BROOKHAVEN BULLETIN

Vol. 37 - No. 16 April 22, 1983

BROOKHAVEN NATIONAL LABORATORY

Mort Rosen

At the site of the Colliding Beam Accelerator, on April 15 Director Nicholas P. Samios (center) indicates a point of interest to Congressman Robert Mrazek (D-NY) on his left. Mrazek, who was elected from Long Island's 3rd C.D. last fall, was on his first visit to BNL. Above are Herbert Kinney (DO), Bud Mitzman (Sr. Dist. Rep. for Mrazek), Dr. Samios, Mr. Mrazek, Vincent O'Leary (Assoc. Director), Parke Rohrer (CBA Deputy Project Head), and Vern Witherill (Asst. Mgr. of DOE's Brookhaven Area Office).

Roger Stoutenburgh

Mesons can provide physicists with important clues in the search for understanding of the basic quark structure and the gluons which provide the forces that bind quarks together. Mesons are extremely short-lived particles that can only be studied with huge accelerators and enormously complicated spectrometers. One of the most important present theoretical concepts is that the forces that hold quarks together (gluons) in mesons derive from a so-called local gauge symmetry principle for the color quantum numbers of the mesons. This theory requires glueballs (states consisting of two or more gluons); but for many years glueballs were not discovered. The discovery of states that are believed to be glueballs was made at the AGS with MPSII by a BNL/CCNY team last year. These striking results were reported at the Seventh International Conference on Experimental Meson Spectroscopy held at BNL, April 14-15. Many other interesting new results in meson spectroscopy were also presented to the attendees — 128 physicists from a dozen countries. "This basic field appears vital and promising for future activities in particle physics," said Sam Lindenbaum, BNL/CCNY, who arranged the conference with the help of the Organizing Committee and associated staff. Here, Lindenbaum (left) takes a break with Guy von Dardel, Physics Institute, Lund University, Sweden, who addressed the conference during a session on Light Quark Spectroscopy. Other sessions centered on Glueballs and Heavy Quark Spectroscopy.

Roger Stoutenburgh

Nuclear models are used to calculate the neutron cross sections for a large variety of nuclei of materials used in such applications as fission and fusion reactors, neutron shielding and spallation neutron sources. One of the most important parameters in these calculations, nuclear level density, was the main topic of discussion at an Advisory Group Meeting of the International Atomic Energy Agency (IAEA) held April 11-15 at Brookhaven. Over 50 physicists from 12 IAEA-member countries visited BNL to discuss "Basic and Applied Problems of Nuclear Level Densities." Among those who attended the conference were (from left) Steve Grimes, Ohio University; Mulki Bhat, BNL; Vladimir Pronyaev, IAEA; Enzio Menapace, CNEN Laboratory, Bologna, Italy; Bob Haight, Lawrence Livermore Laboratory; Herbert Vonach, Radium Research Institute, Vienna, Austria; and Eric Lynn, Harwell, U.K. The meeting was sponsored by the IAEA and the National Nuclear Data Center at Brookhaven.

Palmer Named Assoc. Director

Robert B. Palmer has been appointed to the position of Associate Director for High Energy Physics, effective May 1. Palmer will report to the Director and be responsible for the high energy physics program at the AGS and the CBA, including the development, construction and operation of experimental detectors.

In making the announcement, Director Nicholas P. Samios said that "Dr. Palmer will bring a varied experience and an inventive mind to this position and will, I am sure, fill it with distinction."

Palmer will chair the High Energy Advisory Committee on the research program. The high energy part of the Physics Department will report to him as will the Instrumentation Division and Central Shops.

He will continue to lead a task force on advanced accelerator design and development, which is under the overall supervision of Paul Reardon, Associate Director for High Energy Facilities.

After obtaining his Ph.D. from, and doing a year's postdoctoral study at, Imperial College, London, Palmer came to the Laboratory in 1960. He has worked in a wide variety of problems and fields: bubble chamber design, neutrino physics, accelerator theory, counter experiments at the CERN ISR and, more recently, in superconducting magnets. He played important roles in the discovery of charmed baryons, neutral currents and direct single photons. He contributed many of the concepts for the large bubble chambers. He invented multiple horn focussing, momentum stochastic cooling, the inverse free electron laser and the grating accelerator. His work on superconducting magnets has brought him world-wide acclaim.

Mort Rosen

Robert Palmer

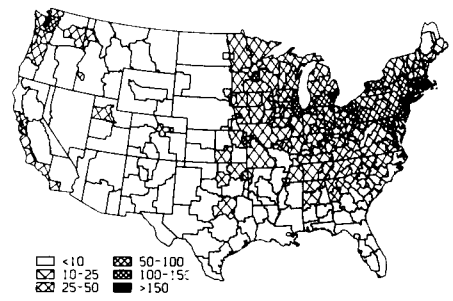
Urban Dwellers Burn More Wood

With uncertain oil supplies and steep price increases for petroleum and natural gas, homeowners have increasingly turned to alternate fuels for home heating. Frederick Lipfert, DEE, and Jennifer Dungan, now at the Marine Biological Laboratory in Woods Hole, report in an article recently published by Science that in the United States, about 9-11% of the fuel used for space heating is firewood. Surprisingly, this usage is concentrated in urbanized areas of the Northeast and north central states.

With wood-burning concentrated in more densely populated areas, Lipfert and Dungan raise the question of how this might affect air quality. They point out that although wood smoke is generally regarded as benign by the public, there is concern about effects on ambient air quality and health that might result from widespread use of wood fuel and about accidents from harvesting wood.

To determine residential firewood use, Lipfert and Dungan surveyed U.S. Department of Agriculture data from 64 counties in New England. They developed an equation for wood usage which was then applied to all counties in the United States, except for Alaska and Hawaii (see map). To check on the validity of this extrapolation of New England data to the rest of the country, state totals were compared to survey data from twelve other states. In general, the states surveyed used firewood in the same manner as New England.

Demographic data on users of wood fuel, where available, indicate that use of wood for space heating is no longer concentrated among the rural poor. For example, in a wood-scarce state like Kansas, nearly 31% of households in the five largest cities used some wood for heating, as compared with 33% of the households in rural farm and rural suburban households in three counties in upstate New York.



