goggles he always wears when on the trike.

— photos on this page by Roger Stoutenburgh

Classified Advertisements

Placement Notices

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

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

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

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

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

SCIENTIFIC RECRUITMENT - Candidates may apply directly to the department representative named, or through the Office of Scientific Personnel, Ext. 7813.

POSTDOCTORAL RESEARCH ASSOCIATE - (two positions) - molecular biology, to study DNA mismatch repair and restriction gene expression in *Streptococcus pneumoniae*. Contact: S. Lacks, Biology Department, Bldg. 463.

PHYSICIST - to serve as head of the Accelerator Physics Section in activities directed to the operation and enhancement of the existing storage rings. Additional activities are the development of free electron lasers, and the development and construction of a compact synchrotron source. Contact: S. Krinsky, National Synchrotron Light Source Department, Bldg. 725B.

PHYSICIST - with broad background in experimental particle accelerator physics, for activities directed to the operation and enhancement of the existing storage rings. Additional activities are the design, construction and commissioning of a compact, superconducting storage ring dedicated to x-ray microlithography. Contact: S. Krinsky, National Synchrotron Light Source Department, Bldg. 725B.

LABORATORY RECRUITMENT - Opportunities for Laboratory employees only.

4121. SECRETARIAL POSITION - Requires AAS in secretarial science or equivalent experience and a thorough knowledge of Laboratory policies and procedures. Responsibilities will include the preparation of technical reports, grant proposals and correspondence. Additional responsibilities include making travel arrangements, processing vouchers and arranging meetings. Word processing experience required; IBM PC WordPerfect strongly preferred. Medical Department.

OPEN RECRUITMENT - Opportunities for Laboratory employees and outside applicants.

4122. ENGINEERING POSITION - Requires a BA or BS in institutional technology or several years' experience as an instructor at a nuclear reactor facility. Must be able to design, develop, conduct and evaluate general employee, emergency planning and other technical training programs. Must have experience with PCs, and good written and verbal communication skills. The ability to obtain and maintain a security clearance is necessary. Familiarization with INPO guidelines and/or DOE accreditation requirements and reactor operator certification are desirable. (Reposting of job #4088) Reactor Division.

Motor Vehicles & Supplies

88 NISSAN SENTRA - 2-dr., 4-spd., am/fm cass., good cond., $6,200. Ext. 5475 or 727-8193 eves.

88 MITSUBISHI PRECIS - h/b, white, 2-dr., 4-spd., m/t, am/fm radio, 15k mi., dark blue interior, $4,000 neg. Ext. 3753.

86 HYUNDAI EXCEL GL - white, 4-dr., am/fm cass., sunroof, good cond., $2,000. Ken, 395-6235.

86 FORD ESCORT - p/s, p/b, a/t, ac, 37k mi., excel. cond., Ext. 2343 or 563-2889 after 6 p.m.

86 SUBARU GL-10 - s/w, 4wd, turbo, loaded, 3-yr. warranty, mint cond., 72k mi., asking $8,400. Henry, Ext. 4547 or 727-7227.

84 OLDS OMEGA - 65k mi., 2-dr., p/s, p/b, ac, am/fm cass., excel. cond., $3,300. Jim, Ext. 4606 or 654-5049 after 6 p.m.

Classified Ads cont'd

84 NISSAN STANZA - h/b, 2-dr., silver-gray, a/t, p/s, p/b, ac, am/fm cass., p/sunroof, loaded, 76k mi., v.g. cond., best offer. Ext. 3183.

84 DODGE CONQUEST - silver/black, ac, am/fm cass., leather seats, cruise, new brakes & tires, neg. Mike, 878-0842 after 5:30 p.m.

