BROOKHAVEN BULLETIN

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BROOKHAVEN NATIONAL LABORATORY

Doug Humphrey

Stanton Cohn (second from left), BNL Medical Department, explains the whole body counter to Dr. Robert Parr, Scientific Secretary, International Atomic Energy Agency, and other members of the IAEA advisory group which met at BNL last month to discuss nuclear-based techniques for the *in vivo* study of human body composition. During a break in their sessions, the group toured the medical physics facilities in the Medical Department.

(See page 2 for report on IAEA meeting.)

Summertime Is Research Time

For William Albritton, a summer visitor from Winnipeg Canada, BNL is the place to be. Advantages such as the presence of a well-known scientist in his field, suitable living conditions for his family, and a lot of time to concentrate on research have brought him back to BNL for a second consecutive summer.

"I must admit I was skeptical when I first came," said the native Alabamian, "because not being from a big urban area, I thought Long Island would be like New York City." But Albritton has found BNL to be the perfect location for his research, which deals with the transformation of plasmids in *Haemophilus influenzae*.

Mort Rosen

William Albritton

Albritton is an associate professor of pediatrics and medical microbiology at the University of Manitoba. He earned his M.D. at the University of Alabama and did his pediatric training at Stanford University. His concern with *H. influenzae* is the organism's potential to cause severe infections, particularly in children. These infections include meningitis, pneumonia, septic arthritis and bone and joint infections.

Since 1974, *H. influenzae* has developed resistance to one of the most commonly used antibiotics, ampicillin. This resistance, which is carried on a little piece of DNA called a plasmid, is able to be transferred from cell to cell.

The problem is that when the cells become resistant to an antibiotic, they become refractory to treatment. Since there is a potential for the cells to become resistant to a large number of antibiotics, treatment could become very difficult. Albritton's goal is to understand the mechanisms by which resistance is transferred between cells.

One of Albritton's main reasons for coming to BNL was to work with Jane Setlow, Biology, who has spent about 20 years studying the transfer of chromosomal DNA in *H. influenzae*. "What she knows about the transfer of chromosomal DNA in *H. influenzae* has been an enormous help in understanding what happens to plasmids," Albritton said. "Nobody else has her expertise and she is very generous in this type of collaboration."

Both Albritton and Setlow are more interested in how the plasmids are transferred than in where they originated. It may be possible, however, that they will solve this puzzle through detailed studies. Albritton said there seem to be enough differences between the way *H. influenzae* transfers these plasmids and the way other cells transfer them to make it worth-while to find out exactly what those differences are.

Albritton finds he can concentrate on research in his lab because he knows his family is enjoying the summer in a BNL apartment. "The environment here is very nice," Albritton said. "At most other institutions, you have to find housing and there are no immediate friends for children. Most of the people in the housing complex here are visitors, so the children can get to know other children from a wide variety of countries. That is most enjoyable."

When Albritton returns to the University of Manitoba he will resume his responsibilities in teaching, training pediatricians, and acting as a consultant to other doctors. In the course of these commitments, he rarely finds any free time. But while at BNL, he can spend all his time thinking and working in research. "To me that's very necessary," he said. "Otherwise, I would rapidly be unable to continue productive research."

— Myra Aronson

Managing The Inn At Upton

Househunting is time-consuming, especially in an unfamiliar area. If BNL's visiting scientists had to find their own summer lodging, that would take valuable time away from the few short months available for research.

As the first priority of a visiting scientist is science - not househunting - BNL's Housing Office assigns and maintains 473 on-site residential units, more than many good-sized hotels.

Head of the Housing Office, as well as the complementary offices of Charter Aircraft, Special Programs, Travel and Transportation, is Dorothy Metz. Part of the Staff Services Division, these offices are located in Bldg. 179B where Gisella Murphy and Mary Glynn are assigned to housing full time with an able assist from Jane Guido. At this time of the year, Metz said, many overtime hours are required to accomplish the essential work at hand. "In addition to normal requests for housing, we've been getting ready for the visiting scientists, and special events such as the ISABELLE workshop. Everyone's requirements have to be considered top priority."

Since many BNL guests are new to this country or to the area, the staff of the Housing Office often becomes their first line of contact if they have questions or problems, even after they are comforably installed in their new homes. Murphy remembers a worried caller who said, "My wall is blinking!" As it turned out, sunlight was reflecting off the first Venetian blinds this person had ever seen.

The problems of some callers are more serious. Once, after a heavy snowfall, Glynn received a frantic call from a mother who said her child was "drowning" in the snow. Glynn realized that the problem was suffocation and that the child was truly in trouble. Her quick call to the Lab's 2222 emergency number helped avert a possible disaster.

The Housing Office is also responsible for keeping all Lab quarters fully furnished. As Metz said, "We supply everything but the toothbrush." Among other things, the job of purchasing and maintaining furnishings involves seeing that furniture is ordered and in place; that complete sets of dishes are in clean closets; that linens are free of holes and in adequate supply; that electric brooms and other appliances work. Housing's 23-person, beefed-up summer custodial staff, supervised by Tony Guacci, spruces up the units after they've been vacated and provides domestic service to the dormitories, Guest House, and family units.

Shortly after the Lab opened in January 1947, the need for accommodations was recognized. So the Camp Upton Military Hospital, located in the southwest corner of the property, was converted to 70 apartments of various sizes. The barracks housing GIs who served here during World War II became the 13-room Guest House and four dormitories. Now, the 40 rooms of Curie House are reserved for women, while Cavendish, Compton and Fleming Houses provide 265 rooms for men.

These lodgings sufficed until the early 60's when the Lab built 44 efficiency apartments. In 1967, the first twenty unheated summer cottages were built, nestled in a pine woods. Ten more of these three and four bedroom units were added a few years later. The sixteen mobile units added in 1975 are also used only for the summer months.

"There's never enough housing in the summer, and there's no relief in sight," Metz said. "The Light Source is going to generate a requirement for more housing in the near future and later, there will be ISABELLE."

The rest of the year, the Housing Office honors other requests in accordance with established policies. Such lodgers can range from new Lab staff and their families who live at BNL while looking for a permanent home, to other employees facing an emergency situation who find themselves in need of temporary quarters.