Fire wood usage (cords per square mile) in the United States, 1978.

Career Day For Women Students

Brookhaven Women In Science has announced a day for junior and senior high school students. The program on Saturday, April 30 will focus on "Careers for Women in Science" and is open to all students, teachers, counselors and parents. The day's activities will be aimed at making female students aware of career options and employment trends in science, mathematics and engineering.

The program will begin with registration at 9:30 a.m. in Berkner Hall. At the opening session, featured speaker Beverly Birns, Professor in Social Sciences at SUNY, Stony Brook, will address the issue of why women are underrepresented in the sciences.

The day's activities, which will continue until 4 p.m., will include films and slide presentations; exhibits highlighting chemistry, computer science and medicine; tours of Biology, Chemistry, Medical and the Exhibit Center; and seminars devoted to physics, chemistry, engineering, medicine, and oceanography.

For more information about this program, call Janet Sillas, Ext. 2345.

Alex Reben

Gathered in the office of Ruth Ann Lutz (seated) are CBA secretaries (from left) Pam Brown, Anne Flood, Vera Mott and Lillian Kouchinsky.

Vital To The Project

For many of the Lab's secretaries today, word processors have replaced typewriters, and photocopiers have made carbon paper obsolete. But one thing that hasn't changed for Brookhaven's secretaries is their sense of professionalism.

Typical of the professional secretaries at BNL is the team at the Colliding Beam Accelerator Project (CBA) in Bldg. 902 which supports the efforts of over 300 people. As Project Secretary, Ruth Ann Lutz, handles the secretarial needs of Associate Director Paul Reardon and Deputy Project Head Parke Rohrer. But like the other CBA secretaries, Lutz is flexible. "When there is a deadline looming, everyone works together — and there have been a lot of deadlines. This is the most cooperative group I have ever worked with."

"I do think we have a special feeling because we realize the importance of this project to the Lab," said Anne Flood, Secretary for the CBA Accelerator Office, which includes the Accelerator/Physics, Cryogenics, and Vacuum/RF Divisions. "It's a very strong group. We're all here for the same purpose."

The purpose of this secretarial team is to keep the gears at CBA working smoothly. Receptionist Vera Mott starts this process when visitors arrive at 902. "It's fun being here," she said, "I meet all different types of people and, for the most part, the people are very up." In addition, Mott helps the secretarial crew when extra hands are needed.

To Lillian Kouchinsky, this is the key to the group's success. "When the pressure is on, everyone just pitches in. There's no petty nonsense — we're too busy for that. We all care about and are interested in each other, and that makes for a pleasant working atmosphere." she said. Kouchinsky and Pam Brown are the secretaries for the Magnet Division. Brown described the atmosphere in their office as "comfortable," and attributed that to the attitudes of those with whom she works. "Everyone gives a helping hand," she said, "We're not taken for granted; our efforts are appreciated."

Appreciation of work well done is one of the reasons that next week, April 25-29, has been designated as Professional Secretaries Week, providing an opportunity to salute all BNL secretaries.

Rosen Bottles Flash For Better Pix

Some years ago, BNL photographer Mort Rosen developed a lighting technique to use for candid photography. Lighting is tricky in photography, and setting up proper lighting is a time-consuming art. How to take quick candids and still light the subject properly?

Rosen came up with an ingenious idea. He took an ordinary plastic bottle, the polyethylene, translucent kind that is readily available from the stockroom. Then he cut a hole in the side of the bottle and stuck it over a flash unit. Says Rosen, "You can really see the difference when you use it. The bottle acts as a diffuser, which can also be used in conjunction with other lights in multiple-lighting. It permits greater control of lighting ratios — the relative intensity of one light compared to another."

Other BNL photographers have picked up the idea, and it never fails to arouse curiosity in those who see it for the first time. One such curious person was Leonard Newman, in the Department of Energy and Environment, who copied it for his own flash attachment.

Newman made sure to take along a bottle on a recent trip to the People's Republic of China. On past trips to China, he had used his regular flash unit to take close-up pictures of food, but the harsh flash light always spoiled its appetizing appearance. So on this trip, he used Rosen's bottle trick, and the food looked yummy.

Newman was in China for a month, traveling all over the country. By the time he left, he spotted numerous photographers popping their flashes through plastic bottles. The Chinese knew a good idea when they saw one!

Doug Humphrey

Photographer Mort Rosen

Safety Alert

Now and then a story gets into circulation that is frightening — but entirely false. The Safety & Enivironmental Protection Division advises employees of one such "scare story" now going around which describes two alleged incidents of employee blindness resulting from an electric arc flash. An article in the March issue of the "Occupational Safety & Health Reporter" reported that these allegations are completely erroneous and "that no such accident ever has occurred."

The article explained that the story was perpetuated when Genstar Stone Products Company sent out a bulletin to its plants which described how two men, one working for United Parcel Service and the other for Duquesne Electric, lost their eyesight as a result of an electric arc flash bonding the contact lens to the cornea of the eye. The story claimed that both men were wearing contact lenses, and when they removed the contacts, the cornea of the eye was removed along with the lens, resulting in permanent blindness. According to Genstar's corporate safety director, the information was copied directly from a flyer circulated by a Pennsylvania mining company, and no attempt was made to verify the two incidents.

Having learned that the allegations are completely false, Genstar has withdrawn the bulletin. The article also quoted Dennis Hirschfelder of the National Society to Prevent Blindness as saying that it is "totally impossible" for the claimed eye hazards to occur.

Inside Info

Robert T. Drew, director of inhalation toxicology in the Medical Department, was recently elected to the American Board of Toxicology. He will serve for a term of three years. The Board's main purposes are to encourage the study of the science of toxicology and to certify by means of examination members of the profession.

Lecture Reminder

In the 26th AUI Distinguished Lecture Nobel laureate Paul Berg will speak on "The Expression of Transduced Genes in Mammalian Cells" at 8:30 p.m., Thursday, April 28, in Berkner Hall.

Reports Available

The following reports are now available to the Laboratory staff and to affiliates of the DOE, AUI and NRC. Others may purchase the reports from the National Technical Information Service, U.S. Dept. of Commerce, 5285 Port Royal Rd., Springfield, VA 22161. Staff members should call Ext. 5068.