84 VW RABBIT - 4-dr., am/fm cass., 4-spd., sunroof, 87k mi., runs well, $1,700 neg. 744-7549.

84 PLYMOUTH HORIZON - 40k mi., 4-dr. h/b, a/t, p/s, p/b, am/fm, blue, $2,000. Ext. 5054 or 286-5897.

84 FORD TEMPO - a/t, 4-dr., ac, am/fm, p/s, 70k mi., avail. 12/4, $2,200. Ohki, Ext. 3111 after 7 p.m.

84 EAGLE - 4wd, 4-dr. wagon, a/t, p/s, ac, am/fm cass., 44k mi., clean, asking $4,900. 473-2473.

83 SUBARU GL - 4-dr. wagon, m/t, am/fm, asking $2,200. Ext. 2604 or 473-2473.

83 PONTIAC SE 2000 - 4-dr., p/b, p/s, a/t, ac, sporty, 78k mi., good cond., asking $2,500. Xuan, Ext. 3677.

81 HONDA ACCORD - 5-spd., 4-dr., p/b, p/s, am/fm stereo cass., new brakes, excel. running cond., asking $1,750. Gestin, Ext. 5469 or 3117.

81 FORD GRANADA - 83k mi., rebuilt trans., body damage, runs well, many new parts, available 11/16, $500. Huang, Ext. 2379 or 3220.

81 PLYMOUTH TC3 - h/b, 5-spd., white/red, good cond., must sell, runs well, needs some work, $800. Phil, 286-1348.

81 BUICK SKYLARK - 120k mi., runs well, $800. Ext. 7290 or 286-0606.

81 OLDS CUTLASS - s/w, $500. 563-3623.

81 OLDS - s/w, all options, good cond., $1,800. Don, Ext. 4821 or 286-2267.

80 CHEVY CITATION - a/t, p/s, p/b, 4-dr., new am/fm/deck stereo, 77k mi., excel. running cond., price neg. Ext. 5076 or 744-4615.

80 MAZDA GLC - 4-spd., 115k mi., very reliable, runs well, $595; 4 Dunlop 195R6014 sport tires, 11k mi., $120/set. Dave, 447-2963.

80 BUICK SKYLARK - ac, p/s, p/b, 72k mi., 2 new tires, good cond., $1,500. John, Ext. 3821.

80 MAZDA GLC - sport, 5-spd., am/fm stereo, good cond., $650. 821-0919.

80 CHEVY CITATION - 4-dr., a/t, p/b, p/s, am/fm stereo w/tape deck, 77k mi., excel. running cond., price neg. Ext. 5076 or 744-4615.

80 FORD E350 VAN - 6-cyl., a/t, p/s, p/b, new tires & brakes, 82k mi., good work truck, asking $1,750. Henry, Ext. 4547 or 727-7227.

79 BUICK CENTURY WAGON - V-6, ac, a/t, p/s, p/b, am/fm stereo, CB, slip diff., 94k mi., extras, good cond. Tony, Ext. 3658.

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

78 FORD MUSTANG II - '81 engine, body in v.g. cond., $750. 589-5980 after 5:30 p.m.

78 PONTIAC FIREBIRD - motor A-1 cond., very clean in & out, mint cond., must see, asking $2,500. Ext 5105 or 286-1615.

75 VW BUS - good for transportation or parts, runs but needs work, best offer. Harold, 286-9024.

75 FORD CAMPING VAN - sleeps 4, sink, refrigerator, stove, dual battery, more, runs well, $3,000. Ext. 7699 or 821-1435.

75 MALIBU - p/s, new brakes, 4-dr., runs well, $350. Joanne, 981-0048 after 6 p.m.

74 MERCURY MONARCH - best offer. 924-7262 after 6 p.m.

74 MERCURY COUGAR - high mileage, $100. 821-0250.

59 EDSEL RANGER - 4-dr. sedan, V-8, 48k orig. mi., $4,500; '57 Chevrolet Bel Air, 4-dr., hardtop, 6-cyl., a/t, 38k orig. mi., $8,000. Ken, Ext. 5110.

TIRES - 2, Dunlop Qualifier, M/S radial, 225/60R15, 4k mi. old, cost $225, $100. Don, Ext. 2981.

