BROOKHAVEN BULLETIN
Vol. 42 - No. 20 May 20, 1988
BROOKHAVEN NATIONAL LABORATORY

Technology Transfer Efforts Earn Three Awards From FLC

Cruising down the Potomac River on the *Spirit of Washington* last Tuesday, BNL'ers were on board to receive awards for their technology transfer efforts from the Federal Laboratory Consortium (FLC).

Chemist Suresh Srivastava and Research Engineer Dmitri Stephani each earned a 1988 Special Award for Excellence in Technology Transfer, and William Marcuse, the Lab's Consortium representative, was named FLC Representative of the Year.

This brings BNL's total of FLC Special Awards to five, since the Consortium established the award in 1985.

FLC was established in 1974 to facilitate the transfer of federally owned technology to state and local governments and to industry. The Consortium is a national network of technology transfer representatives from about 600 federal labs, having access to most unclassified federally sponsored research.

Srivastava, who is Head of the Radionuclide and Radiopharmaceutical Research Group, Medical Department, was cited "For unusual initiative in introducing the red blood cell kit to industrial sponsors and convincing them to commercialize it for use in millions of clinical examinations annually."

Srivastava's kit readily labels red blood cells with technetium-99m, which are then used in diagnostic nuclear medicine for imaging vital organs. Over two million such diagnostic studies are performed annually worldwide. For developing this kit, Srivastava had won an I-R 100 award in 1986.

Knowing that his kit could be useful clinically, Srivastava searched for a pharmaceutical company to produce it. In 1986, his initiative resulted in an exclusive license for the kit being granted to Mallinckrodt. This company expects to market the product early in 1989, with the first year's market value to be $3-5 million.

FLC cited Stephani, Instrumentation Division, "For creativity in inventing hybrid preamplifiers and uncommon initiative in promoting commercialization through assisting manufacturers to produce, advertise and market thousands of units annually."

Stephani's hybrid preamplifiers are used in nuclear radiation detectors. These five electronic devices increase the amplitude of very small electrical charge impulses produced from the interaction of nuclear radiation and matter, so that the signal can then be processed.

After winning I-R 100 awards for two of these devices in 1985 and 1986, Stephani received many requests worldwide and thus realized their commercial potential. He approached REL-LABS to market the devices and then assisted them in getting the product from the factory into the marketplace. At present, REL-LABS and Centalab are selling tens of thousands of these devices each year, with the market growing at a rate of around five percent per year.

Roger Stoutenburgh

Federal Laboratory Consortium award winners: (from left) Suresh Srivastava, William Marcuse and Dmitri Stephani.

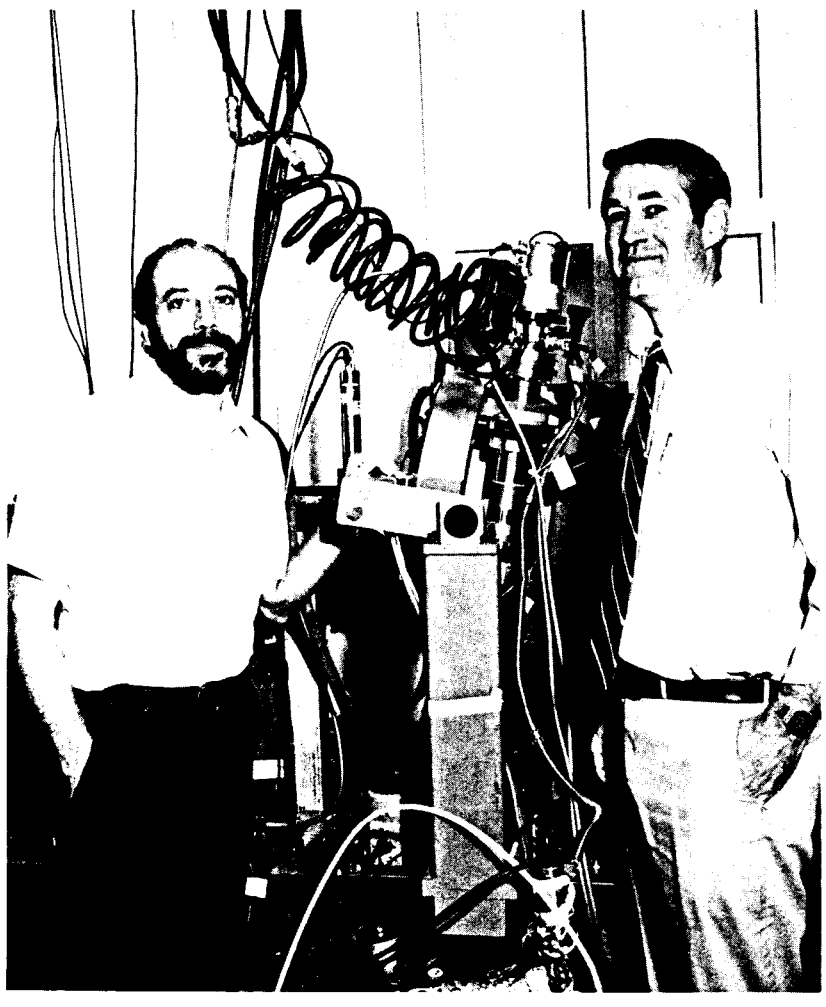
FLC named Marcuse, Head of BNL's Office of Research & Technology Applications (ORTA), their Representative of the Year for his role in assisting with the initiative to transfer x-ray lithography and synchrotron radiation technology for the commercial manufacture of high speed computer chips.

After an initiative was begun at the National Synchrotron Light Source (NSLS), the NSLS, with ORTA's assistance, sponsored a series of X-Ray Lithography Source conferences open to the computer chip industry. As a result, NSLS machine physicists and computer chip manufacturers came up with the specifications for a compact synchrotron dedicated to x-ray lithographic production of microchips, the technology for which will be transferred to industry.