NUREG/CR-2480
BNL-NUREG-51493
Effect of Oxidizing Environment on the Strength and Oxidation Kinetics of HTGR Graphites. Part 1: Reactivity and Strength Loss of H451, PGX and IG-11 Graphites. M. Eto, et al

NUREG/CR-2482
BNL-NUREG-51494
Review of DOE Waste Package Program Subtask 1.1 — National Waste Package Program. M.S. Davis, et al

BNL-51508
The ISABELLE Magnets: A Brief Description. P.F. Dahl

BNL-51509
Toxicity of Silicon Compounds. K.M. Novak

BNL-51511
Toxicity of Cadmium and its Compounds: A Review of the Literature Aimed at Identifying Dose-Response Relationships. K.M. Novak

BNL-51519
Calcium Silicate Cements for Desulfurization of Combustion Gases. Semiannual Progress Report Apr. 1 — Sept. 30, 1981. H.J. Yoo, et al

NUREG/CR-1864
BNL-NUREG-51317
Vol. I & II
A Study of Nonequilibrium Flashing of Water in a Converging-Diverging Nozzle. Vol. 1: Experimental. N. Abuaf, et al. Vol. 2: Modeling. B.J.C. Wu, et al

BNL-51407
Occupational Safety and Health Risks of Producing Selected Materials for Solar Energy Technologies: A Preliminary Report. M.A. Crowther, et al

NUREG/CR-2211
BNL-NUREG-51411
Modeling of Multiple Sequential Failures During Testing, Maintenance, and Calibration. P.K. Samanta, et al

NUREG/CR-2317
BNL-NUREG-51449
Vol. 1 #1-2
Container Assessment — Corrosion Study of HLW Container Materials. Quarterly Progress Report Apr. — June 1981. T.M. Ahn, et al

NUREG/CR-2331
BNL-NUREG-51454
Vol. 1 #3
Safety Research Programs Sponsored by Office of Nuclear Regulatory Research. Quarterly Progress Report July 1 — Sept. 30, 1981. A.J. Romano, et al

In Memoriam

Gerald S. Levine, a former employee and active BERA Board member, died suddenly on April 18 in Westwood, N.J. from injuries sustained in a sports accident. He was 51 years old.

Doug Humphrey

Twelve freshmen and sophomores studying engineering and science at the City College of New York were at Brookhaven March 28-31. They came as part of the Lab's SEEK program to encourage minority students to pursue a career in science and engineering. During their four-day stay, the students saw engineering and science in action through tours and lectures given by staff in each department. The visit was organized by the Affirmative Action Office.

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Equipment Demo

Exxon Office Systems Company will demonstrate a full line of office automation equipment in the lobby of Berkner Hall on April 27 between the hours of 11 a.m. and 2 p.m.

CREF Values

March	$44.48	April	$46.32
May	44.53	June	43.34
July	42.41	August	47.05
September	47.32	October	52.59
November	54.78	December	55.73
January	57.59	February	58.93

March $60.75

PSI News

The April meeting of the Upton Chapter of Professional Secretaries International will be held on Tuesday, April 26 at 5:15 p.m. in Berkner Hall. Following the meeting, members will celebrate Professional Secretaries Week (April 25-29) with a dinner at the Island Squire.

Since the chapter was formed almost one year ago, members have completed their standing rules and regulations, prepared a full budget, and initiated a monthly newletter, "Upstrokes," of which three issues have been published. Now they are becoming involved in the Future Secretaries Association, to work with students at high schools and business colleges. President Betty Ivero (DEE), Vice-president Audrey Blake (TID) and member Pat Towey (DEE) have attended division meetings, and the chapter will be represented in May at the New York State Division meeting in Niagara Falls.

IBEW Meeting

Local 2230, IBEW will hold its regular monthly meeting on April 28, at 6 p.m. in the Knights of Columbus Hall, Railroad Ave., Patchogue. There will also be an afternoon meeting at 2 p.m. for shift workers in the Union office at 31 Oak Street, Patchogue. On the agenda will be regular business, committee reports and the President's report.

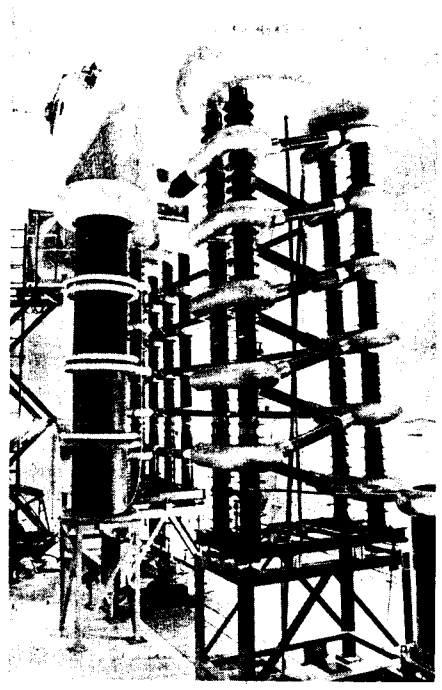
Nursery School

Folksinger Vicki Diamond will give a concert at the Upton Nursery School on Wednesday, May 4, from 10:30 a.m. to 12 noon. Diamond is a popular children's entertainer who does shows and sing-alongs for young audiences all over Long Island and in Connecticut.

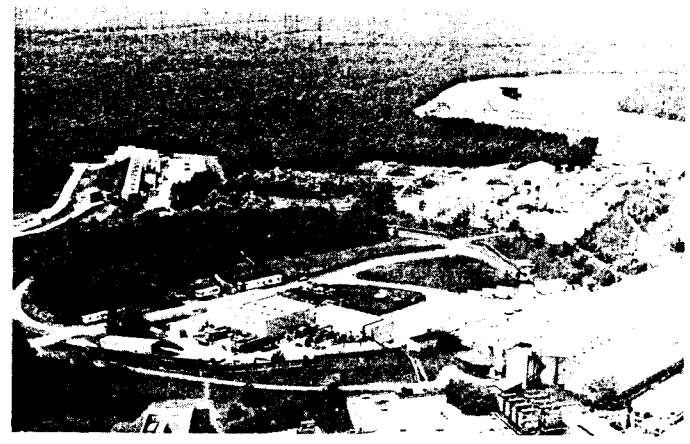
The concert is open to Nursery School students and their parents. Also invited to attend are children who have been enrolled for the 1983 school year. Punch and cookies will be served, and Mrs. Diamond's records will be available.