TIRES - 4, Uni-Royal Tiger Paws, mud & snow, P195/75R15, low mileage, 4/$80. Eric, Ext. 5231 or 363-6753.

TIRES - 2, 950x16.5, on Ford, 8-lug rims, 2/$50. 281-8458.

ENGINE - 1970, 351 Ford Cleveland. 727-0082 after 6:30 p.m.

Boats & Marine Supplies

28' MORC SLOOP KIT - 90% completed, beautiful dark blue hull, sacrifice, $16,000 neg. Jim, Ext. 4584.

25' MORGAN SAILBOAT - c/b, great bay boat, recent sails & motor, $5,000. Steve, Ext. 4008.

22' STARCRAFT - center console, Johnson ob. new trailer, p/winch, VHF, chart recorder, CB, much more, asking $4,000. 475-7092.

19' BOWRIDER CRUISER - 1972, w/1976 115-h.p. Johnson, Coast Guard pkg., trailer w/electric winch, $3,000. Frank, Ext. 2314 or 567-5131.

15' SILVERLINE - 1969, rebuilt 33-h.p. Johnson, new chairs, controls, teleflex steering, trailer, asking $800. Pat, Ext. 4500 or 744-2017.

14' V-HULL BOAT - aluminum, Evinrude ob., trolling motor, 4'x6' depth finder, trailer, $4,200. 744-9802.

MOTOR - 1988, Seagull, ob., model 55, forward & neutral shifter, equal to 4-h.p., test tank run only, asking $625. Ext. 3082.

CRADLE - steel, adjustable, fits 20'-25' fixed keel sailboats, $800; 200 lb. mooring, complete, $120. Bernie, Ext. 4842.

Furnishings & Appliances

DRESSERS - 2; twin bed; queen-size bed, excel. cond., pick-up mid-late Dec. Lisa, 345-0326.

DINING ROOM SET - Ethan Allan, dark oak, octagon table w/4 chairs & hutch, $850. 924-3756.

RUG - orange, 10'x11', like new, $20; child's desk, compact, $10. Ext. 2347.

MEDICINE CABINET - 31"x21", two front sliding mirror doors, like new, $30 or best offer. Ext. 2683 or 751-2469.

CHINA - Edwin M. Knowles, circa 1930's, place setting for 12, a few missing pieces, $50 or best offer. Sharon, Ext. 3995.

FOAM BEDS - 2, twin size, folding, store as chairs, like new, $20/each. Mona, Ext. 5056.

NIGHT TABLE - walnut, $20; rocking chair, $20; hanging lamp, $20; solid maple chest of drawers, $95. Kathy, 744-2203.

SOFA TABLE - chrome & glass, $50. Louisa, Ext. 4207 or 286-0466.

DESK - black metal w/wood-grain top, 2 drawers, 20"x40", good cond., $30. Helga, Ext. 2384.

KITCHEN SET - solid wood, 4 chairs, good cond., $150. 821-1827 after 6 p.m.

MATTRESS - & boxspring, twin, Stearns & Foster, excel. cond., $125. Susan, Ext. 7716.

SCREEN - tri-fold, amber w/oak trim, excel. cond., $12. Ext. 2679 or 472-6922.

DINING ROOM TABLE - wrought iron, 2 leaves, like new, $450; black couch w/table & hand-carved magazine rack, $350; more. 589-2681.

TABLE - solid oak, expansion leaves, $50; Simmons Beautyrest queen-size mattress, excel. cond., $75. MaryAnn, 758-0790.

DESK - wood, 3'x5', 5 drawers w/middle drawer, painted over a wood veneer, old but good cond., $40. John, Ext. 3292 or 286-1348.

MICROWAVE - Sharp, $130; king-size mattress frame, $80; garden table chairs, $40; Gorilla guitar amplifier, $70; plants. Gestin, Ext. 5469 or 3117.

UPRIGHT FREEZER - Amana, 16 cu. ft., good cond., $75. Bert, Ext. 5156 or 581-4436.

