

U.S./Japan Physics Meetings Emphasize Cooperation

... On High Energy Physics

Wilmot Hess, (left) Director of the Office of High Energy and Nuclear Physics, U.S. Department of Energy; and Hirotaka Sugawara, Director General of the Japanese National Laboratory for High Energy Physics (KEK) simultaneously signed their copies of the minutes of the eleventh meeting of the Japan/U.S. Committee on High Energy Physics. The co-chairmen's signatures culminated two days of reports, held at BNL on June 5-6, on the progress of and budgets for U.S. and Japanese high-energy collaborations.



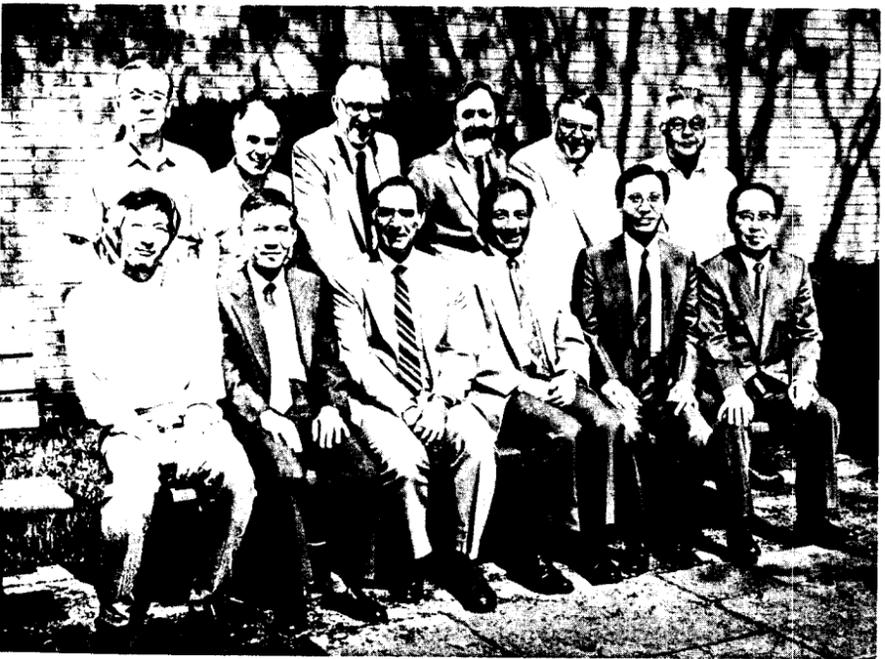
Roger Stoutenburgh

Among the presenters, BNL Director Nicholas Samios briefed the committee on U.S./Japan collaboration at the Lab: the recently completed neutrino scattering experiment E734 at BNL's Alternating Gradient Synchrotron (AGS); E802, the first major heavy-ion experiment at the AGS, searching for evidence of quark-gluon plasma; and E821, a future AGS experiment that will precisely measure the anomalous magnetic momentum of the muon.

Included on the U.S. delegation were: Samios; Leon Lederman, Director of Fermi National Accelerator Laboratory; Burton Richter, Director of the Stanford Linear Accelerator Center; Jack Sandweiss, Yale University; and Roy Schwitters, Director of the Superconducting Super Collider Laboratory.

The Committee urged that the umbrella energy agreement and implementing arrangement, established between the U.S. and Japan in 1978, be extended for another ten years.

... On Neutron Scattering



Roger Stoutenburgh

Five Japanese scientists were at BNL on June 1 and 2 for the U.S./Japan Cooperative Meeting on Neutron Scattering. The U.S./Japan cooperative effort dates back to 1981. Then, in exchange for use of BNL's High Flux Beam Reactor (HFBR), the Japanese agreed to pay for a new neutron spectrometer at the HFBR, to be jointly used by Japanese and U.S. researchers.

Completed in 1985, the neutron spectrometer at the HFBR is used to study phase transitions and the dynamics of solids. Recently, the U.S./Japanese research team has studied high-temperature superconductors with the instrument. The team found that the magnetic spins of the atoms in the superconductors tend to be aligned. That alignment may help to explain high-temperature superconductivity.

That discovery is only the latest success story for the cooperative effort, which has resulted in nearly 90 published papers over the past eight years. Research instruments at Oak Ridge National Laboratory (ORNL) and in Japan are also used by the joint research team.

Shown here are steering committee attendees (front, from left) Kazushisa Kakurai and Satoru Funahashi, Japan; Iran Thomas, U.S. Department of Energy (DOE); BNL Deputy Director Martin Blume; Yasusada Yamada and Naomoto Shikazono, Japan; (rear, from left) Sadao Hoshino, Japan; Stephen Shapiro, BNL; Ralph Moon, ORNL; John Axe, BNL; Donald Stevens, DOE; and Gen Shirane, BNL.

— Kevin Eber

[Eber is a summer student in the Public Affairs Office]



Roger Stoutenburgh

Kneeling before the recently installed and tested Nd:YAG laser in BNL's Accelerator Test Facility (ATF) are those responsible for its development and operation: (from left) Harold Kirk, ATF project manager; Thomas Shimada, Los Alamos National Laboratory; Robert Harrison, Los Alamos; and Alan Fisher, Stanford University.

New Laser to Spark CAP Gun

One of the world's few high-powered, very short-pulsed solid-state lasers was installed and proven in testing six weeks ago as part of the construction of BNL's Accelerator Test Facility (ATF) of the Center for Accelerator Physics (CAP).

In a laser, stimulated emission of radiation occurs when the atoms or molecules within the laser's active medium return to their ground state and emit photons, after being excited to a higher energy state by an external energy source. The first laser made used ruby as the active medium.

Like the first laser, the ATF laser uses a crystal as the active medium — but one made of neodymium: yttrium-aluminum-garnet (Nd:YAG). When stimulated, it emits infrared radiation with a wavelength of 1,064 billionths of a meter.