The school offers morning classes for three and four-year-old children. Applications can be picked up from the school, or obtained by calling the co-president Donna Miltenberger at 924-0590, or the enrollment chairperson Dorey Panno at 924-5495.

Postcards On Sale

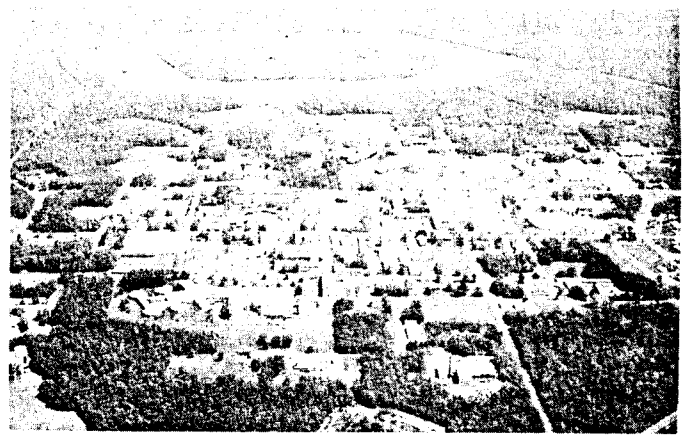


Cockcroft-Walton preaccelerator

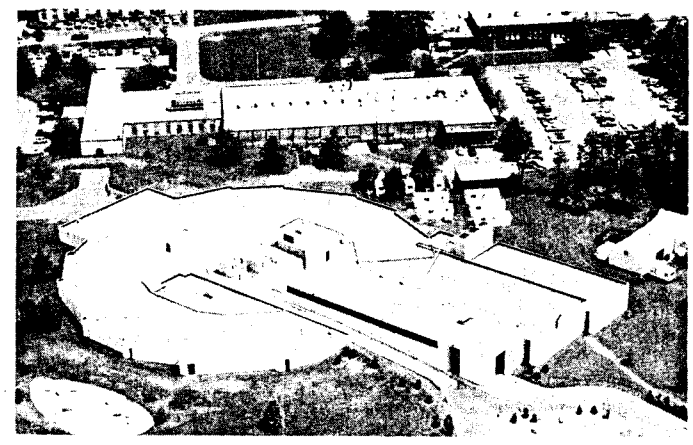


Alternating Gradient Synchrotron

Four new full-color postcards, depicting scenes at Brookhaven, are now on sale for 10¢ each at the Public Relations Office, Bldg. 134, and the BERA Sales Office in Berkner Hall. The new postcards include a view of the Cockcroft-Walton preaccelerator and aerial photos of the Laboratory site, the Alternating Gradient Synchrotron and the National Synchrotron Light Source. A fifth scene, showing the experimental floor of the High Flux Beam Reactor in 1967, is still available.



Brookhaven National Laboratory



National Synchrotron Light Source

Arrivals & Departures

Arrivals

William J. Fedrich ..... Reactor
Anthony R. Spina ..... Central Shops
Harry D. Sweely ..... Instrumentation

Departures

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

Joan H. Glasmann ..... Fiscal
Linda M. Miller ..... Nuclear Energy
George L. Turpin ..... Plant Eng.

Golf

The initial tournament of the BGA golf season will be held on Tuesday, May 3, at the Swan Lake Golf Course in Manorville. Green fees are $8, and there will be a $1 entry fee. Tee times will begin at noon and may be reserved by contacting Vinnie Racaniello, Ext. 4613, Bldg. 725A. Entry fees are due by Friday, April 29. Rain date is Wednesday, May 4.

Schedules for the upcoming BGA team and individual league seasons are now being compiled. Play in both leagues will start either the second or third week in May.

Bowling

Pink League

High games were bowled by D. Johnson 170/202, M-G Meier 160/172, E. Kristiansen 164, R. Rosati 162, H. Keeley 160, E. Jacobson 165.

Red/Green League

E. Sperry IV rolled a 233, M. Israel 223, N. Combatti 215, J. Ferrante 209, J. Medaris 203, R. Larsen 202, E. Sperry 202.

White League

J. Griffin had a 221, B. Lebitski 203, G. Fales 205, J. Ferrante 201/215/210 for a 626 scratch series, D. Adams 200, M. Stoeckel 187/177/165, L. Petro 185, M. Apelskog 180.

Purple League

D. Hall had games of 201/257/646 scratch series, E. Meier 212, J. Mayeski 201, B. Benson 214, A. Pinelli 219, K. Riker 205/224/612 scratch, E. Meier 239/621 scratch, M-G Meier 253.

Singles Club

The Singles Club will hold a wine & cheese "Get Acquainted" party tonight at 5:30 p.m. in the Recreation Building. BYOW and cheese. Members may bring a guest. For more information, call Chuck Watson, Ext. 5317.

Cafeteria Menu

Week Ending April 29, 1983

Monday, April 25		
Cream of celery soup	(cup)	.65
	(bowl)	.75
Western omelet & hash browns		1.80
Western-style chili on white rice		1.85
Hot Deli: corned beef	(bread	1.85
	(roll)	1.95
Tuesday, April 26		
Beef barley soup	(cup)	.65
	(bowl)	.75
Top round of beef & 1 veg.		2.00
Chicken breast Parmesan & 1 veg.		2.00
or w/spaghetti		2.20
Hot Deli: Pastrami	(bread)	1.85
	(roll)	1.95
Wednesday, April 27		
Cream of potato soup	(cup)	.65
	(bowl)	.75
Fish & shrimp Newburg on white rice		2.00
Barbeque spare ribs & 1 veg.		1.95
Hot Deli: Baked ham	(bread)	1.85
	(roll)	1.95
Thursday, April 28		
Turkey vegetable soup	(cup)	.65
	(bowl)	.75
Baked lasagna & 1 veg.		1.95
Old-fashioned beef stew on egg noodles		1.95
Hot Deli: Top round of beef	(bread)	1.95
	(roll)	2.05
Friday, April 29		
New England clam chowder	(cup)	.65
	(bowl)	.75
Breaded fish fillet & 1 veg.		1.85
Macaroni & cheese w/1 veg.		1.80
Hot Deli: Italian-style meatball hero		1.95

Spring Ahead!