This initiative spearheads a current national effort to ensure U.S. capabilities to produce advanced semiconductors for military and civilian purposes, and to bolster U.S. competitiveness in the computer chip market worldwide.

To Your Health

Lyme disease, its prevention and cure, will be the topic discussed today at noon in Berkner Hall. The speaker is Raymond Dattwyler, the physician who heads the Lyme Disease Clinic at the University Hospital, State University of New York at Stony Brook. The talk is sponsored by the Health Promotion Program of the Occupational Medicine Clinic, and all are invited to attend.


Peter Horton

Robert Birgeneau, Paul Horn To Receive Warren Award

The American Crystallographic Association (ACA) will present its 1988 Warren Award to Guest Senior Physicist Robert Birgeneau (right), Massachusetts Institute of Technology (MIT), and Guest Scientist Paul Horn (left), International Business Machines (IBM), at the ACA's annual meeting in June.

Horn and Birgeneau are being cited for their work on a series of experiments on diffraction from two-dimensional systems, in which they used BNL's National Synchrotron Light Source (NSLS). Here, they are standing at the IBM/MIT beam line at the NSLS. They will start on a new series of experiments when the x-ray ring at the NSLS comes up this summer.

The ACA presents the Warren Award every three years. In 1973, the recipients were BNL Senior Physicists John Axe and Gen Shirane, Physics Department.

LIA Learns About the Lab

Peter Horton

The Long Island Association (LIA) is the region's largest business and civic group. In addition to chamber of commerce-type activities, LIA involves itself in issues such as the environment, energy and water quality, which affect the general Long Island community. To learn about the part of the Long Island community that is BNL, eleven LIA members visited the Lab in early May. After receiving an overview of Lab activities from BNL Director Nicholas Samios (fourth from right), the group took a tour that brought them to Bldg. 902, where superconducting magnet research and development is conducted; PETT VI; and the National Synchrotron Light Source.

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 the designated contact at the extension listed.

NUREG/CR-4715
BNL-NUREG-52017
Contact: A. Fort, Ext. 2114
An Aging Assessment of Relays and Circuit Breakers and System Interactions. G.J. Toman et al.

BNL-52078
Contact: Ext. 2223
Solidification of Problem Wastes. Annual Progress Report, Oct. 1985 - Sept. 1986. E.M. Franz et al.

BNL-52080
Contact: S. Zuhoski, Ext. 3359
Advanced Condensing Heat Exchangers. Annual Report, Phase A. G.H. Strickford et al.

BNL-52085
Contact: G. Searles, Ext. 4464
Assumptions, Uncertainties, and Limitations in the Predictive Capabilities of Models for Sensitization in 304 Stainless Steels. D.G. Schweitzer et al.

NUREG/CR-4981
BNL-NUREG-52092
Contact: G. Searles, Ext. 4464
A Safety Assessment of the Use of Graphite in Nuclear Reactors Licensed by the U.S. NRC. D.G. Schweitzer et al.

NUREG/CR-4985
BNL-NUREG-52095
Contact: A. Fort, Ext. 2114
Indian Point 2 Reactor Coolant Pump Seal Evaluations. M. Subudhi et al.

ANS Meeting

Kenneth Rogers, Commissioner of the U.S. Nuclear Regulatory Commission, will be the speaker at the May dinner meeting of the Long Island Section of the American Nuclear Society (ANS), on Tuesday, May 24, at the Bavarian Inn, Lake Ronkonkoma. His topic will be "Nuclear Reactor Regulation: Looking Ahead."

Rogers will be introduced by Walter Kato, Chairman of BNL's Department of Nuclear Energy, at 8 p.m., following cocktails at 6 p.m. and a buffet dinner at 7 p.m.

For reservations at $14.50 per person for L.I. Section members and spouses and $16 for other attendees, call Amalia Ruggiero, Ext. 7517.

New Chief Problem Solver

Peter Horton

Problem solvers — that's what you could call the members of the Employee Relations Committee (ERC) each time they help a non-bargaining, non-scientific employee with a work-related problem that the employee could not resolve with the supervisor.

When the chairmanship of the ERC was recently vacated, Laboratory Director Nicholas Samios asked Michael Zguris to fill it. As chairman, Zguris is responsible for overseeing the ERC's commitment to hearing all sides of an issue and resolving all problems within 30 days. A committee member since 1986, Zguris can be reached at the ERC's special number, Ext. 4005.

A Wish Comes True — LILCO Pays the Bill

When you pay your electric bill, do you ever wish it were the other way around — that LILCO were paying you? That's what happened earlier this month to BNL, when LILCO sent the Lab a rebate check for $10,000.

BNL earned the rebate by reducing the Lab's electrical energy expenditures for lighting, while maintaining safe and comfortable lighting levels. This was done as part of LILCO's "Dollars & Sense" energy rebate program for businesses, through BNL's Miscellaneous Lighting Modifications Project.

The project was conceived by the Energy Management Group of Plant Engineering (PE), funded under the Department of Energy's In-House Energy Management Program and is being designed and coordinated by PE's Electrical Engineering Group.

The lighting that was modified to earn this rebate includes the 11,089 fluorescent lamps in Buildings 510 and 515. By replacing standard 40-watt lamps with 34-watt lamps that produce about the same light output, the Lab reduced energy consumption 15%.

In addition, 4,703 of the standard electromagnetic ballasts that provide the proper voltage and current to start and operate the fluorescent lamps were replaced with electronic ballasts. The new ballasts use about 35% less energy, run more quietly and last longer.

At a savings of $80,000 per year, plus the rebate, the $207,555 cost of this work will be paid back in less than three years.

But this is not the whole project. The Lab expects to realize even more savings, and perhaps another rebate, when similar lamps and ballasts are installed in other buildings and ultrasonic motion sensors are installed in the tunnel for the proposed Relativistic Heavy Ion Collider. These devices automatically sense whether rooms are occupied and turn lights on or off accordingly. When this part of the project is completed next year, at a total cost of $538,000, it will begin saving BNL $190,000 a year, for another payback period of less than three years.