The laser light is then passed through another pair of crystals, to reduce its wavelength by one quarter. Having a wavelength of 266 billionths of a meter, the emerging ultraviolet radiation is what will be used to eject electrons in a 4.5 million-electron-volt (MeV) beam from the cathode of the ATF electron gun. Within a linear accelerator, which was installed last fall, the beam will be accelerated to 50 MeV and transported to experiments.

When ATF construction in Bldg. 820 is completed next year, the Nd:YAG laser will be one of two lasers used to study new ways of accelerating and focusing particle beams,

for free-electron laser studies and for materials science research. Developing the facility involves collaborators from Los Alamos National Laboratory, Princeton University and the State University of New York at Stony Brook.

While most Nd:YAG lasers emit light in pulses lasting about 100 trillionths of a second and have a power of 100 billionths of a joule per pulse, ATF's new laser has a shorter pulse length — six trillionths of a second — and more power — 10 thousandths of a joule per pulse.

For acceleration research, the Nd:YAG laser will also be used in conjunction with a CO₂ laser, which will be delivered by Los Alamos this fall.

Proven to work, the Nd:YAG laser will soon be fired at ATF's electron gun, so that the electron beam coming off the gun's photocathode can be characterized. At present, the photocathode will be made of yttrium, but the possibility of using other low work-function metals is being investigated by Triveni Srinivasan-Rao of the Instrumentation Division.

The short Nd:YAG laser pulse will be directed onto the photocathode of the ATF electron gun, and the temporal and spatial structures of the electrons emitted by the photocathode are expected to follow those of the incoming laser pulse. Thus, the ATF is expected to provide low emittance electron pulses with short bunch lengths.

— Marsha Belford

Enlightening Talk on Thunderbolts

The ancient Greeks explained the origin of lightning by saying that Zeus, their supreme god and god of the weather, threw thunderbolts down from Mount Olympus.

A scientific explanation of lightning formation, however, has been forthcoming only nowadays — and will be discussed in the lecture "A New Look at Thunderstorm Electrification" by cloud physicist Marcia B. Baker, Professor of Geophysics and Atmospheric Sciences at the University of Washington.

Sponsored by Brookhaven Women in Science (BWIS), Baker's talk is scheduled for Wednesday, June 21, at 3:30 p.m., in the conference room of Bldg. 318. Preceding the talk at 3 p.m., coffee and cookies will be

(Continued on page 2)

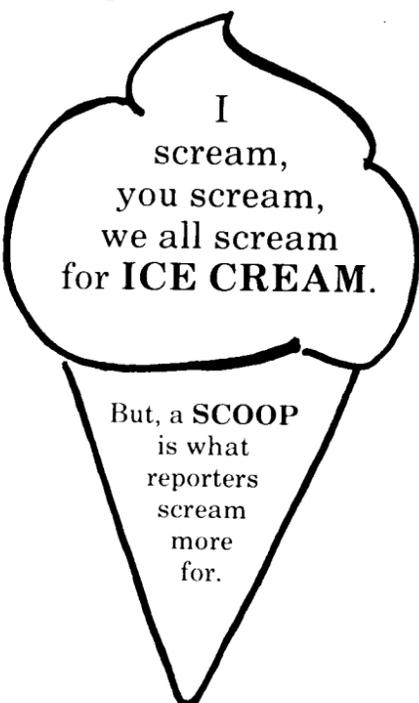


Marcia Baker

Thunderbolts (cont'd)

served. The Laboratory community — especially this year's summer students — are invited to attend.

A former BNL summer student during the 1956 and 1958 seasons, Baker is looking forward to meeting

Scoop of the Week

So, during the summer, the Bulletin will be trading frozen yogurt for hot tips in the second annual Scoop of the Week contest.

If you can scoop all of the Bulletin's informed sources with a hot tip — an idea for news or a feature — and if the Bulletin publishes a story as a result, you will be awarded the Scoop of the Week — a free cone of soft-serve, frozen yogurt from the Cafeteria.

Rush your news and feature tips to the Brookhaven Bulletin, Bldg. 134, or call Ext. 5053. If your idea results in a Scoop of the Week, your name will be announced in the Bulletin, and you will receive an official certificate, redeemable any time at the Cafeteria.

this year's students and those employees who were BNL summer students in the past, both before her talk and at the 10th annual BWIS Cocktail Party, at 5:30 p.m. that day, in the lobby of Berkner Hall.

It is now known that lightning deposits a strong negative charge on the surface of the earth due to the breakdown of the strong electric fields inside thunderclouds. Baker and her colleagues believe that the electric fields within clouds arise from the transfer of charge among ice particles in clouds.

Ice is formed within a cloud by the condensation and freezing of warm, moist air that is drawn into the cloud's base and up through the cloud itself. As cloud ice thaws, precipitation results.

In attempting to explain the generation, distribution and utilization of electricity within thunderstorms, Baker and her coworkers have proposed a mechanism for the transfer of electric charge among ice particles that involves the melting of several molecular layers on the ice particles' surfaces.

In addition, Baker uses data from instrumented aircraft, radar and satellites, along with numerical models, to investigate the breakup of low-level layer clouds. She has begun a study of the roles that small cumulus clouds over tropical oceans play in modulating the energy and water balance in that part of the world.

After receiving her Ph.D. in physics from the University of Washington, Marcia Baker moved up the ranks at the University, from a research associate, 1971-76; to research assistant professor, 1976-80; to associate professor, 1980-88; until she assumed her present position last year.

Baker is a member of the Royal Meteorological Society and the American Meteorological Society (AMS). She serves on the editorial board of *Tellus*, on the Cloud Physics Committee of AMS and on the advisory committee on U.S.-U.S.S.R. and Eastern European scientific exchanges of the National Academy of Sciences.

Women in Science Cocktail Party

Begin the celebration of the tenth anniversary of Brookhaven Women in Science (BWIS) by attending the tenth annual Cocktail Party on Wednesday, June 21, from 5-8 p.m. in the lobby of Berkner Hall.