Daylight Saving Time begins at 2 a.m. on Sunday, April 24. Remember to set your clock ahead one hour.

Cooking Exchange

Gourmets and gourmands will want to attend the next meeting of the Cooking Exchange on Wednesday, April 27. Both provincial and classical dishes will be demonstrated and sampled.

The meeting will be held from 12:30 p.m. to 2:30 p.m. in the Recreation Bldg. and is open to employees and their families. There will be a charge of $1 per person and babysitting will be provided at 50¢ per child. For more information call Mary Daum, 744-1898, or Adrienne Usher, 289-7658.

Motorcycle Club

Don't forget tomorrow's breakfast meet and ride. The club will leave from Howard Johnson's restaurant in Shirley at 10 a.m., but come earlier for breakfast. Everyone is welcome.

Volleyball

Results as of 4/18/83

A Division

The Dinkers took two in a row from the Mixed Ups (15-5, 15-10) to win the second half, and therefore are the overall winners of the season. Congratulations to Dinkers Don and Sandee Litcher, Annette and Robert Meier, Dennis Weygand, Jeanne Danko, Adrienne and John Usher.

B Division

TNT won two in a row over the Phoubars (16-14, 15-11) to become winners of the first half. Congratulations to TNT members Tirre and Linda Farmer, Jose and Joyce Mendez, Marty Leach, Kathy Norden, Tom Kelly, Denise Miesell, Cathi McNeely, and Frank Gaetan. The Phoubars will play Semi-Tough on April 25 to determine second place in the second half at 5:30 p.m.

Tickets are now available for the volleyball party to be held on June 3 at the Brookhaven Center. There will be a hot and cold buffet and an open bar. Price is $3.00 per person for team members and $7.00 for guests. Call your team captain for tickets.

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, 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 Personnel Placement Supervisor, Ext. 2882.

LABORATORY RECRUITMENT: Opportunity for present Laboratory employees.

1851. MATERIAL HANDLER(S) - (Temporary 5/23/83 to 9/2/83) Supply and Materiel Division.

OPEN RECRUITMENT: Opportunity for present Laboratory employees and outside applicants.

1852. CLERICAL POSITION - Requires substantial previous experience as a bank teller or cashier and an overall knowledge of office procedures and paperwork. Fiscal Division.

1853. TECHNICAL POSITION - Requires AAS in electronic technology or equivalent and comprehensive working background with rotating machinery and electronics. Mechanical skills are helpful. Will work as an operator in the AGS Main Magnet Supply group. Rotating shift work. Accelerator Department.

Auto & Auto Supplies

VW PARTS - muffler assemblies, $28; bumpers, $27; 009 distributor, $36; full line of new parts, call for needs. Augie, Ext. 2419 or 289-4211 eves.

72 HONDA MOTORCYCLE FRAME - 750cc, custom rigid frame w/fenders & seat, oil tank, many extra parts. 654-2076 eves.

77 HONDA MOTORCYCLE - CB750K, 11,000 mi., extras, excel. cond., $1,495. Rich, Ext. 4482 or 277-1129.

80 HONDA HAWK MOTORCYCLE - CB400T, excel. cond., low mileage, extras, $995. 286-8814 after 5:30 p.m.

77 BMW - 530i, 55,000 mi., a/c, sunroof, stereo, bronze w/tan leather, 6 cyl., OHC, excel. cond., $6,250. Peter, Ext. 3867.

72 PONTIAC LEMANS - V-6, 2 dr., hard vinyl top, a/t, p/s, $800. Joan, Ext. 2549.

74 CHEVY PICKUP - 3+3, p/s, a/t, a/c, am/fm, camper cap, orig. owner, $3,000. 744-9027.

WIRE WHEEL COVERS - 15", fits '76-'82 Caddy, set of 4. Leroy, Ext. 4581.

76 FIAT - 131S, 2 dr., 5 spd., a/c, am/fm. Ext. 2521 or 928-8379.

75 FORD PICKUP - w/Amerigo camper, 1 ton, 42,000 mi., very clean. 286-8991.

74 BLAZER TOP - white, cost $1,400 asking $750, must sell. 744-3968 leave message.

74 BLAZER - new, 350 ci, 36" tires, rollbar, must sell, asking $2,500. 744-3968 leave message.

66 PONTIAC GRAN PRIX - 389 engine, dual exhaust, 8 lug rims, runs but needs work, left rear quarter panel has body damage, good for parts or restoration, best offer. Roger, 698-3576.

63 CHEVY ENGINE - 6 cyl., runs very well, out of car, $100. H. Sauter, Ext. 3783.

79 HONDA HAWK MOTORCYCLE - 400cc, almost new, asking $650. 588-0805 eves.

79 PONTIAC SUNBIRD - am/fm, 4 spd., immaculate, 60,000 mi., p/s, $2,750. R. Gagliardi, Ext. 4613 or 821-9280.

79 MALIBU WAGON - classic, am/fm, p/s, p/b, a/c, 33,000 mi., like new, $3,475. R. Gagliardi, Ext. 4613 or 821-9280.

79 GRAN PRIX - 43,000 mi., all power, sunroof, blank w/tan inter., must sell. Sheree, Ext. 2907 or 727-3167 after 5:30 p.m.

80 AMC EAGLE STATION WAGON - 4 wd, roof rack, loaded. 286-2821.

78 BUICK CENTURY - unique 2-tone, 4 dr., 6 cyl., new tires & brakes, low mi., stereo/CB, p/b, p/s, pinstripes, showroom cond., $4,600 neg. 751-6418.

79 HONDA MOTORCYCLE - CM400T, 2,000 mi., garaged, must sell, $1,000. Ext. 7125.

73 CHEVY SPORTVAN 30 - all window, rugs, extras, heavy duty, very reliable, $1,550. Vinny, Ext. 4285 or 281-8928.

76 SUBARU - 4 WD, needs voltage regulator & battery tune-up, good cond., 1,400 cc, $700. 727-5912.

73 CHEVY VEGA - good second car, runs well. Ext. 3596 or 821-1039.

69 CHEVY ENGINE - 396, hi-performance, like new, all the best parts, make offer. 924-6895.

VW - multi-colored, runs, $150. Big Joe, Ext. 2697.