DISHWASHER - GE, portable, good cond., $75. Tom, Ext. 5350 or 929-3298 after 6 p.m.

LIFT-CHAIR - electric, 8 mo. old, blue, like new, orig. $1,200, sell for $450. Bill, Ext. 4068 or 473-3171.

REFRIGERATOR - electric stove; range hood; butcher block; kitchen cabinets. Ext. 7225.

Tools, House & Garden

SNOWPLOW - 8' power angle plow, w/all hardware, for 73-79 Ford, must sell, asking $500. 474-5715.

JOINTER-PLANER - 6", w/stand, new, $125. 878-6637.

SPACE HEATER - small, almost new, still in box, $15. Warren, Ext. 4939 or 924-7552.

HANDY HAULER - $35; Murray rotary mower, $50. Kathy, 744-2203.

SANDPAPER - Carborundum, fast cut, finishing paper, #180 grit, boxes of 800 sheets, $40. Kathy, 744-2060 after 4 p.m.

KEROSENE HEATER - Corona, 2,300 Btu, round convection, radiant heat, $50. Lou, Ext. 2050.

TABLE SAW - Delta, 10", w/blade & dado insert, 1 yr. still on warranty, $250. Chris, Ext. 2326.

TUNE-UP CENTER - Snap-On, 3 meters, $250; Snap-On brake bleeder, $150; 20-ton air-assisted hydraulic jack, $200, all neg. 474-5715.

SNOW BLOWER - #401 Toro, 4-h.p., $100. 588-1251 eves & wknds.

Sports, Hobbies & Pets

MONKEY - Mexican Squirrel, blond, rare, very tame, cage, valued at $550, 1 yr. supply of food, asking $800. Vito, Ext. 4547.

SKIS - Hexel, 190cm w/Marker M40 bindings, $50; Lange size 10½ ski boots, $10. Karl, Ext. 7977.

BUMPER POOL TABLE - w/accessories, excel. cond., $75. MaryAnn, 758-0790.

SNOW SKIS - & poles, Lange, 170cm, men's, Solomon bindings, $125. 281-8458.

TRICYCLE - used, good cond., $5. 286-1712 after 7 p.m.

RADIO CONTROL CAR - Porsche 959, fully BB, radio, battery, many extras, orig. $500, asking $250. Donald, Ext. 4123.

SHEPHERD/DOBERMAN MIX - female, 9 mo. old, spayed, not docked, affectionate, good w/children & cats, housebroken. 751-2655.

BICYCLES - children's, 16", 1 boy's, 1 girl's, very good cond., w/training wheels if needed, $20/each. Kathy, 744-2060 after 3 p.m.

CLARINET - student model, $125 advanced, signet, excel. cond., $250. Jim, 821-0250.

BATTERY-POWERED VEHICLE - child's, "Big Foot", $40; 16" boy's bike, $30; Treadmill exerciser, $50. Mary, Ext. 2815 or 472-4087.

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

BICYCLE - boy's, 20"; Fisher Price girl's trike; Kolcraft stroller carriage; twin bed frame; booster-type car seat; end table. Lisa, 345-0326.

Audio, Video & Computer

COMPUTERS - Commodore 128, 1902A RGB monitor, 1571 disk driver, $800; Sears 2600 Atari Arcade, $600, extras w/both. Hughes. Ext. 4619.

TAPE DECKS - Tandber, 7" reel w/30+ tapes, $150; Advent 201 cassette, $100. Augie, Ext. 4220.

MULTITESTER - Sears, portable, never used, orig. $15, sell for $7. Lou, Ext. 2050.

COMPUTER - Radio Shack model 100, portable, 32k memory, w/modem, cables, power supply & case, $300. Chris, Ext. 2326.

TV - Kawasho, color, 13", 2 yrs. old, $95. Marek, Ext. 3285 or 3096 eves.

MOVIE CAMERA - Super-8mm, w/sound attachment, $12. Ext. 2679 or 472-6922.