All on-site housing is rented and paid for according to an established

(Continued on page 2)

Doug Humphrey

Of primary concern to this pleasant crew is the welfare of any guest of the "Upton Inn." Dorothy Metz (seated) supervises the Housing Office and is assisted by (from left) Jane Guido, Gisella Murphy and Mary Glynn.

A Double Bill

Marie Cassidy, Professor of Physiology at the George Washington University Medical Center will discuss "The Mechanism of Action of Dietary Fiber: Structure/Function Correlates" at a seminar sponsored by Women in Science, Tuesday, July 14 at 3:30 p.m. in the Medical Research Center (Large Conference Room).

Dr. Cassidy is also an articulate advocate of the participation of women in the sciences, and will present a second, informal talk on "Women in Science in the Next Twenty Years: Making our Presence Felt" at noon, Room A, Berkner Hall, the same day. She has served as president of the Federation of Organizations of Professional Women and as consultant to Senator Kennedy on the Women in Science Technology Act (which Congress passed in Dec. 1980). She has also received an NSF grant to study the status of women in the sciences.

Marie Cassidy

Johnsen Honored

Kjell Johnsen, technical director of ISABELLE, received the 1981 Norsk Data Physics Award for his technological contributions to elementary particle physics.

Johnsen accepted the award of ten thousand Norwegian crowns at the annual meeting of the Norwegian Physical Society in Norway on June 23, where he gave a talk on ISABELLE and its place in the future of physics.

The Norwegian scientist headed the Intersecting Storage Rings project for CERN prior to his arrival at BNL in 1979. Johnsen was named technical director of ISABELLE last October.

The Inn (Cont'd)

rate schedule. In accordance with government regulations, rates are reviewed periodically to ensure that charges are commensurate with those of similar lodgings in the community.

The Housing Office is also helpful to those interested in off-site housing. A listing of area housing for sale or for rent is maintained there and includes submissions from non-Lab employees. To see the listings or to obtain the forms to get your property on them, just stop by the Housing Office.

O'Hare Is Tops

Thomas O'Hare, Associate Chairman of DEE, has been named Executive of the Year by the Queen Anne Chapter of Professional Secretaries International. O'Hare was nominated by his secretary, Pat Towey, and his selection was based on the quality of his professional background, as well as on her recommendation. He received the unanimous vote of the association's Board of Directors. Members of this chapter are affiliated with businesses in western Suffolk County.

Medical Physics Research Reported At IAEA Meeting

In vivo neutron activation analysis of body elements has become an important tool in medical research. The technique is useful in understanding basic physiology and for diagnosing and managing a variety of diseases and disorders.

The first planned study in man which used *in vivo* neutron activation was reported in 1964 by British researchers, who measured sodium and chlorine. Later came measurements of many other body elements. More recently, a number of new *in vivo* techniques have been developed based on such methods as x-ray fluorescence, nuclear resonance scattering, CAT scanning, and others.

For a week last month, June 22 to 26, an advisory group to the International Atomic Energy Agency (IAEA) met at BNL to review the current status of all *in vivo* techniques and to recommend quality assurance procedures. The group also discussed the extent to which these techniques can be recommended for more wide-spread use in IAEA member states, their cost effectiveness, and other requirements that arise in such applications as licensing and technical training.

Stanton Cohn, BNL Medical Department, was the local organizer of this meeting. Other Brookhaven participants were Ken Ellis, David Vartsky, Ashok Vaswani and Lucian Wielopolski. Medical physicists and research clinicians came from other institutions in the U.S., plus centers in Canada, France, Greece, Sweden and the United Kingdom.

Papers were presented on applications of *in vivo* neutron activation analysis and other techniques for human body composition studies, and BNL participants spoke on a number of topics. According to Cohn, Brookhaven has the most sensitive and highly developed systems for measuring *in vivo* calcium, nitrogen and cadmium. The Lab has also pioneered in measuring iron *in vivo* by nuclear resonance scattering.

Over 2,500 patients have been measured *in vivo* for calcium at BNL. These measurements are used primarily in the study of osteoporosis, a disease that affects a large number of post-menopausal women.

Several hundred patients have been measured for nitrogen at Brookhaven, the only place in the U.S. where this is done. Nitrogen measurements provide a qualitative estimate of protein content. One BNL study involved analysis of body composition of nitrogen in 37 cancer patients over a six-month period of time. Total body potassium and total body water were also measured. Using techniques employed in this research, it should be possible to evaluate hyperalimentation programs for cancer patients who lose body weight.

Cadmium deposits chiefly in the liver and kidney, and this internal accumulation is a potentially serious health problem. Some researchers have suggested that cadmium poisoning can cause hypertension and emphysema. Smokers also show higher levels of cadmium than healthy non-smokers. BNL's cadmium measuring facility is housed in a 34-foot trailer, making it suitable for epidemiological studies or field studies of industrially exposed workers. The trailer has already been to a cadmium smelter in Denver, Colorado.

Recent technological developments have added a new array of exploratory tools for medical researchers. One is nuclear resonance scattering of gamma rays, which was originally used by nuclear physicists. BNL scientists have begun to use nuclear resonance scattering to measure iron in the heart and liver of patients suffering from thalassemia. This blood disease, which usually occurs in young people, is characterized by an overload of iron in the liver and heart. Patients are generally treated with a compound that removes iron from the body. Measurements of iron concentrations can be used to determine if the treatment is working.

A summary report of this workshop, including all papers presented, will be published by IAEA.

Notice To Visitors

The Public Relations Office has a limited supply of The Long Island Guide available for summer visitors. The Guide is published by Newsday and gives comprehensive information on where to go and what to do on Long Island. For your copy, call ext. 2345.

ISABELLE: Focus on Physics

When the 1981 ISABELLE Summer Workshop begins on Monday, July 20, over 200 physicists are expected to be on hand for the 11-day study. Co-chairmen of the workshop are Deputy Director Nicholas Samios and Nobel laureate Samuel Ting.