VW PARTS - (4) 15" wheels, $10/ea.; service manuals, Bug & Rabbit; Bug distributor mech. adv., $20. 744-9832.

73 OLDS CUTLASS - good mech. cond., $500. 821-1042.

CAR RACKS - (2), adjustable, 5 ft., $15. Ext. 3254.

71 CAMARO - 6 cyl., 96,000 mi., runs great, $800. Ext. 3987.

73 OLDS DELTA 88 - a/t, p/b, p/s, am/fm stereo, good tech. cond., $600. Wolfgang, Ext. 3798.

CAMPER - for pickup, 8 ft. bed, sleeps 4, 2 burner stove & more. 751-0182 after 6.

TRAILER MIRRORS - (2) towing tripod, $20; Reese Class III hitches, (1) new, fits '73-'77 GMC/Chevy van, $80; (1) reconditioned, fits '72 Chevy Caprice, $40; 1982 Suzuki RM125, dirt bike, excel. cond., extras, $1,075. 929-8520.

73 GREMLIN - white/black int., 2 dr., 70K mi., radio, a/c, new muffler, 6 cyl., good cond., asking $900. 924-3755.

79 FORD - 150 Ranger, ¾ ton, 4x4, 4 spd., 8' linerbed, 4" lift kit, 12x15 tires, am/fm cassette, new muffler. Everett, 283-9358.

74 CHRYSLER NEWPORT - $900 or best offer. 727-5912 after 6.

77 HONDA - 750cc, Super Sport, runs excel., many extras. Ext. 4095.

74 AUDI FOX - 4 dr., auto., 68,000 mi., runs well, body has rust, asking $550. 751-8240 eves.

GM TRANSMISSION - Saginaw, 4 spd., from GTO, excel. cond., $100; 1967 Buick engine, V8, GS 400, must see, $50. 924-6895.

79 HONDA DIRT BIKE - 50cc, excel. cond., asking $250. 878-0516 after 6.

CHEVY PARTS - Manley pistons, 3.27+0.30, 0.43 rings with l.w. pins, $150; alum. super rods, $100; small block crane cam, 516-539 lift, $30; nodular iron balancer, degreed, $50. Bill, Ext. 4434.

67 DARVA CAMPER - tow along, sleeps 4, gas lights, cooking, bathroom, 8x8 canopy; 1976 Jeep, CJ-7, V8, auto., custom, extras, good shape, 42,000 mi. Dennis, 289-5825 after 6.

77 FORD GRANADA - V6, a/c, p/s, p/b, am/fm, 2 dr., $1,800 or best offer, moving to CA, must sell. 289-4994.

72 CAMARO - 6 cyl., 8 tires, am/fm stereo, $950 firm. 473-3923.

71 DODGE CHARGER - radials, new carburetor, starter, water pump, fuel pump, needs minor work, $375. 744-9802.

69 FORD TORINO - runs well, needs front end work, 302 V8, a/t, p/s, $189.75. Ext. 4528.

81 HONDA - GL1100, Gold Wing, metallic dark blue, crash bars, luggage rack, garaged, excel. cond., 3,000 mi., with full face Bell helmet, $3,000. 744-6892 eves.

78 HONDA - Twin Star, 185cc, windshield, cruise control, sissy bar, luggage rack, great cond., low mi. Ken, Ext. 5042.

72 DODGE POLARA - excel. in & out, well maint., excel. running, $700. 924-3281 eves.

70 CHEVY MONTE CARLO - good cond., gold, $675. 286-8356 after 5 p.m.

72 C20 CHEVY PICKUP - 350 eng., 4 spd., 70,000 orig. mi., excel. cond., $2,000. 588-7648.

71 PINTO - 60,000 mi., auto., 2,000 cc motor, runs excel., $450. Ext. 7187 or 981-9474.

77 KAWASAKI - 400KZ, $595; ET mags, 13" on 60 series tires, $70 pair. 231-6690.

73 AUDI FOX - 4 cyl., 4 spd., 26 mpg, rebuilt eng., many new parts, $495. Henry, Ext. 3050 or 588-3999.

80 PONTIAC PHOENIX - 6 cyl., a/c, p/s, p/b, am/fm cassette, 32,500 mi., orig. owner, execl., $4,000. 744-4611 eves.

77 SAAB - 99 EME, sport coupe, sunroof, luggage rack, Perelli tires, gold, alloy rims, $5,100. Jim, 667-3909.

WIRE WHEEL COVERS - 15", fits 1976 thru 1982 Cadillac, set of 4. Ext. 4581.

Boats & Marine Supplies

21' VENTURE SAILBOAT - sleeps 4, double life lines, trailer, motor, $3,795. Jerry, Ext. 7611.

78 DYNAMAGLAS - 140 HP Mercury, low hrs., dealer maintained. 589-1779 days or 581-6642 eves & weekends.

MARINE ENGINE PARTS - used, reconditioned, half the price of new, Johnson, Evinrude, OMC stern drive. 265-5218.

16' FIBERGLASS BOAT - 1981, tri-hull, 65 HP O.B., teleflex sterring, radio & bilge pump included, showroom cond., $2,400 firm. 399-4122.

21' CUDDY - 1980 Renken, 120 HP Volvo Penta engine, I/O, many extras, full canvas, compass, 50 hrs. use, excel., $7,000. 981-0989.

14' BLUEJAY SAILBOAT - fiberglass over wood, old, asking $500 make offer. Ken, Ext. 7959 or 581-1169 eves.

20' OWENS WOOD BOAT - 1959 w/cabin; '73 Chrysler engine, 105 HP, new power pack, tune-up, winterized, runs perfect; $950 for both or $700 for engine & $300 for boat. Linda, Ext. 2733.

16' COMET - sailboat, glassed wood, alum. mast, new trailer, $800. Bernie, Ext. 4842 or 331-2298.

18' SPEEDBOAT - 1969 Chris Craft, mahogany, 283 cu. in., collector's item, mint cond., $4,000. Mike, 289-0602 eves.