Miscellaneous

BOMBER JACKET - rabbit fur, tan, size large, excel. cond., $30. Ext. 4932.

BABY PRAM - Prego, brown velvet, good cond., $25. 281-8458.

TICKETS - square dance, held by Centereach Fire Dept., Nov. 18, $15/per person, includes food. Mike, Ext. 5482.

JACKET - blue fox, size small, excel. cond., $150. 878-1640.

SILK FLOWER ARRANGEMENTS - for fancy crockery, all color schemes, $18; glass butterfly, $10; brass butterfly, $5. Kathy, 744-2203.

SEWING MATERIAL - zippers, binding trimmings, patterns, lace; dining room lamp; video tape boxes. 744-3069.

ENCYCLOPEDIA BRITTANICA - 1988, w/bookcase, orig. $1,800, asking $850. Ext. 3228 or 924-3756.

SWEATERS - women's, 100% cotton, $19; misc. women's wear, custom design. Richard, 585-0239.

CHILD'S TABLE - w/2 chairs & rocking chair, all wood, asking $50. 929-3620.

Free

DISHWASHER - under-counter, 15 yrs. old; chain saw w/broken flywheel, for parts. Ext. 2018.

POTTER'S WHEEL - works fine, you pick up. Ext. 3369.

FIREWOOD - Ext. 2697 or 744-6962.

72 CHEVY NOVA - you take away. Louis Potter, Ext. 4127.

NEWSLETTER - copy of an interesting newsletter from a couple traveling through India. Don, Ext. 4821.

CHICKENS - John, Ext. 3675 or 924-3528.

Lost & Found

FOUND - woman's watch, in front of Barclay's Bank. Ext. 3304.

LOST - umbrella, from Bldg. 355, Contracts & Proc., please return, no questions asked. Ext. 3142.

FOUND - gold bracelet, large, by Cashier's office. Janet, Ext. 2345.

Yard Sales

WADING RIVER - Sat./Sun., Nov. 4 & 5, 8 a.m.-5 p.m., rain/shine, Sound Road.

Car Pool

BOHEMIA-OAKDALE-SAYVILLE - need 2 more drivers for car pool, also can meet at Exit 59 LI Expressway. Frank, Ext. 2314.

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

BELLPORT - 3-bdrm., ranch, furn., l/r, d/r, eik, den, 2 baths, gar., $1,000/mo. + util. Fred, Ext. 3155 or 286-3446.

BLUE POINT - 2½-rm. apt., bdrm., l/r, kitchen, cathedral ceiling w/fan, 4 large closets, pvt. ent. w/deck, $700/mo. + util., sec., refs., avail. Nov. 1. Richard. 363-6845.

EAST PATCHOGUE - 3-bdrm. house, furn., cable 3-mo. rental, Jan,. thru April, $800/mo. + util. & sec. 821-0379.

MEDFORD - 1 room + priv. bath, priv. ent., small refrig., microwave, no pets, nonsmoker, $100/week + sec. includes all. 475-7250.

MEDFORD - 1-bdrm. apt., l/r, eik, priv. ent., deck, walk to shopping, minutes to Lab, single or working couple, no pets, $600 + sec. and elec. 654-1993 after 5 p.m.

MIDDLE ISLAND - Coventry Manor, 3-bdrm. condo, 2 full baths, all appl., a/c, fenced patio, tennis, pool, avail Nov. 15, $950/mo. + util. Ext. 3922 or 878-2604 eves.

MIDDLE ISLAND - share 2-bdrm. condo, female, 5 min. to Lab, $450/mo. + ½ util. 751-8381.

NORTH SHIRLEY - furn. bsmt. apt., newly decorated, pvt. ent., 1 person, nonsmoker, no pets, 5 min. from Lab & stores, $500 pays all. 281-8044.

PATCHOGUE - 1-bdrm. house w/Bay view, gar., $605/mo. + util. and sec. 475-4199.