Roger Stoutenburgh

Alfred Mahlmann (second from right), Manager of Plant Engineering (PE) accepts the $10,000 rebate check from LILCO from Mark Culp of PE's Energy Management Group. Also on hand are John DiNicola (right), Supervisor of PE's Electrical Engineering Group, and Construction Inspector William Kerns, who holds a 34-watt fluorescent lamp and an electronic ballast like those replaced in Buildings 510 and 515 to earn this rebate.

In Memoriam

Julius Milau, who retired in May 1981 as a Project Engineer in the Department of Applied Science (DAS), died on May 11. He was 66 years old.

Milau had been at BNL for more than 25 years, having started in November 1955, as a Junior Technical Specialist in the Department of Nuclear Energy.

He was a resident of Port Jefferson. He is survived by his wife Dorothy and his two sons, Michael and Kenneth, all of Port Jefferson; and his mother Claire, of the Bronx.

Nursery School

The Upton Nursery School is now accepting enrollment of three- and four-year-old children for the 1988-89 school year. The school, a cooperative preschool held on site in the Recreation Building, is open to families of BNL employees and their relatives.

For more information, call Marypat Takacs, 727-3218, or Marietta Veligdan, 878-6098.

IBEW Meeting

Local 2230 will hold its regular monthly meeting on Monday, May 23, at 6 p.m., in the Knights of Columbus Hall, Railroad Avenue, Patchogue. On the agenda will be regular business, committee reports and the president's report.

Getting Computers to Respond in English

When you ask your computer a question, does it respond in English?

"Getting Computers to Respond in English," will be the topic addressed by Kathleen McKeown, Associate Professor of Computer Science at Columbia University, on Thursday, May 26, at 3:30 p.m., in the Applied Mathematics Seminar Room, Bldg. 515. The lecture is sponsored by Brookhaven Women in Science and the Applied Mathematics Department, and all are invited to attend.

A field in computer science, language generation aims to program computers so that they respond to their users' input in everyday language that makes sense.

Computers can produce language whether their users interact with them or not. Computers can generate answers to users' questions typed in everyday language, such as when running a tutorial program. Or they can regularly produce descriptions of their stored information, such as by compiling an evening summary of stock market activity.

In both cases, a language generation system must decide what the computer is to say and how to say it — but its programmer must first have made such decisions. Many factors — such as who will be using the system — influence and constrain these decisions, so language generation researchers must first identify these factors and represent them computationally.

In her talk, McKeown will discuss the influences and constraints on language generation systems with regard to two different applications: an expert system that advises students about course selection and a question-answering system that describes physical objects.

Kathleen McKeown joined the Columbia University faculty as Assistant Professor in 1982; she was promoted to Associate Professor in 1987. In addition to directing the research of six Ph.D. graduate students, McKeown conducts her own research under a National Science Foundation Young Investigator Award, 1985-90.

She received her M.S. and Ph.D. in Computer and Information Science from the University of Pennsylvania in 1979 and 1982, respectively. While researching the generation of natural language text as her Ph.D. topic, McKeown was twice awarded an IBM Research Fellowship, and she received an award for an outstanding doctoral dissertation from the American Society of Information Science, 1983.

The daughter of Marilyn McKeown, Physics, Kathleen McKeown received an Associated Universities, Inc., scholarship, which she used for study at Brown University, where she was granted her A.B. in Comparative Literature in 1976.

Before the lecture, a luncheon will be held in honor of the speaker at noon, at the Brookhaven Center, at a cost of $6.25 per person. All those interested in attending, please call the Cafeteria, Ext. 3541, to make your reservations.

Note to Diners

On Saturday, May 21, the Cafeteria will be closed due to the Science Fair. The snack bar service normally provided at the Cafeteria will be available from 9 a.m. to 2 p.m at the Brookhaven Center.

Cooking Exchange

For the final meeting before the summer break, members of the Cooking Exchange will demonstrate dessert specialties, on Wednesday, May 25, from 12:30 to 2:30 p.m., in the Recreation Building. If you have a sweet tooth, be sure to come and taste the delicious desserts.

Brookhaven employees and their families may attend the meeting and sample the different dishes after watching the demonstration. There is a $2 fee per adult, which is used to help defray the cost of the ingredients. Babysitting is provided at 50¢ per child.

Theater Group

The Theater Group will meet on Monday, May 23, at 8 p.m., in the North Room of the Brookhaven Center. The program will be a reading of *Angel Street*. All are cordially invited.

Softball

Games for week of May 9

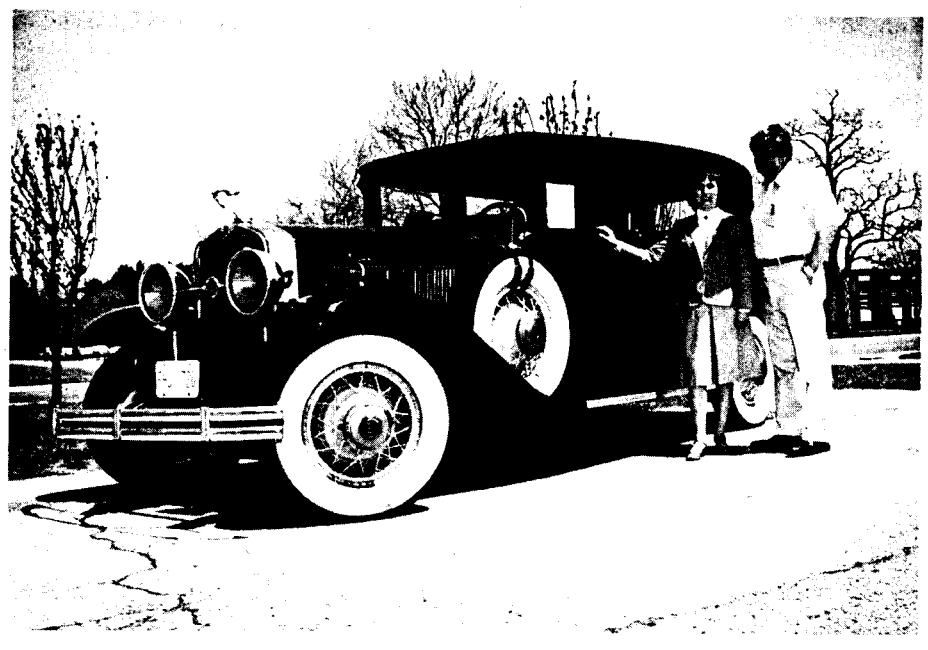
League I
Light Source 17 - Cutting Edge 6
Blue Jays 10 - Ravens 5
Bandits 19 - Sudden Impact 3
Phoubars 7 - Cool 'n Gang 3