The workshop's primary emphasis will be on the physics opportunities presented by ISABELLE, with a focus on the physics that can be accomplished if the accelerator turns on in 1986 with a luminosity of 2×10^{31} cm^{-2} s^{-1}, bunched beam operation and an energy of 350×350 GeV. To cover these topics thoroughly, the distinguished twelve-member organizing committee has centered the agenda around four main areas of discussion: Physics Opportunities, Mirza Beg (Rockefeller), Val Fitch (Princeton), Alfred Mann (U. of Pennsylvania), Jack Sandweiss (Yale), Sam Treiman (Princeton), and Ling-Lie Chau Wang (BNL); Experimental Areas, Robert Lanou (Brown U.) and Sam Aronson (BNL); Large Detectors, Charles Baltay (Columbia) and Howard Gordon (BNL); and Detector R&D, William Carithers (LBL) and Thomas Ludlam (BNL).

This will be the first ISABELLE workshop since 1978. Neil Baggett, liaison physicist in the Director's Office, explained, "It's important to review our physics goals in today's context of theory and understanding. High energy physics is an ever-changing field and it is always possible that developments could change the physics to be done at ISABELLE."

All those interested are invited to attend the workshop. For further information, contact conference secretary Kit D'Ambrosio, Bldg. 510A, Ext. 3830.

In Appreciation

I would like to thank all of my son's many friends and coworkers for their kind expressions of sympathy and concern.

— Rose Masciopinto and family

On The Spot

Myra Aronson, Reporter
Doug Humphrey, Photographer

Question: What is your opinion of Long Island?

Rose Grandalpha, Secretarial Pool

"For myself I think L.I. is fine, but for younger people who want to settle here, there's not too much opportunity. Jobs are scarce, taxes are high even for me, and it's so hard to buy a house. Stores have become a lot more accessible; you don't have to travel as far to get to a supermarket as you used to. I've had a summer place here for years and I'm hoping to settle here."

Nicholas Samios, Director's

"I love L.I.'s proximity to N.Y. You can get all the culture you want there. If we could eliminate the cold, bleak, and dreary month of February, I'd say the climate is also very nice. God was right when He made February the shortest month of the year so He didn't have to suffer as much. Twenty years ago it was too quiet with not enough to do, but it's gotten much better."

Tim Dietz, Physics

"I haven't been here long enough to find out too much about L.I. I really didn't expect it to be quite as green as it is and I also expected it to be a lot smaller. There's nothing really special here, everything that's here is in Jersey as well. The thing is you have to drive quite a way to go to a movie or something so you're stuck here without a car."

Adrienne Farrell, Chemistry

"I love L.I.'s beaches because they have the best sand in the world, absolutely the best. It's the only place that offers the bays and the boating we have. The air is clean and fresh and there's no air pollution. It sure beats L.A."

Meyer Steinberg, DEE

"There's a lot of good on L.I. You've got beaches, you've got seasons, you've got cold weather, you've got warm weather, you've got swimming, you've got tennis.... It's near New York and New York is the cultural center of the world — despite what goes on there. I go to N.Y. every month and see beautiful theatre and opera, but I wouldn't live there because I also like greenery."

Maria Apelskog, Research Library

"L.I. is better than Brooklyn any day. It's a lot prettier out here and a lot less congested. You don't get mugged as often (maybe every other day instead of every hour). L.I. is building up quite a bit and that's not so bad as long as they leave some trees around."

S. Chung, Physics

"When I arrived in 1966 I was a bit shocked. I was at Berkeley in California for five years and when I came here I found people to be a bit aggressive. L.I. is also a transportation dead end. We need some way to get across the Sound, like a bridge or better ferry service. Otherwise it's okay. I must like it or I wouldn't have stayed here."

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Tennis Tournament

The Tennis Committee announces that the annual tournament consisting of five events (mixed, m & w singles, m & w doubles) will commence the weekend of July 25. The tournament will take priority over all other play during the weekends of July 25 and August 1. Competitors may sign up at the BERA Sales Office now, until July 17. The draw will be posted by July 20 at the BERA Sales Office and at courtside. Competitors are encouraged to play first-round matches as soon as the draw is posted. The tournament is open to Laboratory employees and spouses, and the entry fee is $1.50 per person per event, payable at sign-up.

There are openings on the Tennis Committee. BERA members interested in serving on the committee are asked to contact Gail Williams, Ext. 3338, or Georgia Irving, Ext. 3335, before Friday, July 17.

Motorcycle Club

The day ride to Connecticut last month was so much fun, trip leader Erno Ostheimer has more ideas on where to go next. Northern Connecticut is waiting. Or how about an air show at the Old Rhinebeck Aerodrome in upstate New York?

Come to the club meeting on Monday, July 13, at 5:15 p.m. in the Recreation Building. Let's pick an itinerary and a date.

Come To The Cabaret!

Doug Humphrey

Janet Sillas will demonstrate her comic talent and singing ability when the Theater Group presents the Fourth Annual Vaudeville Show, on July 17 and 18 at the Brookhaven Center, at 8 p.m. This promises to be the best show ever -some old favorites, some new acts - and lots of fun for a summer evening. Bring the kids, Grandma, the neighbors, and enjoy a summer evening at the Center. Two nights only. Tickets are $3; $2 for those under 12, or over 65. For information call Liz Russell, Ext. 3940.

PINY Courses

The Department of Nuclear Engineering at the Polytechnic Institute of New York will offer two courses this summer at the Shoreham Nuclear Power Station. These courses, which are open to Brookhaven personnel, are NU 602, Intro. Nuclear Eng. II, 7/21-8/21, Mon., Wed., 6-8 p.m.; and NU 606, Radiation Protection, 7/21-8/21, Tues., Thurs., 6-8 p.m.

Registration will be held at Shoreham on Tuesday, July 14, from 6-7 p.m. For further information call John Lamarsh at (212)643-8184 or (914)834-8576 or Glenn Price, Ext. 3336.

CHPS Reminder

The deadline for initiating or terminating membership in the Community Health Plan of Suffolk, Inc. (CHPS) is next Friday, July 17. Appropriate forms and applications are available at Personnel Services, Bldg. 185 (Ext. 2877).