PORT JEFFERSON STATION - 3-bdrm. house, 2 baths, eik, l/r, d/r, den, near BNL & SUNY Stony Brook, $1,300/mo. incl. all. 928-3216 or 737-2842.

QUIOGUE - furn. studio apt, kitchen. bath, l/r-bdrm. combo, w/w, 30 min. from Lab, nonsmoker, $575/mo., 1 mo. sec. Ext. 4960 or 288-5576.

SHIRLEY - 1-bdrm. apt., l/r, eik, full bath, w/w, no pets, single working adult, $575/mo. + sec., includes util., avail. immed. 281-1840.

STONY BROOK - share Colonial house w/professionals, $375/mo. + util. Jim, Ext. 2183.

CATSKILLS, NY - 3-bdrm. chalet w/sleep. loft, furn., near Hunter & Windham Mts., great for hunting, skiing. Ben, Ext. 3642 or Kay, Ext. 4501.

For Sale

BROOKHAVEN - 1 bdrm., l/r, d/r, den, 2 baths, screened porch, 1 car gar./, bsmt., attic, ¾ acre, city water, ask. $159,000. Ext. 4623 or 286-8229.

COMMACK - 4-bdrm. Cape, fin. bsmt., new furnace, roof, igp, hardwood floors, fully fenced, $165,000. 499-1056.

JAMESPORT - Hallockville Estates, ¾ acre, cul-de-sac, walk to beach, terms avail., ask. $72,000. Kathy, Ext. 5312 or 929-8467.

MASTIC - 3-bdrm. ranch, carpeting, a/c, full bsmt., fenced yard, more, ask. $105,500. Harris, 281-5752.

MASTIC - 3-bdrm. ranch, ¼ acre, 1½ baths, den, fin. bsmt., deck, appl., house fan, 3 ceiling fans, shed, fence, near school, shopping, 15 min. to Lab, ask. $115,000. 265-2366 after 6 p.m. wknds.

MIDDLE ISLAND - 3-bdrm. ranch, 18'x24' great room, l/r w/fp, d/r, eik, 1½ baths, skylights, ig pool, sprinklers, deck, more, 5 min. to Lab, $144,990, mint. 924-8426 eves.

QUOGUE - adult park, 55 and over, 12'x55', 2 bdrm., l/r, eik, 1 bath, washer, storage, reasonable. 878-4350.

SAYVILLE WEST - 3-4 bdrm. ranch, 2 full baths, gar., cac in all rms., full bsmt., eik, d/r, l/r, w/w, fam./rec. rm., pvt. patio, Sayville School Dist., walk to Bay, $150,000. 589-2681.

SELDEN - Village in the Woods, 1-bdrm. co-op, upper unit, eik, d/r, l/r, pvt. balcony, ask. $75,000. 696-5386.

SETAUKET - 7 rms., 2 baths, custom-designed and built for owner, 0.86 acre, quiet, scenic, passive solar energy, deeded beach rights. 473-4666.

SHOREHAM - 3-bdrm. ranch, ⅓ acre, l/r, d/r, kitchen, part. fin. bsmt., 2-car gar., 24' round pool, 10 min. to Lab, low taxes, SWR schools, $139,500 neg. Judy, Ext. 5263 or 821-0401.

ADIRONDACKS - 2 wooded, waterfront properties 20 min. from Lake George; one, 590' on water, $57,000; other, 290', $55,000; terms avail. for both. Pat or Barbara, 288-5576 or Ext. 4960.

FT. LAUDERDALE, FL - 1980 double-wide mobile home, 2 bdrm., 2 baths, l/r, d/r, eik, w/w, ac, w/d, furnished, screened-in porch, sickness in family, $17,000. George or Carol, 475-6333.

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

WINDHAM SUMMIT, PA - A-frame cabin on 12 acres, wooded mountainside, furn., pot-belly stove, electricity, no plumbing, sleeping loft, porch, secluded, $30,000. Janet, Ext. 4049.