30' PACEMAKER - Sports Fisherman, 265 HP, FWC, F.B. fighting chairs, CB, much more, $3,800. 878-1915 after 5:30 p.m.

8' HYDROPLANE - good cond.; 4-man rubber raft. Don, Ext. 5329 or 878-2215.

EVINRUDE - 40 HP, good running, $300. E. Harris, Ext. 4095 or 475-8504.

17' THUNDERBIRD - cathedral hull, 90 HP Mercury, Trailex alum. trailer, asking $2,000. Borg, Ext. 3568 or 286-0428.

14' FIBERGLASS BOAT - Chrysler, semi-v, 1981 galvanized Highlander trailer w/buddy hubs, 40 HP Johnson, all new controls, canvas, bow rail, CB/antenna, gas tanks, battery, $1,500 negotiable. Tony, 584-7544.

JOHNSON - OB, 25 HP, mint, long shaft, extra can, prop, $850; depth recorder, Fish Finder Ross, DS300B, mint, guaranteed. John, Ext. 4243.

Yard Sale

PT. JEFF. VILLAGE - antiques, etc. Apr. 23-24, 9-5 p.m., 116 South St.

Miscellaneous

OUTDOOR SWING - for young toddler, $4; baby walker, $4; guard rail, $5. Ext. 7530.

DOOR - alum. storm/screen, white, 3' x6' 8" , all hardware included. 821-0865.

DESK TOP MICROFICHE READER - 3M Consort, Model 198AGE/42X, excel. cond., $120. 265-5218.

TAPES - BASF Pro II blank cassettes, CrO_2, C-90, $2.75 ea. Ext. 2521.

BOY'S BIKE - 26" Schwinn, 5 spd., nice cond., $40. H. Sauter, Ext. 3783.

CALCULATORS - credit card size, Enterprex, new, complete w/case & directions, $8/ea. Pete, Ext. 3516 or 399-2813.

DIAMOND SET - large size, $350; men's/women's ring, $75; sterling silver set, $1,250. 475-0144.

TABLES - (3) contemp. fruitwood, good cond., (1) square, (1) coffee, (1) step, $125. Jerry, Ext. 7427 or 475-5591 after 5 p.m.

STEREO PHONOGRAPH - compact, $40. Jim, Ext. 4479.

VEGETABLE PLANTS - 6 pack flower; 4 pack plants, $.75/pack, delivery around May 1. 727-6818.

CHROME CHANDELIER - contemporary, good cond., $50. Eva, Ext. 3701 or 751-8128 after 6 p.m.

GOWNS - sz. 8-10, apricot color, $75, yellow, $65; girl's winter jacket, sz. 12, $20; instamatic camera, $30. Walt, Ext. 2907 or 698-0576.

SOFA BED - Castro, w/swival rocker, matching covers, good cond., $125/both. Ernie, Ext. 3357 or 281-7873.

POOL TABLE - Minn. Fats, $40. Bob, Ext. 4672.

POOL TABLE - AMF Grand Prix, slate top, automatic ball return, excel. cond., all access., must see, $1,200. Linda, Ext. 2733.

FLY RODS - fishing tackle, all must go, bargain; bike rack, auto carrier, alum., like new; Peugeot bike, PX-10 531, Renolds tubing, Shimund 600 components, excel. cond., $350. 924-6895.

SUMP PUMP - heavy duty, $35. 744-9832.

BICYCLE - BMX, 20", Super Goose, mint cond., many extras, $350. 821-1042.

BEDROOM SET - 2 long dressers, 1 mirror, 2 nite stands, $250. 286-8769.

TV - Hitachi, b/w, 12" port., 4 mos. old, $50. Wolfgang, Ext. 3798.

CONSOLE STEREO - solid cherry wood w/porcelain knobs, Early American, receiver, turntable, speakers, storage. Ext. 3565 or 878-2233 after 6.

DINETTE - 60" oval; walnut and glass coffee table; Stratford queen size sofa bed; Salton hot tray. Ext. 3565 or 929-6964.

CASEMENT WINDOWS - heavy duty, alum., screen/storms incl., various sizes, $20 ea. Niels, Ext. 4124.

STEEL DESK - and chair, $200; Oster kitchen machine, complete & in good shape, $80; sofa, $150. 924-4250.

CANOPY FRAME - white, good cond., $50. Ext. 2964.

TICKETS - (2), for Vatican show, good for Wednesday, May 11, 10:30-11 a.m. Ext. 2487 or 928-6930.

HAMS - Heath C.W., transceiver HW16, with V.F.O., ant. tuner, SWR meter, coax switch, complete, $200. 589-2648.

B&D ELECTRIC LAWN MOWER - w/bag, needs handle, $25. Bruce, Ext. 5091.

FISH TANK - 55 gal., fully equipped, hood, stand, filter, pump, gravel, $95; R/C airplane controls, Kraft sport series, 4 servos, charger, motor, 3 planes, extras, $325. Ext. 7187 or 981-9474.

POOL TABLE - Brunswick, 4x8, 1" slate, excel. cond., $350. Bob, Ext. 4551 or 475-3612 eves & weekends.

FREEZER - Gibson upright, 16-½ cu. ft., $150. Jim, Ext. 4843 noon.

HUNTING BOW - 45 lbs., like new, $35. Bob W., Ext. 7197 or 821-0705.

BRIDAL VEIL - exquisite Bianchi, ivory lace, fingertip length, Mantilla style. Kathy, Ext. 3420 or 924-7665.

DISC & SNOW PLOW BLADE - fits garden tractor, $25 ea., $40 for both; fir & spruce evergreens, 20" to 40", you dig, 2 for $7; steamer trunk, about 1918, $45; grindstone, old, foot pedal, $40. 878-6637.

SEWING MACHINE - Kenmore, $150; Coleman metal cooler, $20; fan, $15; car roof rack, $15. Ext. 4372 or 924-0582 eves.

TYPEWRITER - Electriss, office type, $75; freezer, 19 cu. ft., excel. cond., $125. 289-2467.

GAS RANGE - 36" Tappan, 5 burners, w/griddle, copper, needs cleaning, $50. Alex, Ext. 2384.