Ten, It Is

The Atmospheric Sciences Division wrestled with a list of 65 entries in the naming of the meteorology tower, and finally gave the choice to Bob Brown, who was responsible for transferring the monitoring operation from the old tower to the new. He selected "Ten" (Tower for Environmental Noting) which was submitted by Lou Stang, Nuclear Energy Dept. Brown said he chose this name because of its ease in computer use and because it followed the previous sequence (Ace, King, etc.). "Nimbus" was a close runnerup, but was rejected because one of its meanings is "rain cloud."

Public Relations tended toward the more literary appellations and liked particularly Nimbus, as well as Ariel and Skywalker. Other names receiving votes in PR were Phonenix, The Informer, Sentinel, Solitaire and Weatherman.

Some entries indicated a play on words: Eyeful Tower, Weathering Heights, and (The Towering) Informer. One person wanted to call it, simply, Fred.

Afro-American Club

All BNL employees are invited to attend a meeting of the Afro-American Culture Club on Tuesday, July 14 at noon in Berkner Hall, Room C. We will discuss the Soul Food Family Picnic planned for August.

At the last meeting the following officers were designated: Dwight Brown (Chairperson), Ed Taylor (Co-chairperson), McHarrell Thomas (Treasurer), Sandra Green (Recording Secretary), and April Donegain (Correspondence Secretary). Christine Moore is Chairperson of the Activity Selection Committee.

Cricket Club

The Brookhaven International Cricket Club hosted the British Veterans C.C. from Oyster Bay on June 28. The Lab team went into bat first and, at the end of the allotted 35 overs, had scored 110 runs. Clem Auguste was high scorer with 25 not out, before being forced to retire into the shade after overheating in the 90 degree temperature on the field. When Oyster Bay went into bat, John Millener bowled steadily for ten overs for only 17 runs, but the other Brookhaven bowlers were no match for opening bat Alvin Barnett, who scored a quick 64 runs, the highest individual score yet recorded at the Lab field. Oyster Bay finally won with the loss of only two wickets.

Tax Sheltering Alternative

Until recently, tax sheltered retirement programs, under Section 403 (b) of the Internal Revenue Code, were exclusively the province of insurance companies. TIAA/CREF's Supplemental Retirement Annuity (SRA), under which employees could tax shelter amounts over and above their requirement contribution to the retirement plan, are in this category.

Now, voluntary salary reduction contributions can also be invested in shares of registered investment companies (mutual funds) under custodial accounts. Below are the major features of tax sheltering through a mutual fund offering a 403 (b) plan, and how they may differ from the SRA plan:

- A number of the mutual funds participating in 403 (b) plans have a family of funds, such as money market fund, bond fund, high income fund and high capital appreciation fund. Depending on your investment objective, amounts can be transferred from one fund to another without penalty. *SRA plans with TIAA/CREF do not offer this investing flexibility.*
- It is our understanding that accumulations under existing SRA's with TIAA-/CREF could be transferred to the 403 (b) mutual fund without tax penalty.
- Withdrawal rights for money invested in mutual funds under tax deferred retirement programs are restricted by IRS regulations. Such funds cannot be withdrawn unless one of the following conditions is met: the participant reaches age 59-1/2, becomes disabled, dies, encounters serious financial hardship, or terminates employment. It is interpreted that financial hardship could be demonstrated by unusual medical expenses, purchase of a home, or sending children to college. Generally, once eligible for withdrawal of funds, amounts may be taken out in a lump sum or in monthly, quarterly, or semi-annual installments. *Withdrawals from SRA investments with TIAA/CREF are not subject to the above restrictions and are cashable upon request.*
- As with SRA, withdrawals are taxed as ordinary income in the year received. Regular five-year income averaging provision may be used if it is beneficial and the participant otherwise qualifies.
- Salary reduction amounts that may be tax sheltered are subject to the same limitations as SRA's.

To determine the extent of employee interest in this alternative, please complete the form below and return to B.J. McAlary, Bldg. 134A.

Tax Sheltering Alternative

Name _____ Dept. _____ Ext. _____ Life # _____

Interested? _____ Yes _____ No

Send to: B.J. McAlary, Bldg. 134A

Sunday Tours

The first of 8 Sunday tours of the Laboratory will be given on July 12 between 10 a.m. and 3 p.m. Visitors will be taken on a guided tour of the Lab's site, a highlight of which will be a stop at the ISABELLE construction area. Visitors may spend as much time as they wish at the Exhibit Center where they may view displays and demonstrations of the Laboratory's many-faceted research. Souvenirs may be purchased at the Science Store. At Berkner Hall, tourists will be shown a film on the construction of the Brookhaven House and Brookhaven's multi-media slide show, Quest.

Cafeteria Menu

Week Ending July 17, 1981

Monday, July 13		
Cream of tomato soup	(cup)	.55
	(bowl)	.65
Corned beef & cabbage		1.60
Shrimp Sukiyaki over rice		1.65
Hot Deli: Veal pattie & pepper hero		1.60
Tuesday, July 14		
Cream of split pea soup	(cup)	.55
	(bowl)	.65
Roasted top round of beef & 1 veg.		1.65
Beef hash & 1 veg.		1.55
Holt Deli: Clam boat		1.70
Wednesday, July 15		
Hot borscht soup	(cup)	.55
	(bowl)	.65
Turkey Tetrazzini		1.60
Chinese pepper steak on rice		1.65
Hot Deli: Roast beef	(on bread)	1.65
	(on roll)	1.75
Thursday, July 16		
Beef barley soup	(cup)	.55
	(bowl)	.65
Meat cakes & onions w/1 veg.		1.60
Barbecued chicken & 1 veg.		1.55
Hot Deli: Monte Cristo		1.70
Friday, July 17		
Clam & celery bisque	(cup)	.60
	(bowl)	.70
Meatloaf & 1 veg.		1.55
Stuffed flounder & 1 veg.		1.55
Hot Deli: Chili dog		1.60

Arrivals & Departures

Arrivals

Joseph M. Hendrie ..... Director's Ofc.
Andrew W. Moran ..... S&E Prot.
Brian W. Williams ..... Chemistry
Ihor Zubal ..... Medical