Hot and cold hors d'oeuvres will be served, and there will be a cash bar. BWIS members past and present, and the rest of the Laboratory community are invited to attend, so it should be a pleasant evening for all.

For reservations at \$6.50 per person, send a check payable to BWIS to Caroline Kramer, Bldg. 475, by Monday, June 19. For more information, call Kramer, Ext. 2673.

Tennis News

The annual BNL tennis tournament will begin Saturday, July 22, featuring men's and women's singles and doubles, plus mixed doubles. The cost is \$2 per person per event.

Sign-up starts today, June 16, at the BERA Sales Office in Berkner Hall, where tournament rules are also available. The last day for sign-up will be Tuesday, July 11, and the draw will be posted by Friday, July 14, both at the BERA office and the courts.

Later this summer, if there is enough interest, a consolation tournament will be held for first-round losers. Call Steve Shapiro, Ext. 3822, or Ken Perkins, Ext. 2147, for more information.

Tomorrow — Tennis Fun Day!

Sign up at the BERA Sales Office, or call Neal Tempel, Ext. 3418.

Summer on Long Island For Strawberry Aficionados

Strawberry-picking season is here, but you'd better go soon if you want the best berries.

This year's wet weather is causing the berries to go soft, and some of the growers are quickly losing their crops. Although the next two weeks should be prime picking time, more rain could cut the season short. Therefore, it might be wise to call ahead to check on the latest conditions.

Those of us more interested in eating berries than picking them should head out to Mattituck for the annual Strawberry Festival to be held Saturday, June 17, at the Mattituck-Cutchogue High School grounds on Route 25.

But true strawberry-picking aficionados insist that nothing beats freshly picked berries. So here's a list of local growers:

Anderson Farms: Route 58, Riverhead. 727-1129 or 727-2559. Open 9 a.m. to 6 p.m. weekdays, 8 a.m. to 6 p.m. weekends. Berries 90¢ per quart, containers 10¢.

Benner's Farm: 56 Gnarled Hollow Road, Setauket. 689-8172. Open Wednesday 2:30-5:30 p.m. and weekends 9 a.m. to 12:30 p.m.

John Berezny: Northville Turnpike and Sound Avenue, Riverhead. 727-4661 or 722-3308 after 6 p.m., or 722-3823 during the day. Open seven days a week from 9 a.m. to 6 p.m. Berries \$1 per quart, containers 10¢.

John Condzella: Route 25A, Wading River. 929-4697. Open Monday-Saturday from 8 a.m. to 5 p.m. and Sunday till 6 p.m.

Edward's Farm: N. Edwards Avenue, Calverton. 369-2043. Open seven days a week from 8 a.m. to 6 p.m. Containers sold.

Fox Hollow Farm Stand: 143 Sound Avenue, Calverton. 727-1786. Open 9 a.m. to 5:30 p.m. Closed Wednesdays. Berries \$1 per quart. Containers sold.

Kenneth Glover: 633 Horse Block Road and Strawberry Lane, Brookhaven. 286-8721. Open 8 a.m. to 6 p.m. Containers sold.

Hodun Farms: River Road, Calverton. 727-2618. Open seven days a week from 9 a.m. to 5 p.m. Containers sold.

Fritz Lewin Farm: Corner of Sound and Edwards Avenues, Calverton. 727-3346. Open seven days a week from 8 a.m. to 6 p.m. Berries 80¢ per quart, \$3 for four quarts.

Lewin Farms: Sound Avenue, Wading River, next to Wildwood State Park. 929-4327. Open seven days a week, 8 a.m. to 6 p.m. Berries \$1 per quart. Containers sold.

May's Farm: Route 25A, Wading River. 929-6654. Open seven days a week from 8:30 a.m. to 5 p.m. Berries 78¢ per pound. Containers sold.

Meadows Farm: Old Stump Road, Brookhaven. Open Wednesday, Friday and weekends, 9 a.m. to 6 p.m., and Tuesday and Thursday, 1:30 to 6 p.m. No chemicals used.

Muller's Farm: 9 Orchard Neck Road, Center Moriches. 878-0621. Open seven days a week from 7:30 a.m. to 5:30 p.m. Berries 75¢ per quart, containers 10¢.

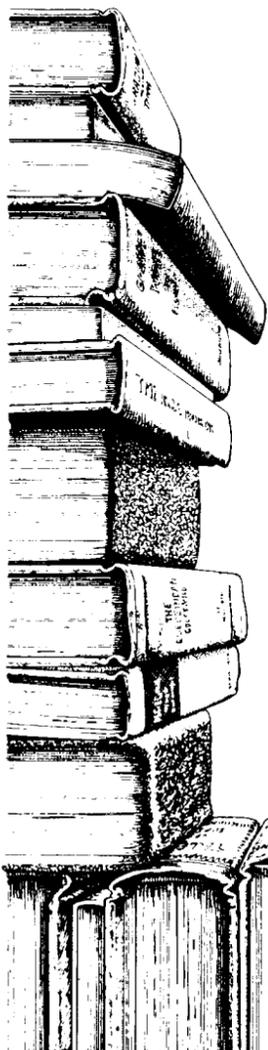
William J. Polak Jr.: Church Lane, Aquebogue. 722-3049. Open seven days a week from 8 a.m. to 5 p.m.

Young's Orchard: 54 Sound Avenue, Riverhead. 727-5363. Open Tuesday through Sunday from 8 a.m. to 6 p.m. Berries 75¢ per pound, containers sold.

**1st ANNUAL BOOK FAIR**

Berkner Hall Lobby

Thursday, June 29 - 10am - 3pm



The following publishers are participating:

Academic Press
Addison-Wesley
American Institute of Physics
American Society
of Mechanical Engineers
Cold Spring Harbor Laboratory
Elsevier Science Publishing Co.
W. H. Freeman
Gordon & Breach
National Institute for Standards
and Technology (formerly NBS)
Oxford University Press
Pergamon Press
Plenum Press
John Wiley & Sons

Come and Browse!