Real Estate

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

For Sale

EAST MORICHES - Newport Beach, 3 bdrms., 2-½ baths, 2-car garage, f/p, fenced backyard, 2-zone heating, ½ acre, deeded private beach rights, docking space & launching ramp avail., $70,000. Ext. 2733 or 878-8491.

SHIRLEY - beautiful large brick ranch, M.D., 6 over 5, garage, landscaped, 10% assumable mortgage, $59,900. 399-4122.

MASTIC - 3 bdrm. ranch, family room, excel. cond., avail. immed., $45,000 or rent $500/mo. 928-9222 or 698-4197.

RIDGE - 1 acre building plot, 100x400, fully wooded, in quiet residential area, asking, $13,900. 924-3236.

HOLBROOK - high ranch, 4 bdrms., eik, l/r, d/r, large f/r with fireplace, garage, hardwood floors with some carpeting, 2-zone oil heat with set back thermostats, fenced backyard, brick patio, $61,990. Ext. 4092 or 744-1134.

MIDDLE ISLAND - 3 bdrm. townhouse, 1 bath, 5 min. to Lab, central a/c, 5 appl., new w/w carpet, woodstove, loft den, skylights, cathedral ceiling, prime location, wonderful for family w/children, $47,900. Ext. 5284 or 924-4237.

NO. SHOREHAM - Shoridge Hills, custom built 3 bdrms., 1-½ baths, 7 rms., in excel. cond. on high ½ acre, 2 car garage, finished den, low taxes, private community, deeded beach rights, priced in high 70's. 744-8483.

For Rent

EAST MORICHES - share 3 bdrm. house on temp. basis, approx. 6 mos., female, no children or pets, use of washer/dryer, all util. included except telephone, $70/week. Ext. 2733.

VERMONT CHALET - Londonderry, new, on large pond, stone fireplace, hiking, swimming, nearby large lake, fishing, canoeing, golf, tennis, theatre, music festivals, antiqueing, rent by the week. 757-5599 after 4 p.m.

STONY BROOK - 2/3 bdrm., l/r, d/r, eik, full basement, f/p, walk to Stony Brook, asking $700. 751-2835 after 6 p.m.

SOUND BEACH - 2 bdrm. apt., eik, full bath, l/r, walk to beach, 2 car parking, $400/mo. | util. 744-4500.

N.E. PENNSYLVANIA - lakefront cottages, heat, hot water, private docks, boats, excel. fishing, swimming & boating, 2-3 bdrms., $200-$250/week util. incl. 751-7140.

SHAWNEE VILLA - vacation resort in the Pocono's, full accom., for 6-8 people, week starting 6/4-6/11, $500. Charlette, 348-2856 or 732-5539 after 5 p.m.

WADING RIVER - 1 bdrm., furnished apartment, walk to beach, 1 mo. security, $350/mo. util. incl. 929-6543 after 6 p.m.

Free

72 CAPRI PARTS - doors, trunk lid, engine, carb. parts. Tim, Ext. 3496 or 281-7873.

Lost & Found

FOUND - knit hat & mittens at AGS. Ext. 2873.

FOUND - Zippo lighter with initial J.J.S. on front, inscription on back. Ext. 2957.

FOUND - dental bridgework in women's rest room at the Brookhaven Center. Ext. 2345

Carpools

STONY BROOK/STRATHMORE - established carpool needs 4th rider/driver. Morris, Ext. 4192.

STONY BROOK TRANSVAN - has opening for 1 member. Sid, Ext. 4125 or Paul, Ext. 2476.

QUEENS - 2 drivers needed for 4-person carpool. Simon, Ext. 2182.

SMITHTOWN/HAUPPAUGE - need 5th member to join pool, Yellow Top Farm area. Rich, Ext. 3948.

RONKONKOMA - driver to join 3-person pool, near L.I.E., exit 60. Victor, Ext. 2395.

Wanted

STORM WINDOWS - wood frame. Ext. 3172.

SUNFISH TRAILER - Harry, Ext. 4256.

HOUSEMATE - single, working female to share house in South Bayport, $275/mo. pays all. 289-7228 after 5 p.m.

HOUSE TO RENT - Bayport-Blue Point area only, 2 to 3 bdrms. Carol, Ext. 3341 or 567-6433 after 6 p.m.

MAN TO PRUNE TREES - Eva, Ext. 3701 or 751-8128 after 6 p.m.

PORTABLE ELECTRIC GENERATOR - 1 KW, repairs o.k. Bill S., Ext. 3848 or 698-8649.

HOUSE - small, 2 bdrms., small lot o.k., repairs o.k. Bill S., Ext. 3848 or 698-8649.

FILE CABINET - 2, 3 or 4 drawers, 15" or 18" wide, good cond., reasonable. Ext. 3589.

WATCHMAKER'S LATHE - & tools, etc.; also old clocks, watches, jewelry in any cond. Al Campbell, Ext. 2047.

SHEETMETAL WORKER - to fabricate interior of race car, must have own tools. Eddie, Ext. 2674, nights or weekends.

APARTMENT - to rent, 1-2 bdrms., young couple with child for the month of July only. Ext. 4584.

TRAINS - Lionel, any "0" gauge or "027" gauge cars, track and equip. Frank, Ext. 3120.

WOODEN KITCHEN CHAIRS - china closet; hutch or secretary. Ext. 3565 or 878-2233 after 6 p.m.

HELP WITH YARD CLEANUP - chain saw necessary. Ext. 2740.

HOUSEMATE - to share spacious house, 3 mi. from Lab. Gary Ext. 2066 or at Frog Hollow, 924-7480.

EXERCISE BIKE - with lots of miles left, reasonable. Ext. 4607 or 368-8018.

MINIBIKE - car seat, iron. Ext. 4571 or 3107.

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

LAWN MOWER - w/bagger, good cond., reasonable price. John, Ext. 3292 or Chris, 286-1348.

HOUSE TO RENT - on Fire Island, late June and/or early fall, town of Seaview if possible, for 2 couples with children. Ext. 3655 or 744-4611 eves.

Ads left out of this issue due to lack of space need not be re-submitted to appear in next week's issue. Please note that ads may not be more than 15 words long and must be received in the Bulletin office by 4:30 p.m. Friday, for inclusion in the following week's Bulletin.

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