Departures

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

John L. Batdorf ..... S&E Prot.
Louis F. Both ..... Accel.
James D. Cassidy ..... Accel.
Alina R. Commerford ..... Medical
Gregory M. Gowdy ..... Physics
Theodore M. Hilgemeier ..... Accel.
Charles H. Horn ..... Central Shops
Melody D. Howard-Mix ..... Physics
Owen C. Jones, Jr. ..... N. Energy
Walter S. Lundgren ..... Accel.
Beverly J. Nine ..... N. Energy
Peter Paige ..... Personnel
Joseph R. Preisig ..... S&E Prot.
Loretta E. Reddick ..... S&E Prot.
Roger S. Rittmaster ..... Medical
Reese D. Thomas ..... Accel.
Mary R. Trovato ..... N. Energy
John C. Valek ..... Accel.
Tung S. Wang ..... Applied Math.
Wing T. Wong ..... Energy & Env.

Softball

League I
Ravens 21 — Phoubars 16
Blue Jays 9 — Six Pax 4

League II
Roga 13 — Cardinals 4
Moles 13 — AMD Bombers 12
Deegenerates 9 — Big Sticks 3

League III
Binary Bombers 15 — Lights Out 14
Electric Company 13 — Nuke Powers 8
Magnuts 14 — Dirty Sox 3
Ice Pops (won) — Medical (lost)
The Forties - bye

Leagues IV and V
All games for Monday and Thursday postponed due to rain.

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.

The determination of the best-qualified candidate for available positions will be based upon education, experience and other job-related criteria. Such factors will be evaluated and measured against the demonstrable requirements of the available vacancy, as well as the Laboratory's Affirmative Action objectives.

The Laboratory is committed to a policy of Equal Opportunity in its selection and placement of personnel. Its objective is equality of opportunity in employment, training, and promotion without regard to race, color, religion, national origin, sex or handicap.

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, as indicated below. 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: Opportunities for present Laboratory employees.

1585. TOOL AND INSTRUMENT MAKER - (5 positions) Central Shops Division.

1586. MASTER METAL WORKER - Central Shops Division.

OPEN RECRUITMENT: Opportunities for present Laboratory employees and ouside applicants.

1587. ENGINEER - Requires BS/MS in nuclear engineering or related field and a familiarity with the function and performance of light water reactor (BWR and/or PWR's) plant systems. Knowledge of fluid systems, electrical systems or heating and ventilation systems is desirable. Experience in the preparation or review of piping and instrumentation diagrams is also desirable. Department of Nuclear Energy.

1588. TECHNICAL POSITION - Requires an AAS in chemistry or equivalent background. Responsibilities will include setting up of apparatus, running confirmatory tests for an aqueous corrosion program, and the preparing and conditiong of metal test coupons such as polishing, heat treating and preparation of solutions. Knowledge of basic electrical circuits for wiring heaters and temperature controllers is desirable. Department of Nuclear Energy.

1589. TECHNICAL POSITION - Requires an AAS in chemistry or material science or its equivalent in relevant experience which includes good mechanical skills and knowledge of vacuum systems. Responsibilities will include routine chemical and mechanical testing of solid radioactive and non radioactive waste forms. Will provide support function to scientific and professional staff. Department of Nuclear Energy.

1590. CHEMISTRY ASSOCIATE - Requires an MS in analytical chemistry or its equivalent in relevant experience. Prior experience using the atomic absorption spectrophotometer, autoanalyzer and related techniques is required. Responsibilities will include chemical analyses and development of analytical methodology in support of the low level radioactive waste research efforts. Previous experience in radioactive or toxic waste management is desirable. Department of Nuclear Energy.

1591. TECHNICAL POSITION - Requires AAS degree in electronic technology or equivalent background. Will maintain and operate equipment in a multicomputer installation. Requires background in computer maintenance, digital electronics, systems-level diagnostics, and test equipment. Must have demonstrated ability to work independently. Accelerator Department.

1592. ELECTRONIC ENGINEER - Requires BSEE or equivalent capabilities. Will be part of team to develop the FASTBUS standard at BNL. Prefer computer hardware experience with high-speed data acquistition systems. (Re-posting of Job No. 1579) Accelerator Department.

1593. TECHNICAL POSITION - Requires the equivalence of a bachelor's degree acquired through training and experience in oceanographic electronic technology. Responsibilities include trouble-shooting oceanographic electronic equipment, designing and constructing moorings for instrumentation, all all-around electronic repair and maintenance. Requires previous experience with oceanographic electronic equipment (i.e., CTD system) and with electronic instrumentation at sea and requires up to 2 months per year at sea. Department of Energy and Environment.

SCIENTIFIC POSITIONS OPEN: The following staff positions are open. Candidates may apply directly to the department representative named, or through the Office of Scientific Personnel, Ext. 3338.

INDUSTRIAL HYGIENIST - Seek candidates with M.S. in Industrial Hygiene or relevant field, A.B.I.H. Certification, and industrial experience for supervisory position in the Operational Industrial Hygiene Program. Contact: O. White, Jr., Safety & Environmental Protection Division.

NUCLEAR WASTE MANAGEMENT - Several positions for PhD's in physical or inorganic chemistry, materials science, geology, ceramics, to join NRC program. Contact: D.G. Schweitzer, Department of Nuclear Energy.

NUCLEAR ENGINEER - M.Sc. or Ph.D. with familiarity with light water reactor accident analysis, especially core meltdown phenomena, for Probabilistic Risk Assessment Program. Contact: R.A. Bari, Department of Nuclear Energy.

Autos & Auto Supplies

FAN - declutching type for GM, 7 blades, $20; Fan 12v, 2 spd, $5. Joe, Ext. 4212.

75 FORD - F250 Camper Special Pick-up Truck w/ 10½' Hornet Camper Slide-on, self contained, many extras. $6,500. Will sell camper separately. Ext. 4622 or 929-4840.

CRAGARS - Universal 15" (2) 7", (2) 8", fair cond. $75; also 4 Trans—Am Honey-Comb rims, fair. 15", $50. Bill, 698-4882 after 6 p.m.