Deadline Today For Kids' Program

Today is the last day for Lab employees to register their children for BERA's summer recreation program in swimming.

Children in the swimming program take one lesson each week for eight weeks. At the end, if they qualify, they receive American Red Cross certificates.

The program costs \$20 for each child upon registration, plus \$1.50 daily pool admission fee or present season ticket. Children must be a minimum of 42 inches tall to participate.

Applications are available today at the BERA Sales Office in Berkner Hall, from 9 a.m. to 2 p.m., and at the Recreation Office in Personnel, Bldg. 185, until 5 p.m. Completed applications and fees (checks payable to BERA) are due at the Recreation Office today.

BNL

**BLOOD
BLOOD
BLOOD**

Drive

Please don't forget the BNL Blood Drive starting next week on June 20, 21 and 22. Your help is urgently needed. To make an appointment to donate, call Susan Foster, Blood Drive Chair, Ext. 2888, or contact your department or division Blood Program Captain.

English Courses Offered on Site

English as a Second Language classes are now ongoing for employees, guests of the Laboratory and spouses. Classes are usually held on Monday evenings for intermediates and Tuesdays for beginners, both from 7 to 9:30 p.m.

Classes are free of charge and are conducted in the Personnel training room, Bldg. 459. A detailed class schedule will be provided by the instructor. For additional information, please call Pat Knisely, Ext. 7631.

Summer Volleyball

Pickup volleyball games will be held on the outdoor courts near softball fields 5 and 6 on Wednesday evenings from 5:15 p.m., beginning June 21.

Mixed League tournaments have been scheduled for the nights of June 28, July 19, August 9 and August 30. Participation will be limited to 36 players per tournament, on a first-come, first-served basis. Entry fees per tournament are \$2. To sign up for the June 28 tournament, contact Kathi Barkigia, Ext. 7661, or Carrie Grimshaw, Ext. 2073, by Friday, June 23.

Equipment Demo

Industrial Sales Associates and Vacuum Industries Inc. will present a tabletop product display at Berkner Hall on Thursday, June 22, from 10 a.m. to 3 p.m.

Industrial Sales Associates represents several manufacturers of high vacuum and industrial products, including Sputtered Films, Inc.; R.D. Mathis Company; Matheson Gas Products; Cooke Vacuum Products, Inc.; Edwards Temescal; Cambridge Mill Products; and Advanced Systems, Inc.

Vacuum Industries Inc., Bohemia, will display their new, portable Turbo-Pumped Mass Spectrometer Leak Detector.

Bowling Champs



Singing the victory song in the Purple League are the Looney Tunes: (from left) Karen Vogel, Jim Vogel, Marsha Kipperman and Paul Callegari.



In the Pink League, the Apple Blossoms bloomed: (from left) Renie Rosati, Anne Ostermeyer and Kathy Folkers. Not present: Maria Apelskog.

— Photos by Roger Stoutenburgh



The Designers came up with the winning plan in the Red/Green League: (back, from left) Fred Hohmann, Sonny Dimaiuta, Ed Sperry IV; (front, from left) Edward Sperry, Joe Ferrante, Al Pinelli and Charlie Tomesch.



Hook or Crook played it straight and took top honors in the White League: (clockwise from top left) Joe Ferrante, Ed Sperry IV, Kay Conkling and Marge Stoeckel.

Tune In! — Paring the ParCourse

The Tune In! program is designed to give employees a confidential means of directing questions or complaints to members of management, who respond in writing. If the letter is of general interest, and if all parties agree, it may be published in the Bulletin.

For example, this Tune In! came to the Bulletin Editor recently on one of the orange forms contained in plastic Tune In! boxes all around site. The Editor determined that the question could best be answered by Recreation Supervisor M. Kay Dellimore, Personnel, so the Tune In! was retyped and sent to her with just a number to identify it. Dellimore sent the response to Tune In! #751 to the Editor. The reply was then forwarded to the questioner.

If you can't find a supply of Tune In! forms in your building, call the BNL Mailroom, Ext. 2534, or Public Affairs, Ext. 2345.

Tune In!

Since the incidence of Lyme disease is the highest in Suffolk County of all the counties in New York State, and since over 75% of the deer ticks in Suffolk County are infected with the Lyme disease bacteria, and since deer ticks hang out on low brush and tall grass, why can't BNL trim the trail on the ParCourse?

The signs on the ParCourse warn you about ticks and advise you to stay on the trail, but the trail is too narrow and overgrown in many places. To reduce the chances that BNL employees who run on the ParCourse will get ticks on them and be bitten, please take a more active approach and get a grounds crew in there.

M. Kay Dellimore's reply

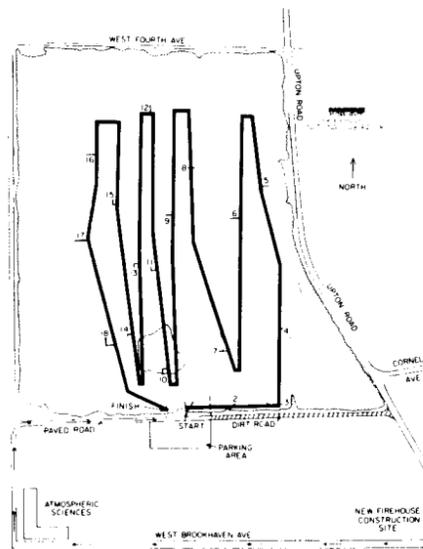
I understand your concern about the overgrown brush on the ParCourse, and I have made an urgent request to Grounds to have it cut back immediately. Apparently, the brush has grown at an unusually rapid pace because of the constant heavy rains of late.