HUBBARDTON, VT - land, 38+ acres, water view, 30 min. Killington ski area, town-maintained road, low taxes, wooded, power, telephone, asking $45,000. Tom, Ext. 2823.

Wanted

OLD FLOOR SAFE - will gladly pick up. Artie, Ext. 4988 or 325-0743.

PERSONS TO SKI- or shop Quebec and Montreal, Feb. 16-19, $309 includes trans., meals, lift tickets, tours, hotel. Bea, Ext. 3642 or 732-2472.

STEREO COMPONENTS - old, tubed, Macintosh, Marantz or Western Electric, working or not. Jim,. Ext. 4584.

MUSICIANS - competent pianist seeks other musician(s) to play classical music together for fun; duets, chamber music. Laurie, 286-2854 eves.

BOOKCASE - large. Kathy, 744-2203.

UPHOLSTERER - and slipcover maker, w/good refs. Janet, Ext. 2345.

KITTEN - 6-8 wks., all black male w/golden eyes, no substitutes please. Wegner, 286-8639.

KEYBOARD - synthesizer, 5 octaves, touch-sensitive keys. Ted, ext. 2620 or 751-6765.

Services

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

TV, STEREO, VCR REPAIRS - 35+ years exp., pick-up and delivery at BNL, recently retired employee. Dick, 732-5071.

TREE STUMP GRINDING - Bob, 727-2346.

CATERING - all occasions, Italian food our specialty, call for extensive menu, reasonable. 289-0883 or 654-5097.

PAINTER - stripping, peeling, cracking, call for estimate. Dan, 929-3195 eves.

WORD PROCESSING - accurate, fast results, 9 years' secretarial experience, IBM PC Wordstar letter quality. 928-7571 after 6 p.m.

CHILD CARE - will baby-sit at my home in Shoreham, prefer 2-3 years old, excel. care, refs. 821-5173.

HOME ENERGY CONSULTATION - top efficiency system installation personally tailored to meet your home's energy requirements. 399-1868.

ELECTRICAL WORK - neat, quality work at reasonable rates, free estimates, alterations, extensions, trouble shooting. 821-6780.

ROTOTILLING - reasonable rates. Artie, 696-2398.

SEASONED FIREWOOD - oak, split. stacked, delivered, full cord, 4'x4'x8', $135 cord, $75 half cord. 698-2501.

AUTOMATIC LAWN SPRINKLERS - free estimates, professional layouts and repairs, prompt, polite service, winterization, $30.00. 928-7042,

PAINTING - interior, reasonable rates, work guaranteed. Pat, 924-2298 eves.

BABY-SITTING - will baby-sit at my home in Shoreham. 744-4633.

BABY-SITTING - will babysit at my home in Miller Place/Sound Beach. 744-4185.

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

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

GIFTS - custom-made wall decorations, wreaths, picture frames, photo albums/address books, order now for Christmas. Victoria, 399-6390.

SOLAR NAILS - $30 full set; $15 fill-ins plus 2 free nails; manicures, $5, certified technician. Sue, 399-5099.

BRICKWORK - patios, walks, swimming pools, retaining walls, landscaping ties, Belgian block, 20 yrs. exp., Lab discount. Tony, 698-9274.

YARD WORK - leaves raked. Tim, 744-2203.

PLUMBING - repairs, installation, heating, boilers, fixtures, free estimates. Joseph 345-3923, leave message.

COMPUTERIZED REAL ESTATE BUSINESS ANALYSIS - property management, mortgage reduction, legal documents, more. 399-1868.

In Appreciation

To all at BNL who helped make *The Standard Model (abandoned)* sculptural exhibit a success:

Thank you! Your encouragement, enthusiasm and effort will not be forgotten. Special thanks to Bob DiLello, Bob Dyer, Eric Forsyth, Howard Gordon, Jerry Hudis, Doris Rueger, and the Public Affairs Office, particularly Anne Baittinger, Janet Tempel, Eloise Gmur and the Tour Program Staff. A very special thanks to Peter Yamin.

— Stephen Rueckert

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