73 DODGE - Monaco wgn, a/t, p/b, p/s, a/c, CB am/fm stereo, radials, 2 extra snows, 76,000 mi, many new parts. Best offer, Ext. 3926.

76 VOLARE - Subn, a/t, p/b, radials, posi rear end, am/fm radio, 57,000 mi, black. $2,300. 727-5527 or 757-2369 eves.

78 MERCURY - Zephyr, purchased new 1979, excel cond. $3,500. Ask for Toni, 928-6562 after 7 p.m.

72 OPEL - 60,000 mi, good cond, no problems, 25 MPG. $1,100. Mark, Ext. 3291.

HARLEY DAVIDSON SADDLEBAGS - deluxe models w/full protection bars, lockable, removeable. $150. Dennis, Ext. 3533 or 654-2076.

67 MUSTANG - 2+2 Fastback 289ci, 4 spd, green w/black int., cassette, excel cond. in & out. 589-5126.

69 CHEVY IMPALA - body & engine excel, $500; 1970 Ford Wgn - body & engine very good, $600; 1971 Ford Ltd - body & engine very good, a/c works. $600. 271-0247 eves.

VEGA PARTS - 3 spd transmission, reconditioned head, new valves. Duke, Ext. 4279 or 289-3586.

72 HARLEY DAVIDSON - FLH police special. $4,000. John, Ext. 4973 or LI1-4792 after 6 p.m.

69 OPEL GT - custom rebuilt 1900 engine, good cond. $1,500. 281-2257 after 5 p.m.

73 ELDE - Conv., white w/red int. Phil, 475-0068 after 5 p.m.

79 JEEP CJ5 - Golden Eagle, 8 cyl, 4 WD, std, tilt steering, soft top, am/fm, many extras. $5,700. Call 286-8110.

71 FORD BRONCO - 4 WD, high miles, excel shape. GR5-4199.

79 FORD ECONOLINE - 150 small V8, a/t, p/s, p/b, tilt steering wheel, am/fm cassette. $6,000. 588-0186.

69 CHEVY NOVA - good 230 engine, new tires, new carburetor, needs body work. Gene, Ext. 3142 or 928-7026 eves.

76 PONTIAC VENTURA - excel cond, s/t, am radio, 75,000 mi. $1,700. Available July 20th. Ext. 3369 or 282-3221 eves.

TIRES - (3) steel belted radials, FR78-15, used, good cond. $10. ea. Ext. 2461 or 325-9511.

76 PINTO - Runabout, 4 cyl, a/t, excel cond. $1,800. Ext. 7561/4290 or 282-3233 wkends.

74 VW BUG - good cond, recent rebuilt engine, like new. 929-4173 after 5 p.m.

69 FORD F250 - Pickup custom cab, camper special, 4 spd, 360 V8. 286-1097.

80 VW RABBIT - Diesel, mint cond, white w/red int. Phil, 475-0068 after 5 p.m.

72 MONTEGO - a/t, p/b, p/s, a/c, 2 snows, rebuilt trans., new alternator, master cylinder. Ext. 3293/3102 after 6 p.m.

12 BOLT - ring & pinion set, 3.31 ratio, $45. Ext. 4084 or 878-1060.

TIRES - (2) 155-13 w/w, polyester ply, only driven 500 mi. $35/pair. Jeff, 732-3842 eves.

76 PLYMOUTH VOLARE - Premier, 6 cyl, a/t, p/s, p/b, a/c, am/fm tape deck, excel cond. $2,495. Meyers, Ext. 4385/4357.

72 VW SQUAREBACK - a/t, excel cond, orig. owner. Ron, Ext. 4449 or 751-8403.

71 NIMROD CYPRESS — Pop up trailer, sleeps 8, sink, stove, ice box, extras, good cond. Asking $1,000. 744-4047.

78 PLYMOUTH HORIZON - dark blue, 4 dr, 4 speed, am radio, roof rack, excel gas mileage, very good cond. $3,600. 924-5331.

71 TOYOTA - 4 spd., new parts, new tires. Asking $850. Frank, Ext. 4113 or 399-1307.

69 VOLVO - minimum rust, 100,000 mi, 27 MPG, $850. Kevin, Ext. 4353 or 924-7283.

67 BARRACUDA - mechanics special or for parts, a/t, needs front end work. $100. Ed Frantz, Ext. 3753.

LEAF SPRING — Booster kit, complete. $5. Vic, Ext. 2395.

76 FORD - F-150, am/fm/cassette, a/t, V8, steel radial tires, clean, $2,500. Dan, 698-7322 after 6 p.m.

70 OLDS DELTA 88 - convertible, needs rear window. $500. Ext. 2417 or 589-4883 eves.

80 AMC EAGLE WAGON - 4 wheel drive, 12,000 mi, loaded, excel cond. Asking $7,500. 475-4792 after 5 p.m.

8-TRACK PLAYER - for car, excel cond. $20. Ext. 3431 or 744-9677.

Boats & Marine Supplies

SAILBOAT - Cal 20, 6 HP, 3 sails, VHF, stove, cradle, fully equipped, extras, mint cond. $5,900. Fred, Ext. 7980.

23' SAILBOAT - fiberglass, pop-top, swing-keel, new sails, cushions, custom extras, 6 HP Johnson, in-water. Ext. 7961 or 727-2470 eves.

26' STEELCRAFT - 1947, sleeps 4, full galley, head, best offer, needs work. George, 581-4318 after 5 p.m.

15' MOHOGANY BOAT - Johnson shift controls, steering, excel cond. Ready for water. Kenny, 878-1698.

14' FIBERGLASS - Runabout, 35 HP, 1975, w/ trailer, elect. start, upholstered seats, windshield, speedometer, extras, v.g. cond. $1,100. Ext. 2906 or 929-6189.

LAZER - w/Harken block & hand trailer, v.g. cond. $850. 325--0928 after 6 p.m.

16' DOUBLE ALUMINUM BOAT - 399-0969.