In the future, I will see that the ParCourse is kept as safe as possible for those who wish to continue to use it. There is still risk involved, however, and those who use it should exercise precautionary measures. It is recommended that all employees wear protective clothing on the ParCourse, and check and recheck themselves for ticks after use.

Even though Lyme disease has been prevalent for the past few years,

many people, such as Lab visitors, may still be unaware of the problem, so the caution signs are necessary even when the brush is cut back.

Thank you for your concern and interest.



Located on a 1.57-mile serpentine trail in a pine forest west of Upton Road and north of Atmospheric Sciences, Bldg. 51, and the Firehouse, BERA's ParCourse Fitness Circuit is a series of 18 exercise stations. You can move between stations at a run, a jog or a walk, and recommended rates are included with the instructions that appear on illustrated signs at each station. Brochures describing the ParCourse are available in Personnel, Bldg. 185, or at the BERA Sales Office in Berkner Hall.

OCAW Meeting

The next meeting of the Oil, Chemical and Atomic Workers (OCAW) Local 8-431 will be June 20, 5:15 p.m., at Foresto's in Calverton.

Cafeteria Menu

Monday, June 19	
Soup: Spring vegetable	(cup) .75 (bowl) .95
Buffalo wings w/ pot. or veg.	3.10
Broiled fish papillote w/ pot. or veg.	3.10
Lite-line: Bologna "crepes"	2.95
Hot deli: Philly cheese w/ sautéed onions	2.95
Tuesday, June 20	
Soup: Potato carrot chowder	(cup) .75 (bowl) .95
Beef stroganoff w/ egg noodles	3.10
Ham steak w/ pineapple & pot. or veg.	3.10
Lite-line: Stuffed tomatoes w/ tuna salad	2.85
Hot deli: Turkey melt hero	2.85
Wednesday, June 21	
Soup: Navy bean	(cup) .75 (bowl) .95
Chicken in wine sauce w/ pot. or veg.	3.10
Chili relleno	2.95
Lite-line: Broiled skinless chicken breast w/ pot. or veg.	3.10
Hot deli: Reuben	2.85
Thursday, June 22	
Soup: Washington chowder	(cup) .75 (bowl) .95
Fried chicken à l'orange w/ pot. or veg.	3.10
Spanish meat loaf w/ pot. or veg.	3.10
Lite-line: Cold vegetable medley w/ cottage cheese	2.95
Hot deli: Pastrami	2.85
Friday, June 23	
Soup: Seafood gumbo	(cup) .75 (bowl) .95
Stuffed whitefish w/ pot. or veg.	3.10
Kielbasa & sauerkraut w/ pot. or veg.	3.10
Lite-line: Broiled whitefish	3.10
Hot deli: Veal Parmesan hero	2.85

BROOKHAVEN BULLETIN

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

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

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(516)282-2345

Note to Employees:

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

Arrivals & Departures**Arrivals**

Rolf H. Beuttenmuller Instr.
Arup K. Bhattacharya Instr.
Bruce J. Dionne DNE
Betty F. Elder Staff Serv.
Feng Hsu DNE
Robert L. Selvey S&EP

Departures

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

Mark Q. Barton NSLS
James F. Gleason DAS

Classified Advertisements**Placement Notices**

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

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

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

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

LABORATORY RECRUITMENT - Opportunities for Laboratory employees only.

4069. SECRETARIAL POSITION - Requires AAS in secretarial science or equivalent and a good knowledge of Laboratory policies and procedures. Will be responsible for the preparation of highly technical reports for the Safety Evaluation Group. Additional duties to include preparing correspondence, arranging travel, processing vouchers and maintaining files. IBM PC experience required. Previous XyWrite experience desired. Ability to obtain and maintain DOE security clearance is required. Reactor Division.

4070. SECRETARIAL POSITION - Requires AAS in secretarial science or equivalent and an extensive knowledge of Laboratory policies and procedures. Must have excellent communication skills and demonstrated interpersonal skills. Word-processing experience essential. IBM PC experience desired. Will coordinate and perform diverse administrative secretarial duties for Department administration. Accelerator Development Department.

OPEN RECRUITMENT - Opportunities for Laboratory employees and outside applicants.

4071 ENGINEERING POSITION - Requires a BSEE or equivalent with experience in process control instruments, pneumatic controls and analog and digital control circuits. Will be responsible for providing engineering support for the reactor instrument group and the design, procurement, installation and testing of I&C modifications to BNL reactors. Knowledge of industry codes, standards and regulatory guides applicable to reactor instrumentation is desirable. Must be able to obtain and maintain a DOE security clearance. Reactor Division.

4072. OCEANOGRAPHY ASSOCIATE - Requires a BS in mathematics, physics or oceanography, experience in oceanographic data processing, knowledge of FORTRAN and SIR data base in a VAX VMS environment and previous research vessel experience. Will be responsible for processing Coastal Zone Color Scanner digital images. Will process hydrographic data and participate on cruises. Department of Applied Science.

4073. TECHNICAL POSITION - Requires AAS or equivalent experience in laser and electro-optical systems, laser-related electronics and mechanical assembly. Responsibilities include maintaining laser systems and aiding in the construction of short-pulse UV lasers. Will work with carbon dioxide, YAG, dye and excimer lasers. Instrumentation Division.