League II
Dirty Sox 6 - Moles 4
Titans 9 - Medical 8
Phase Out 4 - AMD Bombers 2

League III
Farm Team 15 - The Source 6
Foul-Ups 13 - Kidz-R-Us 8
Snakebites 18 - Survivors 7

League IV
Spacekadets 15 - Sandboxers 7
Seventh Inning Stretch 7 - Mudville Sluggers 5
Turkeys 24 - The Far Side 21
Who Cares 23 - Underalls 22

Antique & Classic Car Show Every Wednesday



Peter Horton

This 1930 LaSalle, owned by Cheryl Conrad and Doug Pope, is one of the cars you're likely to see if you visit the parking lot across from Berkner Hall, any Wednesday at lunchtime. That's when the members of the BERA Antique & Classic Motoring Club will gather regularly with their well-kept automobiles, and all are invited to stop by to see them.

They Biked the Five Boroughs

Roger Stoutenburgh

Can you imagine riding 36 miles through all five of New York City's boroughs, without any cars with which to compete? These BNL'ers could — and did, on Sunday, May 1, when they participated in the 12th annual Five Boro Bike Tour. Along with approximately 22,000 other cyclists, they left Battery Park in Lower Manhattan at about 8:30 a.m., pedaling over bridges and through the Bronx, Queens and Brooklyn, until they ended their ride in Staten Island at about 1 p.m.

Looking forward to next year are: (rear, from left) Don David, Carrie Grimshaw, Richard Garrett, John Dubendorff, Susan Pepper, Larry Fareria and Michele Rabatin; (front, from left) Menno Oversluizen, Chris Buckley, Alastair MacDowell and Nancy Lazarz. Not present for the picture were Richard Greene, Michael and Karen Knotek, and Jack Lazarz.

Speakers Bureau

Anthony Baltz (Phys.), **Gerd Dimmler** (Instr.), Gelinas Junior High School Science Fair, Science Fair Judges, January 12 & 13.

Cosmore Sylvester (NSLS), **Abass Wessen** (PE), Minorities in Engineering and Applied Science at State University of New York at Stony Brook, Careers in Engineering at BNL, February 3.

John Hennessey (PE), **William Sells** (S&EP), BOCES/Brookhaven Learning Center Career Awareness Day, Careers in Plant Engineering, February 3.

Donald Gardner (Phys.) Suffolk County Boy Scouts Career Awareness Day at Connetquot High School, Careers in Mechanical Engineering at BNL, February 4.

William Marcuse (DO), Route 110 ACTION, Technology Transfer at BNL, February 9.

Marsha Kipperman (Pers.), Career Day at Riverhead High School, Careers at BNL, February 10.

Robert Thomas (Chem.), Bellport High School Step Program, Minorities in Science, February 22.

Michael Rowe (DAS), East Moriches Union Free District School, How Scientists Do Science, February 24.

Otto White (S&EP), Minorities in Engineering and Applied Science at State University of New York at Stony Brook, Careers at BNL, February 24.

Ronald Longacre (Phys.), Shoreham Wading River High School, The Creative Process in Science, March 9.

Victor Gutierrez (DO), REAP Group at Herrick Public Schools, Energy Efficiency and Solar Energy, March 28.

K.C. Wu (ADD), ASME Student Group at State University of New York at Stony Brook, Careers in Mechanical Engineering at BNL, March 29.

Leslie Fishbone (DNE), State University of New York at Stony Brook, International Safeguards, March 29.

Peter Cameron (AGS), Biofeedback in the Left/Right Hemisphere of the Brain; **Gerry Morgan** (ADD), Applied Superconductivity; **James Powell** (DNE), Antimatter; **Meyer Steinberg** (DAS), How to Solve the World's Problems by Turning Gold Into Lead, Island Convention VII; Science Fiction/Science Fact at State University of New York at Stony Brook, April 16.

William McGahern (AGS), Career Awareness Exploring Program at Ronkonkoma Junior High School, Careers in Engineering, April 21.

Victor Gutierrez (DO), Scientist of the Month Program at Forest Lake School, Solar Energy, April 29.

AACC Dinner Dance

The Afro-American Culture Club (AACC) will hold its annual Installation/Dwight C. Brown Memorial Scholarship Award Dinner Dance on Saturday, June 4, in the Brookhaven Center from 7:30 p.m. to 2 a.m.

The ticket price of $25 includes a cocktail hour from 7:30 to 8:30, dinner and music by ET.

For ticket information, contact Mary Durham, Ext. 7143; April Donegain, Ext. 2459; Fran Ligon, Ext. 3709; Bruce Penn, Ext. 7213; or Deidre Seymore, Ext. 5037.

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Social Club Trips

Both the rafting trip and the Cruise to Nowhere have been cancelled, due to lack of interest.

The Mystery Trip on September 3 is filling up, but reservations are still available. The three-day trip costs $219 per person, two to a room, or $215 per person, three to a room.