1978 JOHNSON - 4 HP long shaft, used 2 seasons on sailboat. Asking $300. 286-1097.

19' TRI HULL - 1970 fiberglass 80 HP Mercury engine, trailer, new gas tank, rugs, seats, skiis. $2,000. Judy, 234-1572.

NYLON ROPE - 1/2", 100 ft., w/thimble, brand new. $30. Lou, Ext. 4615.

Miscellaneous

COBRA CB - w/power mic. $70; over a cord of wood, seasoned, half split. $75. Rolf, 399-4822.

STROLLER - Perego folding Bye-Bye type w/ hood, v.g. cond. $40. Louisa, Ext. 4207 or 286-2251.

CAMERA - Konica Auto S2 range finder, 45mm 1:18 lens, leather case, Honeywell tilt-a-mite flash. $80. Joe, Ext. 4212.

ELECTRIC ADDING MACHINE - Smith Corona, $22. 286-0795.

ICE CREAM MAKER - RCW 5 qt., like new. $20. Ext. 4084 or 878-1060.

ATTIC FAN - 48", best offer. Tom, Ext. 7115.

AIR COND - Fedders 5000 BTU lightweight, portable, used ony one month. $150. David, Ext. 3145.

BOOKS FOR SALE - College & Graduate level Physics texts. David, Ext. 3145.

TABLE POWER SAW - home made, $45; portable heater Catalitic Colman, $15. Ext. 7666.

PHONE ANSWERING UNIT - Crown Model CT4450, needs repairs. Cost $140. Asking $65. Ext. 2323.

POTTERS KICK WHEEL - oak frame, $175. Ken, Ext. 5042 or 475-5694 eves.

RUG - oval, wool braided, 8'x6', avocado. $40. I. Merritt, 589-5126.

TV - 21" Admiral console, B&W Contemp. walnut cabinet, $50; Dinette large formica table w/leaf & 4 chairs, $50; (2) upholstered liv. rm. swivel chairs, $25. 929-6148.

MARIGOLD PLANTS - mixed colors, $1.10/doz. Bill, Ext. 4279 or 298-9648 eves.

PORTABLE WASHER/DRYER - GE, excel cond. $350. or best offer. Peter, Ext. 4767 or 698-3822 eves.

DERBY GARDEN TILLER - for small gardens, must be seen, like new. Dick, Ext. 3601 or 286-0958.

ORGAN - Wurlitzer; xylophone; 2 wheel & 3 bicycles; stroller; household items; 53 piece melmac; punch bowl; tennis rack. 924-3755.

TENNIS RACQUET - Prince Classic 4½L Vantage I strings, $45; 2 spd. 30" GE exhaust fan & cover. $75. Ext. 4846 or 363-6940 after 5 p.m.

COBRA 135 - SSB, clock, std. CB, 19 channels maco 200, power boost, SWR meter, pluses, excel. $500. Firm. 744-0778 eves.

STEREO - am/fm 8 trk BSR turntable, $75; polaroid camera & case, $25. John, Ext. 4973.

SLO-COOKER - West Bend, includes electric frying pan, silverstone pan, pyrex baking pan, new. 924-4991.

WOOD STOVE - airtight Fisher Grand Pa, rated for 2000 sq. ft. $350. Joe, Ext. 7955 or 878-8907.

CASSETTE/RECORDER - metal tape capability, never used. $100; speakers 2-way, 1 yr. old. $75/pr. 289-0687.

MAYTAG DRYER - gas, good cond, $65. Walter, Ext. 3397 or 567-9025 after 6 p.m.

DINING ROOM SET - complete cost $3,000. Will sell for $1,000. 399-0969.

HUTCH - $250; black cast iron stove, $225; cobbler bench, $75; TV w/cabinet. $85. 744-6063.

TORO LAWNMOWER - 21", electric start, rear bagger, needs little engine work, otherwise excel. Ext. 7544.

LIVING ROOM SET - couch, chair, 2 end tables, excel cond. $200; Energy Mart Kerosene heater, $175. 283-6338.

BICYCLES - girls 20", $20; boy's 20", 5 spd, $20; boy's 16" Ross w/training wheels. $15. 286-1097.

ELECTRIC RANGE - 40", you haul, best offer. Ext. 5042 or 475-5694 eves.

POTTERY - bowls, plates, chip & dips, planters, cups & many more. Dried Flower arrangements. Linda, 732-5454.

INDIAN HEAD PENNIES - Most dates available from 1880-1899. Greg, Ext. 7960.

CUB SCOUT UNIFORM - size 10, complete, $10. Lois, 929-4753 or Bob, Ext. 4672.

HORSE MANURE - in bags, $1.00 per bag, you pick up. 589-7316.

WOOL RUG - 15'x15', slate blue w/pad, fair cond, $150; decorative cutout wood panels for sliding glass doors. $50. Nancy, 924-8160.

COFFEE TABLE - matching end table, maple, $40/both; Early American lamps w/Eagles, $15/pair. Karen, Ext. 5228.

FRESH FISH - weaks, blues, bass, fluke, etc. Wholesale prices, leave number. Ruger, Ext. 2107.

DELUXE REDWOOD CHAISE - w/ottoman & armchair, adjustable backs, excel cond. $100. 744-2783 eves.

CLOTHES WASHER - GE apt. size, excel cond, $150; 1890's antique high back wicker porch rockers. $300. pair. 589-2338.

COLONIAL SOFA BED - maple arms, needs recovering, $15; matching chair, fair cond, $20; electric meat slicer, $20; Italian provincial coffee and end table, excel cond, $20 ea; old folding bed, $5; bridesmaid dress, pale green, size 9, $10; electric knife, $3; Polaroid big Shot camera and case, $10; suitcases, $5 ea. Judy, 698-4882 after 6 p.m.

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

RIVERHEAD AREA - mobile home 10x50, 1 bdrm, stove, refrig, washer/dryer, tool shed, covered patio. Ext. 3485.

SHOREHAM VILLAGE - custom ranch, 3 bdrms, 2 baths, fam rm w/fp, d/r, l/r, gourmet kitchen, 2 car o/s garage, 0.8 acre, w/w throughout, new oil burner, good financing, walk to priv. beach, tennis club. 821-0890 after 5:30.