Motor Vehicles & Supplies

88 HYUNDAI EXCEL GL - 5-spd., a/c, p/b, am/fm cass., rustproof, alarm, 6/60 warr., mint in/out, extras. Pat. 736-4687.
88 TOYOTA SUPRA - immaculate, clean, loaded, must sell, new car is in, neg. 736-7603.
88 MITSUBISHI PRECIS - am/fm cass., 15k mi., excel. cond., \$4,700. Norbert, Ext. 4832.
88 TOYOTA COROLLA FX - h/b, 2-dr., 4-cyl., p/s, p/b, am/fm, 8k mi., excel. cond., asking \$7,300. Tom, Ext. 3531 or 632-2245. eves.
88 MITSUBISHI PRECIS - am/fm cass., 15k mi., excel. cond., \$4,700. Norbert, Ext. 4832.
87 MAZDA RX7-TURBO II - loaded, showroom cond., \$16,500. Pat. 929-6066 after 7 p.m.
87 MOPED TRAC ESCOT - 800 mi., excel. cond., Lie-Ping, Ext. 3867 or 474-4817

87 HYUNDAI - 4-dr., 5-spd., a/c, tinted glass, anti-theft locks, 22k mi., 5-yr. warr., \$7,000. 698-2308 after 6 p.m.

87 MAZDA B2000 PICKUP - red, bed liner, 5-spd., must see, 4800 mi. Rob, 821-3130.

86 MITSUBISHI PICKUP - 4wd, fiberglass cap, 68k mi., \$4,200. 286-4801.

85 FORD TEMPO - 4-dr., a/t, p/s, p/b, am/fm cass., excel. cond., asking \$3,100. 929-8105.

85 TOYOTA CAMRY - mint, turbo diesel, a/t, a/c, stereo, cruise, economical, 60k mi., \$4,995. 744-2947 eves.

85 HONDA TRIKE - 125 miles, mint cond., \$400. 928-5065.

85 YAMAHA THREE WHEELER - 225 shaft drive, like new, \$850. Jerry, 345-3682.

84 HONDA AERO 125 MOTOR SCOOTER - 8k mi., red, new battery, extras, good cond., very reliable, \$595. Vita, 277-0464 or Frank, Ext. 7519.

84 PONTIAC FIREBIRD - V-6, 35k mi., garaged, louvres, wire wheels, fully loaded, excel., \$6,200. 467-7556 or 588-7989.

83 PONTIAC - p/s, p/b, a/t, a/c, 78k mi., good cond., \$3,300. Xuan, Ext. 3677.

83 DODGE ARIES - 58k mi., new tires, muffler, batt., \$2,100; '83 Olds Cutlass Supreme, 67k mi., \$3,600. Israel, 444-2208 days or 924-3678 eves.

83 HONDA ACCORD LX - h/b, a/t, ft. blue, a/c, am/fm stereo cass., excel. cond., \$4,200. Darlene, Ext. 2876 or 345-5365.

83 NISSAN STANZA - h/b, 4-dr., a/t, p/s, p/b, a/c, am/fm, clean in/out, excel. cond., \$3,600. Jim Wright, Ext. 4606 or 654-5049.

81 BUICK CENTURY - \$2,750; '81 Datsun 310, \$1,500. John, Ext. 3382.

81 PLYMOUTH CHAMP - h/b, 2-dr., m/t, 4-spd., new white paint, good cond., must be seen, \$900. Tim, 281-7873.

81 MUSTANG - 4-cyl., a/t, 82k mi., good cond., Ext. 2926 or 281-0268.

80 EAGLE - 4wd, p/w, a/c, new tires, asking \$1,800. Jerry, 345-3682.

80 DATSUN - 4-spd., many new parts, runs well, \$980. Ext. 3206.

80 SAAB TURBO - 5-spd., \$4,450; '77 Chevy Wagon, 8-cyl., a/t, \$800. Morris, 473-5376.

79 PONTIAC BONNEVILLE - 2-dr., full power, sunroof, excel. cond., \$1,500. Scotty, Ext. 3457 or 698-5701.

78 TOYOTA CELICA - motor runs, excel. tires, new front end, damaged, \$375 takes all. Ext. 5462 or 288-2080 after 5 p.m.

78 FORD FAIRMONT - 4-dr., 6-cyl., runs well, body good, a/t, \$750. 589-7429.

78 CAMARO RALLY SPORT - no rust, needs some engine work, \$1,200. Richie, 878-1580 after 5 p.m.

78 SCIROCCO - turbo charged, excel. tires, front end, fuel injection, needs work, \$400. Gar, Ext. 4387.

77 LINCOLN TOWN - high mi., good cond., \$900. Bob, Ext. 3496 after 5 p.m.

76 CHEVROLET CAPRICE - 4-dr., 8-cyl., many new parts, runs well, \$800. Susanne, Ext. 3118.

74 HONDA CB 360 - rebuilt engine, new valves, rings, brakes, battery, front tire, etc., \$550. Pete, Ext. 4100.

73 POSTAL JEEP - 6-cyl., a/t, L.H.D., runs well, \$250 neg.; 1 pr. 12.00x15 tires, \$40 or best offer. John, Ext. 2172 or 744-4386.

71 AMC HORNET - runs well, needs \$160 of work to pass inspection, best offer. 929-6744 eves.

Boats & Marine Supplies

25' LANCER - 1977, sloop, shoal keel, new Genoa, new Evinrude 9.9 ES, must sell, \$4,100. 289-8693.

22' BOAT - Chrysler I/O, 260 h.p., cuddly cabin, camper top, 5,600 lbs., \$7,500. Dennis, Ext. 4028 or 734-5884.

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

22' PALMER SCOTT - she/ter cabin, fiberglass, 100 h.p., Chris Craft engine 286-1384.

19' BOWRIDER CRUISER - 1972, w/1976 115 h.p. Johnson, Coast Guard pkg., trailer w/electric winch, \$3,500. Frank, Ext. 2314 or 567-5131.

17 1/2' DIXIE - fiber, 50 h.p. Merc., new trailer, new canvas top, extras, clean, excel. cond., \$4,500 neg. Ann, Ext. 2114 or Steve, 751-0277 after 6 p.m.

17' ARISTOCRAFT - 1965, fiberglass, rebuilt 60 h.p. Merc. I/O, very economical, excel. cond., w/ trailer, ready to go, \$1,700. Mark, Ext. 2599.

17' PROLINE - 1986, cc. 90 h.p. Yamaha, trailer, all equipment, plus many extras, asking \$6,500. 289-4198 eves.

15' DUO BOWRIDER - fiberglass, 55 h.p. Johnson, trailer, \$600. Bill, Ext. 2036.