The Las Vegas/Honolulu/San Francisco tour beginning October 18 has 12 people with confirmed reservations, so if you were hesitating to sign up because there might not be enough other people, don't wait. Reservations for this 12-day trip are available at $1,425 per person, two to a room, or $1,396 per person, three to a room.

For more information, call Doris Terry, Ext. 2228.

Bowling

Red/Green League

The Sandbaggers are the league champions. High games were bowled by K. Asselta 223, E. Meier 213, K. Riker 208, C. Bohnenblusch 204, H. Dawson 202.

Purple League

Four of a Kind are the league champions. High games were bowled by Ed Meier 219, Bob Jones 214, Sharon Smith 200.

Peter Horton

One Suggestion Is Worth $470

John Usher, a Nuclear Engineer in the Department of Nuclear Energy, was recently presented with $470, for his suggestion to recycle toner cartridges used in laser printers. By replacing this stock item with cartridges that come with four refills, like the one Usher is inserting here, the Laboratory will save $4,700 annually.

Original, cost-saving suggestions for the Lab are always welcome and employees who submit new ideas will receive a "thank you" mug from the Employee Suggestion Program.

Arrivals & Departures

Arrivals

Michael C. Armijo ..... Biology
Ronald R. Harding ..... Plant Eng.
Michael Piccione ..... Plant Eng.
Thomas C. Roberts ..... DNE
Joel W. Spinner ..... AGS

Departures

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

Patricia A. Aud ..... DAS
Jack P. Sadousky Jr. .... Sfgrds. & Sec.
Catalin Vintilescu ..... AGS

Cafeteria Menu

Week of May 23

Monday, May 23

Tomato rice soup	(cup)	.75
	(bowl)	.95
Sautéed beef liver w/onions & 1 veg.		2.75
Country captain chicken w/1 veg.		2.85
Spinach bacon & egg chef's platter (lite-weight)		2.25
Hot deli: Baked ham	(bread)	2.75
	(roll)	2.85
	(hero)	2.95

Tuesday, May 24

Garden vegetable soup	(cup)	.75
	(bowl)	.95
Beef, macaroni & tomatoes w/1 veg.		2.75
Fresh fish Florentine w/1 veg.		2.95
Baked fish w/lemon & 1 veg. (lite-weight)		2.95
Hot deli: Italian meatball hero		2.85

Wednesday, May 25

French onion soup	(cup)	.75
	(bowl)	.95
Roast top round of beef au jus w/1 veg.		3.05
Pork El Paso w/1 veg.		2.95
Yogurt fruit plate (lite-weight)		2.25
Hot deli: Roast breast of turkey	(bread)	2.75
	(roll)	2.85
	(hero)	2.95

Thursday, May 26

Beef noodle soup	(cup)	.75
	(bowl)	.95
Chicken breast piccata w/1 veg.		2.95
Spaghetti w/meat sauce & garlic bread		2.85
Baked fish w/parsley lemon butter (lite-weight)		2.85
Hot deli: Corned beef	(bread)	2.75
	(roll)	2.85
	(hero)	2.95

Friday, May 27

Manhattan clam chowder	(cup)	.75
	(bowl)	.95
Fried chicken livers w/1 veg.		2.75
Fillet of fish amandine w/1 veg.		2.95
Hot deli: BBQ pork on a bun		2.85

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.

2858. ENGINEERING POSITION - Requires BS in engineering, knowledge of O&M standard operating procedures, practical knowledge of QA, and the experience or the desire and ability to become a training instructor. Technical writing skills and knowledge of standard procedure preparation is desirable. Will assist in training personnel in craft skills and procedures, preparation of standard operating procedures, and documentation or preparation of formal QA program. Plant Engineering Division.

OPEN RECRUITMENT - Opportunities for Laboratory employees and outside applicants.

2859. ENGINEERING POSITION - Requires a BS or MS in electrical engineering or equivalent with broad experience in analog circuit design. Experience in sophisticated instrumentation, low-level high-noise immunity circuit design and computer interfacing required. Accelerator Development Department.

2860. ENGINEERING POSITION - Requires a BS or MS in electrical engineering or equivalent with experience in power electronics, power supplies and solid state conversion techniques. Experience in multikilowatt power supplies and fast pulsed power techniques a plus. Accelerator Development Department.

2861. ENGINEERING POSITION - Requires a BS in electrical engineering or computer science and five years' experience in microprocessor system design. Must have strong hardware design and microprocessor software development skills. Familiarity with A/D and D/A interfacing required. Experience with multitasking, real-time operating systems and networking a plus. Candidate should have experience with project planning and good communications skills. Alternating Gradient Synchrotron Department.

2862. TECHNICAL POSITION - Requires BS in chemistry, environmental science or equivalent experience and background in priority pollutant and related analyses as required by regulatory agencies. Demonstrable experience in the operation of AA, GC, HPCC and GC/MS required; knowledge of environmental and workplace regulations is desirable. Will conduct chemical analyses as part of an environmental monitoring program. Safety and Environmental Protection Division.

2863. ENGINEERING POSITION - Requires MSEE and knowledge of small signal rf detection. Familiarity with nuclear physics detection techniques such as pulse height analysis in both the time and frequency domain is necessary. National Synchrotron Light Source Department.

Autos & Auto Supplies

87 FORD E150 VAN - large, 6 yr. warranty. Dave, Ext. 2076.

87 LAZER II - Black Magic special edition; 87 trailer, $2,500. Bob, 273-4258 eves.

86 CAMARO IROC-Z28 - red/black, loaded, T-tops, louvers, excel. cond., $11,000. neg. Ext. 2276 or 727-1412.

85 OLDS CIERRA - V6, 35k mi., a/c, p/s, p/b, new tires, grey, $6,900. Al, 935-9449.

84 CHEVETTE - a/t, am/fm cass., new tires, excel. cond., $2,500. 878-0874 after 5 p.m.

84 FORD MUSTANG - console, am/fm tape, p/s, p/b, a/c, sunroof, alum. wheels, 2.3 liter, excel. cond., $4,900. Ext. 4846 or 363-6940.