SHOREHAM - 2 story, 4 bdrms, Clarendon Colonial, 2 baths, l/r w/fp, d/r, dinette, kitchen & mud room, 2 car garage, on .45 acre corner lot. Deeded beach rights. 744-2766.

RIDGE - Leisure Village. Carlton Model. 2 bdrms, 3 baths, l/r, d/r, a/c, blinds and lux. carpet throughout, garage, w/auto open, senior community, golf, swim, Rec. bldg, 24 hr. security. Haycock, 331-3358.

SHOREHAM - North of 25A, 25 yr. old Cape in estalished neighborhood, 3 bdrms, study, fin bsmt, garage, on 1/3 acre, priv. beach rights. Owner financing available. $52,500. 744-5801.

MASTIC - 3 bdrm ranch, country kitchen, fenced 1/3 acre on corner, attached garage, full bsmt, brick/cedar front, shed, near Forge River Marina, assumable mortgage. $39,000. 281-4371.

For Rent

CORAM NORTH - Strathmore East ranch, 3 bdrms, 2 baths, study, fam rm, eik, 5 appliances, priv. fenced yard, gas heat. $575/mo. + util. Available Sept. 1st. 928-7154 or Ext. 3791.

PORT JEFF STATION - 1 bdrm apt, full kitchen, l/r, full bath, carpeted throughout, large priv. lawn area. Available August 1st. $300/mo. + util. Ext. 4094

Wanted

GARAGE TO RENT - 2 car, in Shirley/Mastic area. 281-6042.

ELECTRIC RANGE - apt. size. 22". Call Lew at Ext. 3502 or 286-8166.

DEHUMIDIFIER - good cond; Men's bike, 5 or 10 spd. Paul, Ext. 4045 or 289-5770 after 6 p.m.

TOASTER OVEN - reasonably priced. Carol, Ext. 3341 or 281-3567 after 5:30.

PIANO - Baby Grand, good cond. Lew, Ext. 3502 or 286-8166.

SHREDDER - needed for garden composting, reasonably priced. 281-8274.

ALUMINUM ROW BOAT - 10-12', reasonable. Joe, Ext. 4661.

CAR BODY - 1972 Pinto Mustang, 4 cyl motor, body good cond. Rose, 727-0661 after 4 p.m.

HARONOIUM - to borrow or rent for Vaudeville nights, July 17 & 18. W. Love, Ext. 3996.

APARTMENT - Queens area, furnished or unfurn, one bdrm, newlyweds awaiting completion of co-op, immediate. 924-4097.

HOUSE/APT. - 3 or 4 bdrms furnished, to rent beginning Sept. for one year, visiting Scientist and family. Ext. 3786.

APT. - to rent 1 bdrm apt. Sayville area, for female Laboratory employee. Carol Ext. 3341 or 281-3567 after 5:30.

HOUSE/APT. - to rent for few months from August 1st. Ext. 3403 or Ext. 2584.

HOUSE - for visiting scientist, needs 3 bdrms, Aug. 8 to Sept. 8th or part thereof, on LI or Conn. Ext. 3525 or 331-3724.

OLD DOLLS & TEDDY BEARS - 475-4199.

BUSINESS ASSOCIATES - excel income potential, no investment required, tax advantages. 698-5861 after 7:30 p.m.

USED LAWN BOY MOWERS - for parts, Joe, Ext. 4139.

PIANO - console model, good cond; also flute, open-hole, silver head, joint or all silver. Ted, Ext. 2620 or 751-6765.

BOAT TRAILERS - one light for 16' sailboat; one heavy dutry for 19' inboard boat. Ext. 2384.

DECK HOCKEY PLAYERS - all positions available, goalie essential, season starts early Sept. Call Ron, Ext. 3238.

JOHN DEER ELECTRIC 90 - I need parts, mower, motor & seat. Tom, Ext. 7115.

BICYCLE - built for two, reasonable. Al, Ext. 4473.

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.

Car Pools

MATTITUCK - have car wishing to join existing car pool. Bill Stars, Ext. 4279 or 298-9648 eves.

STONY BROOK/STRATHMORE - M-sec, join or start car pool. Jag, Ext. 5080.

COMMACK RD/LIE - driver/rider to form 2 person car pool, no smoking. 8:30 to 5:00. Ext. 5294.

MASSAPEQUA/FARMINGDALE - Points West, meet near Exit 32 Southern State Pkwy. (Rt. 110). Plotkin, Ext. 4717 or Wallner, Ext. 4216.

FROM PATCHOGUE VIA BELLPORT - 9 yr. old car pool, on-time, has vacancy for paying rider. Alyce, Ext. 2901.

BABYLON/WEST ISLIP - driver needed for 4 person car pool. Ext. 2493.

Services

Services are listed as a courtesy to BNL employees. They are neither screened nor recommended by the *Bulletin*

NEED A HOUSE PAINTED? - inside or out? experienced painters will do the job. References. James, 473-2059.

MOTHER WILL BABYSIT - small children at home, lots of lover and care. Mary, 399-6128.

ASPHALT PAVING - and sealing. Bob, 475-4382.

HOUSE PAINTING - interior/exterior, professional, quality materials, insured. Bob, 289-7657 after 6 p.m.

CARPETS INSTALLED - quick dependable service, repairs, free estimates. Jim, 821-0187 after 5 p.m.

PROFESSIONAL TYPING - Debbie, 727-5475.

FIRESIDE CHIMNEY SWEEPS - all types of flues. Special employees summer discount. $10 off. Fully insured. Mike, 584-6425.

CERAMIC CLASSES - relax & enjoy a satisfying hobby. Shoreham area. 821-0215 after 6 p.m.

SIGHT SEEING FLIGHTS - aerial photogr., Long Island, Conn., New York, modern all weather aircraft. 929-6148, day or eves.

MATURE WOMAN - willing to babysit in my home. 286-2131.

BRIDAL UMBRELLA - seat, wishing well -for rent. All for $15. 475-0037.

AUTO REFINISHING - all areas of body work performed. Reasonable rates. Bob, 744-4047 after 5 p.m.

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