12' ALUMINUM ROWBOAT - excel. cond., best offer. 929-6744 eves.

JOHNSON OUTBOARD - 1976, 6 h.p., long shaft, good cond., \$275. Frank, Ext. 5317 or 589-5980.

MERCURY OUTBOARD - 10 h.p., excel., needs drive shaft & water pump, make offer. John, Ext. 2294.

JOHNSON OUTBOARD - 1968, 33 h.p., fair cond., lower unit, good cond., upper unit fair, controls available, electric start. Tom, Ext. 5275.

Furnishings & Appliances

SOFA & LOVESEAT - Early American, maple wood, pheasant print cushions, good cond., must sell, \$125 both. Frank, Ext. 7519 or Vita, 277-0464.

BED - oak, Scandinavian, day bed, w/pull-out or pop-up trundle, great for kids or guests, excel. cond., \$200. Ext. 7644 or 929-4295 after 4 p.m.

HOUSEHOLD FURNISHINGS - bedroom set, dinette, freezers, couch, many others, reasonable. 363-7032.

END TABLES - 2, pine, for living room, good cond., \$20 ea. 878-0874 after 5 p.m.

RECLINER - gold tweed, good cond.; dining room set, 5 chairs, buffet, fair cond. Noreen, 878-6921.

FURNITURE - computer C64, TV, microwave, freezer, VCP, sewing machine, lawnmower, much more. John, Ext. 3382.

ADIRONDACK CHAIRS - new, well made, \$35 ea. firm. Hank, Ext. 7828.

BED - 4-poster, double, pine, armoire, night-stands, lamps, \$550. 475-8252 after 6 p.m.

DRAPES - 1 pr. off-white, quadruple x95" long; 2 pr. white antique satin, triple, 95" long; 3 runs, white wool flokati; best offer. Ext. 3270.

FAN - whole house, Sears, 24", 2-spd., timer, \$85. Nancy, Ext. 5274 or 281-2767.

WASHER - heavy-duty, Frigidaire, white, used 4 yrs., \$100. George, Ext. 4100.

REFRIGERATOR/FREEZER - 19.6 cu. ft., Whirlpool, frostless, good running cond., \$100. 473-1620.

RUG - sheepskin, black, 10'x10', new, \$300. Dennis, Ext. 4028 or 734-5884.

RUGS - 2, hand-braided, large, wool, best offer. Ext. 3270.

KITCHEN SET - oak, w/4 chairs, good cond., \$250; refrigerator, Welbilt, beige, 2 mos. old, excel. cond., \$300. 563-3792.

STOVE - G.E., electric, w/self-cleaning oven, 1 yr. old, white, excel. cond., \$295; G.E. electric dryer, \$50. 395-3485.

DEHUMIDIFIER - humidifier combo, Sears, \$75. Ext. 7130 or 929-8323.

AIR CONDITIONER - 7,500 Btu, \$100; new & used books, \$1 ea.; 2 steel tennis rackets, \$20; wrought iron plant stand, \$10. Tim, 744-2203.

CHEST FREEZER - Frigidaire, 8 cu. ft., white, 1 yr. new, \$175, warranties \$54 per yr. to operate. Ext. 4786.

Tools, House & Garden

LAWNMOWER - Lawn Boy w/ 5 h.p. Briggs & Stratton eng., 4-cycle w/bag, mulcher plate, \$110. Dan, 698-7322 days or Ext. 4987 eves.

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

WATER PUMP - three-stage jet, Flint & Walling make, new GE 1 1/2-h.p. motor, w/pressure tank, used 3 years. 821-3925.

STRAWBERRIES - you pick, no chemicals, Meadows Farm, Old Stump Road, Brookhaven; W.F.S.Su, 9 a.m.-6 p.m.; T,Th, 1:30-6 p.m.

POOL HEATER - for pools up to 20'x40'. Ext. 7130 or 929-8323.

CABLE - 150', 4/0, underground, electrical, \$100. Charles, Ext. 5462 or 288-2080 after 5 p.m.

Sports, Hobbies & Pets

BIKES - woman's, 26", 3-spd., \$40; girl's, 20", banana seat, \$20; both good cond. Peter, Ext. 7687 or 744-1112.

BICYCLE - woman's, 26", 3-spd., \$20. Susanne, Ext. 3118.

BICYCLE - BMX Mongoose Expert, good cond., \$75 neg. 261-5290.

BIKE - child's, 16", blue, \$20. 751-1884 eves.

BICYCLE - Raleigh unisex, 10-spd., carrier baskets, good cond., large frame, \$75. Ralph, Ext. 2180.

EXERCISE BIKE - like new, hardly used, Vita Master 55c, dual action, upper & lower body action, \$70. Tom, Ext. 7842.

BIKE RACK - Schwinn, holds 2 bikes on rear car bumper, \$20. 589-3608.

BICYCLE - Fugi, 18-spd. touring bike, almost new, \$250. 399-3228.

ROWING EXERCISER - \$50; b&w 19" TV w/stand, \$25; push lawnmower \$20; Farberware rotisserie, \$20. 821-0794.

TREADMILL - brand-new, only 18 miles on it, \$150. Donna, 331-7873.

GYM - Marcy home gym & D.P. equipment, new. Nick or Bob, 584-5717 after 5 p.m.

FITNESS CENTER MEMBERSHIPS - 2, lifetime, Jack LaLanne Holiday centers, yearly renewal \$12 ea.; both \$400. Bob, Ext. 4002 or 924-7658.

REMOTE CONTROL CAR - RC10, never used, race prep., \$210 neg. 331-9792.

VIDEO CAMERA - & VCR, Olympus VX-305-U, complete w/cases & instructions, new \$1,200, make offer; Bichon Frise, asking \$150. 589-0625.

BASS GUITAR - Hondo, used once, in original box, \$60. Mark, Ext. 2599.