82 CADILLAC SEVILLE - black/grey, loaded, mint in/out, must see. Ext. 4821 or 727-1412.

82 CHEVY C30 TRUCK - 14' flatbed, a/t, 14k mi., excel. cond., $7,300. 265-4715 after 6 p.m.

81 FORD ESCORT - 4 speed, 65k mi., runs well, high mpg, $1,750. 289-7607.

81 FORD FAIRMONT - wagon, light blue, roof rack, 6 cyl., p/s, p/b, a/c, am/fm cass., clean, $1,800. 736-2494.

80 YAMAHA 850 - 6k mi., fairing, trunk, excel. cond., $975. Ext. 2674 or 878-0175.

80 MONZA - 4 cyl., 4 speed, looks good, needs some work, $850. Ext. 2175.

79 BMW 320I - red, dealer maintained, a/t, sunroof, a/c, f/b spoilers, stereo, mags, beautiful, $4,500. 623-3367.

79 FORD PINTO - wagon, 4 speed, reliable, good cond., new exhaust, am/fm, $600. Graham, Ext. 4253 or 331-4171.

79 FAIRMONT SW - 4 cyl., 4 speed, runs OK, body damaged, handy size, good utility car, $300. Tom, Ext. 7196 or 286-2505.

79 MUSTANG - 8 cyl., p/s, p/b, a/c, am/fm cass., good cond., asking $2,000. Ext. 2175 or 399-0224.

78 VW DASHER - needs motor, 4 speed, body good cond., $200. 924-3225 after 4:30 p.m.

78 TOYOTA COROLLA - wagon, well maintained, available first week of June, $850. Dave, Ext. 4256.

77 HONDA ACCORD - runs, rusted, needs brakes, 5 speed, $300. 924-3225 after 4:30 p.m.

77 OLDSMOBILE CUTLASS SUPREME - runs well, recent tune-up, $1,200. Helen, Ext. 2671.

77 PEUGEOT 604 - needs some work, will consider partial trade for VW 412 or Bug. Dave, 878-8541.

76 MUSTANG GHIA - 48k orig. mi., a/c, a/t, red, excel. cond., $1,895. Ext. 5400 or 878-6098.

76 CADILLAC SEVILLE - brown w/tan int., 350 V8 fuel-injected, low mi., new exhaust, p/w, p/b, needs body work, must sell, $1,200. 736-2494.

76 JEEP CJ7 - 6 cyl., a/t, w/6' snow plow, body rust, $3,150. Beeper 830 or 286-0204.

75 SUZUKI 250GL - very good cond., $275; 2 extra wheels/tires, $40. Ext. 7699 or 821-1435.

75 COLEMAN YORKTOWN CAMPER - sleeps 7, needs work. John, 732-7247.

74 PLYMOUTH DUSTER - no rust, new tires, battery, muffler, engine problems, $250. Ext. 4240 or 286-0295.

73 VW 412 - 4 dr., a/t, rebuilt engine, runs well, $250. Yang, Ext. 3663 or 924-1376.

73 HOLIDAY VACATIONER - 26', clean, skylight & cedar in bath, asking $4,500. 289-4732 after 6 p.m.

FORD F-250 TRANSMISSION - 4 speed, $300; industrial electric 5 h.p. motor, $150. Ext. 2031.

TIRES - 5, almost new, 2-15R15, all weather radial, $100; 1-55x13 snows, $30. Ken, 289-8212.

TIRES - 4, General radials, P185/75R14, mud & snows, less than 4k mi., unmounted. Ext. 7562.

CENTURY 200 CAR SEAT - $14. Ext. 3705 or 862-7998.

Boats & Marine Supplies

28' MORGAN - 1971, sleeps 5, autopilot, knot/log, depth, vhf. Campbell, 286-3675.

23' CHRISCRAFT - glass hull, 350 V8, many extras, $2,495. 878-0175.

22' MARATHON WEEKENDER - 1986, 170 h.p. Mercruiser, Shoreline trailer, cuddy, camper canvas, loaded, $15,900. Ext. 3341 or 981-9474.

19½' CORINTHIAN SAILBOAT - fiberglass w/full keel, sleeps 2, OB, etc., $3,995. Ext. 4637 or 692-8659 after 6 p.m.

17' O'DAY DAYSAILER - new sails, new trailer, 3 h.p., boat, $1,000; trailer, $400. Ext. 2109 or 472-9199.

16' HOBIE CAT - & trailer, multi-color sail, extras, $2,000. Ext. 4122 or 286-0872 after 6 p.m.

14' BLUEJAY SLOOP - w/trailer, as is, $400 or best offer. Ext. 7657 or 924-2933.

14' SAILBOAT - flat, 2-person, dagger board rudder & sail, $50. Harry, Ext. 5248 or 744-2715.

12' SEAGULL SAIL - needs work, $450 neg. Rick, Ext. 4662 or 744-6059.

BAYLINER BOWRIDER - 1984, mint, 125 h.p. Volvo I/O, used 100 hrs., fully equipped, $6,800. Ext. 2981 or 424-6916 eves.

AMF SUNFISH SAILBOAT - good cond., $550. Ralph, Ext. 4171.

SAILFISH - red/white, good cond., $250. Jim, Ext. 3372 or 821-0250.

WATER SKIS - Ski-Master 57 fiberglass & metal; O'Brian water vest, small, used once, orig. $140, sell for $65. Ext. 2981 or 744-1440.

Miscellaneous

AQUARIUS COMPUTER - w/16k memory, data rec., printer, file form, etc., good starter system, make offer. Bernie, 588-4987.

STEREO - all Pioneer components, receiver, 100w per tape deck, turntable, 6-way speakers; GE microwave, full-size, $200. Sheldon, Ext. 3499.

COLECO POOL - 24'x4', filter, pump, hoses, some chemicals, you take down, $200. 669-5181.

END TABLES - 2, good cond., dark wood, $25/both. Fred, 924-3565.

BICYCLES - & parts, Schwinn, $15/all; 5-hole automobile rims, $7.50/each. Ext. 4475 or 5114.

GRANDFATHER CLOCK - moving moon dial, triple chime movement, $400. Joe, Ext. 2898.

QUEEN-SIZE WATERBED - bookshelf headboard, heater, bumper pads, mattress pad, complete, good cond., $200. 395-1228.

LAWN MOWER - 3½ h.p. tech. engine, rear bag type, no bag, $65. Dan, Ext. 4987 or 698-7322.

KITCHEN CABINETS - light wood, good cond., great for basement or utility area, best offer. Ext. 7115 or 744-5801.

3-SECTION SCREEN - amber plastic, bottle-glass pattern, oak frame, 78"x77", $20. Ext. 2981 or 744-1440.

PORTABLE TV - black & white, 10", $20; rock/maple coffee table, 34", $25; 20" girl's bike, $10. 878-6637.

COAL STOVE - ½ ton of hard coal, $200/all; Sears upright freezer, $150; ½ h.p. deep well jet pump, 2", $50. 924-6751 eves.

RIDING MOWER - 8 h.p., runs, needs some work, $150. 475-5448.

STACKABLE CHAIRS - 4, beige fabric back & seat, chrome legs, unused, $30/each. 727-6481.

BOY'S BICYCLES - $40, $20 and $10. 744-2275.

BOILER EQUIPMENT - original tankless coil for all M-series Repco boilers, never used, $45. Ralph, Ext. 4171.

COLOR GRAPHICS ADAPTOR - w/printer port for PC, $35; PC Junior International modem, $35. Bernie, Ext. 4842.

STORM & SCREEN WINDOWS - Sears, aluminum, never used. John, 477-9633.

POLAROID CAMERA - auto 250 w/case, flash, cable release, make offer. Ernie, 588-4987.

MUSIC CONSOLE - Colonial, maple, Pilot am/fm radio, turntable, speakers, $75 neg. John, 477-9633.

SOFTWARE - Microsoft Basic Interpreter for Apple MacIntosh, version 1.01, $40. Ext. 7716.

HUFFY LAWN TRACTOR - H1054, 8 h.p., pull start, Briggs & Stratton, 26" cut, tuned, $250. Ext. 3428 or 427-6728 eves.

CHINA CLOSET - antique, oak, $200. Ext. 2109 or 472-9199.

DINING TABLE - w/6 chairs & 2 leaves, oval shaped, dark wood, excel. cond., $150 firm. Ext. 4743.

DINETTE - w/2 swivel chairs, good cond., $50. 369-2716 after 6 p.m.

SCHWINN BMX BIKE - chrome, mag wheels, orig. $200, sell for $45. Ext. 2109 or 472-9199.

LOUNGE CHAIR - & ottoman, $75; Eureka upright vacuum, $40; 19' b&w tv, $35; Waring blender, $15; punch bowl, $25. Ellie, Ext. 3395 or 325-1537.

TICKETS - 2, Garrison Keillor, June 4, 2:00 p.m., Radio City Music Hall, $29/each. Bergoffen, Ext. 2760 or 286-1533.

SCREENS & STORM WINDOWS - wood, 9 each, good cond. Cliff, Ext. 3794.

MOTORCYCLE HELMET - red, like new, $25. Jim, Ext. 3372 or 821-0250.

IBM REDACTOR TYPEWRITER - script & adiutant typing heads, good cond., asking $75. 666-7218, 4 p.m.-6 p.m.

FISHING EQUIPMENT - rods, etc.; carpenter's tools; lawn tractor, needs repair. Jack, 399-0969.

FRENCH PROVINCIAL HUTCH - w/bar, good cond., $200. Barbara, Ext. 4960 or 924-3674.

IBM TYPEWRITER - model C, good cond., long platen, $100. Dave, Ext. 2694 or 941-9022.

PHOTOGRAPHY EQUIPMENT - Bower-X, Sekomic L-206, Yashica-44. Rick, Ext. 4662 or 744-6059.

POOL SUPPLIES - diving board, vacuum head & hose, stabilizer pillow, etc. Ext. 4727.

Yard Sale

EAST MORICHES - May 21-22 (9 a.m.-4 p.m.), moving overseas, 51 Woodlawn Ave. Ext. 3817 or 878-1210 for directions.

SHOREHAM - May 28-29, moving, all must go, Ashley Lane.

Car Pools

PATCHOGUE - van pool, seat open, leave name and number. Ext. 4669.

W. ISLIP-BAYSHORE - looking to join car pool, 8:30-5:00. Mike, Ext. 2705.

Free

SOFABED - queen size. 289-8253.

REEL-TO-REEL TAPES - box of classical music. 744-8655.

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 Rent

BELLPORT - 4 br, 3½ baths, Jacuzzi, in walking distance of bay and village. 286-0269 eves.

BROOKHAVEN HAMLET - 4 bdrm. house, 2 baths, share w/two other professionals, ¾ acre, $350 includes all. Sydney Stafford, 286-4028.

CALVERTON — 2 bdrm. townhouse, 5 appliances, f/p, cac, w/w, fenced patio, upper deck. 878-0874 after 5 p.m.

MILLER PLACE - 2 bdrm. house, f/p, walk to beach, furnished, w/d, quiet, $975 + util. 473-3349.

PORT JEFFERSON STATION - 2 bdrm. ranch on 1½ acres, l/r, kit., dining area, full bath, bsmt., garage, off Canal Rd., avail. July 1, $825/mo. + 1 month security. 473-6432.

ROCKY POINT - large, sunny, immac., 2-room apt., walk to beach, $400/mo. incl. util., cable TV. 744-2045.