FISH TANKS - 30 gal. & 55 gal., complete w/fish, \$90 & \$130 neg. 331-9792 eves.

BOWS - Golden Eagle Cam Hunter, R.H., 45-60 lbs., 30"-31" drain, \$150; Bear Ltd., 45-65 lbs., 30" drain, R.H., \$50. Bill, Ext. 2377.

Audio, Video & Computers

CD PLAYER - w/connecting cord for home stereo, carrying strap, headphones, rechargeable battery, 3 mos. old, \$125. Ext. 4153 or 732-5829.

COMPUTER - Toshiba T3100, lap-top, 80286 processor, 640 K, 20 meg. & 3.5" floppy w/case, 472-9772.

COMPUTER - 640 K expanded PC Jr., modem, 2 drives, extras, \$400 or best offer. Ext. 7189.

TV - 13", b&w, good cond., \$20. Noreen, 878-6921.

PIANO - upright, Winters, like new, \$995. 744-2947 eves.

Miscellaneous

BALLET - 2 seats, London Festival Ballet, July 29 matinee, Dress Circle Met Opera, \$32 ea. G. Friedlander, Ext. 4300 or 724-5131.

Lost & Found

LOST - Ted Williams softball mitt, June 5 on Field 1. John B., Ext. 4028.

Free

KITTEN - 8-week-old calico, friendly and fun. 399-4963, leave message.

COCKER SPANIEL - AKA, female, black & tan, sweet, affectionate, well trained, needs good and loving home. 331-9792 eves.

WASHER - GE automatic, yellow, many features, you pick up. Ralph, Ext. 2180.

PATIO BLOCKS - 8x16, approx. 300 blocks, red, yellow & green. Henry, 543-8153.

CARPET - 19x15 gold/brown shag, very good cond. 368-1133.

KITTENS - Russian Blue, 4 weeks old and weaned, bluish-gray color w/tiger mixed. Frank, Ext. 3120.

Car Pool

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

ELWOOD-E. NORTHPORT-COMMACK - driver needed for car pool, 8:30-5:00. Paul, Ext. 4156.

DEER PARK-COMMACK - Exit 52 LIE Park & Ride lot. Mario, Ext. 4546.

Yard & Garage Sales

EAST SETAUKET - must sell everything, 10 a.m.-4 p.m.; Sat. & Sun., June 17-18, 295 Sheep Pasture Road. John 473-4338.

PATCHOGUE - June 17 & 18, many collectibles, 99 Smith Street. Brian, 286-1108.

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

RIDGE - 2-bdrm. condo, w/w, w/d, d/w, 2 miles from Lab, \$700/mo. + util., security + refs. required. Ext. 4525 or 981-4696 after 6 p.m.

RIDGE - 2-bdrm. cottage, 3 miles from Lab, north of 25, available July 1st. John Kendall, (718) 527-0520, or Michael, Ext. 3406, after 7 p.m.

RIDGE - 3-bdrm. ranch, 1 1/2 baths, country kitchen, all appliances, fenced-in yard, family neighborhood, 5 min. from Lab, \$900/mo., avail. July 1. Carol, Ext. 2673, or 744-8632 after 6 p.m.

ROCKY POINT - new 1-bdrm. apt., full bath, l/r, eik, priv. ent., walk to beach, nonsmoker, no pets, \$600/all. 744-6386.

SELDEN - brand-new studio, kitchen, l/r-bdrm. combo, full bath, new appliances, private ent., private driveway, no pets, no children, all utilities incl., \$550/mo. avail. now. 732-7565 after 6 p.m.

YAPHANK - Colonial Woods, 3-bdrm. condo, 2 baths, gar., bsmt., a/c, w/w, 5 appl., pool, tennis, clubhouse, avail. 7/1, no pets, \$1,000. 473-1732 eves.

YAPHANK - Colonial Woods/Whispering Pins, 3-bdrm. condo, 2 baths, gar., bsmt., a/c, w/w, 5 appl., fireplace, pool, tennis court, avail. July 1, \$1,000/mo. 499-1858 eves.

SPRING HILL, FL - 2-bdrm. house, a/c, fully furnished, avail. at summer rates, weekly or monthly, \$150 week, \$400/mo. Ext. 4530 or 261-2719 after 6 p.m.

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

For Sale

CORAM - 9-rm. Colonial, cul-de-sac, 4-bdrm., 2 1/2 baths, fam. rm., f/p, eik, d/r, l/r, mud rm., i/g pool & lawn sprinkler, 2-car garage, extras, \$195,000. Ext. 2303 or 732-3902 after 5 p.m.

CORAM - Tanglewood Hills, 4-bdrm., 2-bath, California ranch, cathedral l/r, 2-car garage, gas heat, fenced 1/3 acre, professionally painted, \$130,000. 928-7154 eves.

HOLBROOK - 3-bdrm. townhouse/condo, 5 appl., w/w, 1 1/2 baths, tennis courts, swimming pool, clubhouse, balcony & fenced-in patio, 15-20 min. to BNL, \$129,000. Ext. 2873 or 472-3236.

MANOR PARK - 4-5 bdrm. Colonial, 1 1/2-bath, l/r, d/r, fam. rm., part. finished bsmt., garage, 1/2 acre, South Manor SD, 5 min. from Lab, new roof & heat, now \$149,000. Roger, Ext. 3578 or 395-1969.

MIDDLE ISLAND - Coventry Manor, 3-bdrm. townhouse, kitchen, l/r, d/r, laundry rm., 5 appl., paneled, ca/c, pool, tennis, clubhouse, asking \$106,000. Ext. 3160 or 289-5704 after 6 p.m.

PORT JEFF. VILLAGE - 9 rooms, wooded 1/2 acre, cul-de-sac, 5 bdrm., l/r w/fp, d/r, eik, fam., study, 2 1/2 baths, ca/c 2-car gar., priv. beach & club, walk to village & harbor, \$279,000. 331-3846 eves.