SHIRLEY - studio apt., private entrance and driveway, working single person, 10 min. from Lab. 399-0969.

STONY BROOK - June and July, 6 bdrm. house, fully equipped, swimming pool, $1,200/mo. 689-6416 eves.

LAKE PLACID - modern 2 bdrm. A-frame, loft, sleeps 8, full furn., near swimming, boating, golf, tennis, hiking, more. 757-1775 after 3 p.m.

HILTON HEAD, S.C. - 2 bdrm. condo, sleeps 6, beach, pool, golf, tennis. May-Sept $420/wk. 585-9149.

N. MYRTLE BEACH, S.C. - 1 bdrm. ocean-front condo, sleeps 4, near golf, piers, fishing, amusements, $375/wk. Bill, Ext. 2377 or 399-6168.

For Sale

CENTER MORICHES - 3 bdrm. ranch, 1½ baths, att. gar. and storage shed, lot sized 111' x 160' on cul-de-sac. excel. loc. 878-0175.

EASTPORT - 2 bdrm., l/r, kit., bath, full bsmt., 100x120 property, good loc., close to school & shopping, beautifully landscaped, $115,000, firm. Ext. 2232 or 325-0835.

MILLER PLACE - Scotts Beach, 4 bdrm. ranch, ½ acre plus, private beach community, sunroom, spa, pool, city water, $190,000. Judy, 473-6631 after 5 p.m.

PORT JEFFERSON - Harbor Hills, 4 bdrm. split ranch, d/r, eik, family room w/fp, brick patio, winter waterview, 24'x44' bsmt., excel. cond., $199,000. Ext. 4483 or 473-3689.

PORT JEFFERSON - Harbor Hills, 3 bdrm. ranch, 3 baths, wooded, golf course setting, balcony, deck, patio, 2-car gar., 3-zone gas heat, $259,900. Ext. 3791 or 928-7154 eves.

RIVERHEAD - mobile home in adult park (over 55), 2 bdrm., 1½ baths, waterview on Peconic River, new floors, carpeting & bath, $35,000. 369-2838.

SETAUKET - north of 25A, 6 rm. cape, 2 baths, 2-car garage, wooded area, 3-Village schools, asking $190,000. 751-1401.

STONY BROOK - 4 bdrm. ranch, 2 bath, cac, w/w, Pella room ½ acre, 2-car garage, in-ground pool, $219,990. 751-7023, eves.

WADING RIVER - 3 bdrm. ranch, l/r w/ f/p, d/r, eik, 2 baths, 2-car oversized garage, 10'x24' deck with screen room, 1 acre, SWR schools, low taxes, $192,000. 929-3251 after 6 p.m.

HOLIDAY, FL. - Sandpiper 3 bdrm., 2-bath, cathedral ceilings, oversize gar., corner lot, laundry rm., clubhouse facil., pool, asking $80,000. 744-3968.

N. PORT RICHEY, FL. - 5 bdrm., 5 baths, 1 w/jacuzzi, l/r, d/r, custom kit. w/all appl., fam. rm., f/p, w/w, 3 a/c, 2-car gar., patio, pool. 1¼ acres, $195,000. 813-862-6262 or 698-0576.

ROCKLEDGE, FL. - block & stucco, 2 bdrm., 2 bath, fam. rm. 11x25 porch, carpet, shades, some drapes, extras, good loc., $64,500. 305-631-2840.

HILTON HEAD, SC - 3 bdrm. condo, sleeps 8, 2 baths, washer/dryer, wet bar, 6 tennis courts, 3 pools, whirlpool golf, ocean view, asking $89,000 or will rent. 929-8912.

Wanted

SMALL CAR - economical, good running cond., reas., for student son. Bill, Ext. 4312 or 281-6498.

VW CONVERTIBLE - any year, any shape. Kevin, Ext. 2031 or 878-4285 after 5 p.m.

HOUSEMATE - non-smoker, quiet, share condo, 5 min. from Lab., small room, low price. Ext. 2485 or 924-0123.

HOUSEMATE - share 2 bdrm. ranch on LI Sound, Rocky Point, $450/all. 744-9519.

TRIATHLETE TRAINING PARTNERS - Quan, 744-8386 or Anh, Ext. 2024.

CHILDREN TO BABYSIT - Middle Island mom will care for your children, 5 min. to Lab. 924-2205.

H.S. STUDENT - for lawn mowing and other seasonal domestic work in Bellport village. 286-3742 eves./wkends.

TEMPORARY HOME - for good natured, indoor, Persian cat, 2 months beg. June 1. 472-1735.

APARTMENT TO RENT - for up to $350/mo. Zeke, Ext. 5010.

HONDA ACCORD - 82 or 83. 718-456-8474.

BOBCAT/CEMENT MIXER/WET SAW - buy or rent. Tony, 698-9274.

H.S. STUDENT - outdoor helper, cut grass, lawn chores, E. Patchogue, south. Lola, Ext. 2265 or 289-0567.

AIR CONDITIONERS - 2 for 24" window opening, max. 7500 BTU. Ed, Ext. 7786.

DROP-LEAF TABLE - closed about 30x45, fully opened about 45x90, need to sit 8 or 10. 727-3608 after 5.

PART-TIME SITTER - on-site, for 3 yr. old boy, Fri. afternoons., Ext. 7657 or 924-2933.

APT. IN PT. JEFF/MT. SINAI AREA - ground floor accessible, garage. Janet, Ext. 2345 or 929-3910.

HOUSEMATE - non-smoker, share 3 bdrm. hi-ranch, Wading River, avail. Sept/Oct, $500 approx. Sam, Ext. 4023, 5211 or 929-3721.

HOUSE OR APT. - to rent, 3 or 4 bdrm., 1.5 baths, l/r, d/r, kit., wash/dry, family neighborhood, June. 914-245-0907.

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