BROOKHAVEN BULLETIN
Vol. 36 - No. 1 January 8, 1982
BROOKHAVEN NATIONAL LABORATORY

Investment Option Added To Retirement Program

To help individual employees meet their financial objectives for retirement, a new investment option—mutual funds—will be added on February 1 to the present AUI retirement program.

At the present time, employees who wish to supplement AUI's contribution to the regular TIAA/CREF retirement plan can make voluntary contributions via salary reduction to a TIAA/CREF Supplemental Retirement Annuity (SRA). The amounts by which employees elect to reduce their salaries are applied towards TIAA and/or CREF and taxes are deferred until they actually receive those monies. Effective February 1, mutual funds will be added as tax-deferred investment options for voluntary employee contributions. Otherwise, the AUI retirement program will remain unchanged.

A mutual fund is a special type of company, designed to provide a way for investors to pool their money to obtain professional supervision and diversification of their investments. Two prominent investment firms, the Fidelity Group and T. Rowe Price, were selected by an AUI committee on the basis of predetermined criteria as primary mutual fund options for voluntary employee tax-deferral retirement program contributions.

These firms offer a total of 17 mutual funds that include money market funds, equity funds (common stock), balanced funds (a combination of common stocks and bonds), and income funds (bonds and federal securities).

All the selected funds qualify as custodial accounts under section 403(b)(7) of the IRS code. Employees who prefer to select their own mutual funds may do so **if** the chosen fund also qualifies under section 403(b)(7) and **if** proper procedures are followed.

All regular full-time and eligible part-time employees may participate in the option, which will be available **only** as voluntary contributions made through a salary reduction agreement with AUI. Eligible employees can invest their own money in as many as

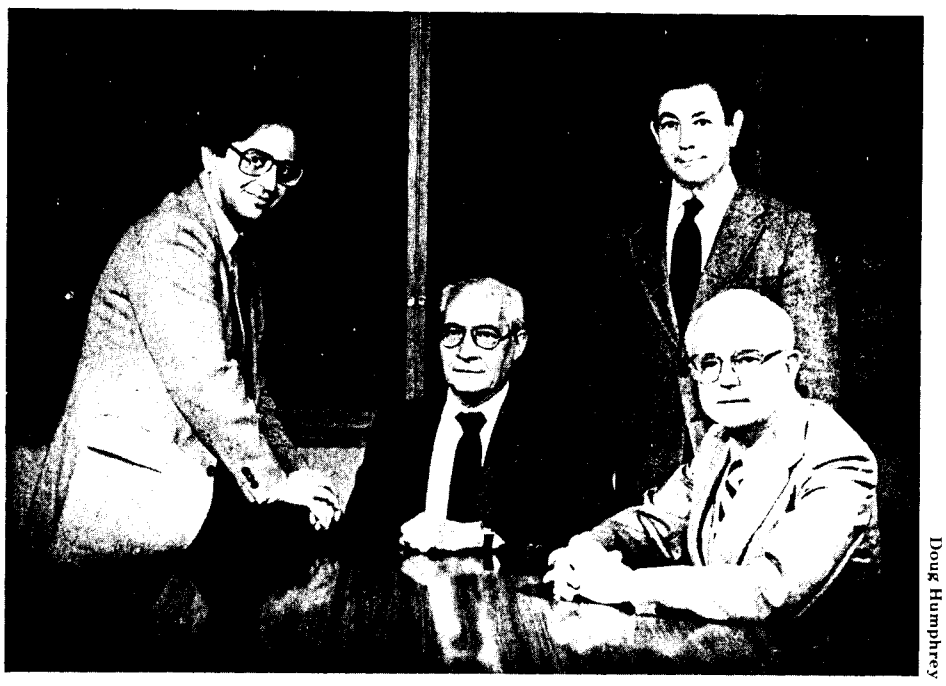
(Continued on page 2)

Samios Named Acting Director

As announced before Christmas by AUI president Robert Hughes, Nicholas P. Samios was named acting director of the Laboratory effective January 1. His appointment follows the resignation of George H. Vineyard, director for the last nine years, who will return to physics research at the end of one year's leave.

Samios joined BNL's Physics Department in 1959 after three years on the faculty of Columbia University. He was leader of the Nuclear Interactions Group (now Omega Group) from 1965 to 1975, when he was named chairman of the Physics Department. In February 1981 he was named Deputy Director for High Energy and Nuclear Physics.

Samios says that, for the present, he will also continue as head of the ISABELLE project. In view of his double duties, he plans to delegate considerable authority to deputy director Warren Winsche, and associate directors Martin Blume and Victor Bond. He notes that even though this is his management style, he considers it the only way to operate under the circumstances. "In fact," he says, "among the reasons I accepted this job is the importance of ISABELLE to the Lab and the fact that there are very capable men in the Director's Office already in place." Winsche will continue to oversee the applied programs as well as day-to-day operations. Blume will add responsibility for nuclear physics to that of low energy physics and chemistry. Life sciences will be under Bond's direction.



Doug Humphrey

Nicholas Samios (left), recently appointed acting director, with deputy director Warren Winsche (center), associate directors Martin Blume (standing) and Victor Bond.

Samios' career has been devoted to high energy particle physics, and he is particularly well known for his discovery of the Omega Minus particle and the first charmed baryon. For his work, he was named a winner of the 1980 E.O. Lawrence Award, and that same year received the New York Academy of Sciences Award in Physical and Mathematical Sciences.

Although his title is acting director, Samios will have the full powers of a director. As of now, he says he is not contemplating any immediate changes. He has agreed to serve in this capacity until the trustees have concluded their formal search for a director.

Quote Of The Week

I have visited five major laboratories and five major production centers and have had a chance to get the flavor of both the defense and multi-purpose laboratories. I am very much impressed by the people, the work they are doing and the high level of technology involved. The laboratories are really a national trust that we must preserve to retain our position of leadership in the world.

—Guy W. Fiske, Under Secretary of Energy, in the January issue of the Energy Insider.

Vineyard Comments On Last Ten Years

George Vineyard, who submitted his resignation as director last summer, has a busy year ahead of him. Until the end of June he will be in residence at the Institute of Theoretical Physics, University of California at Santa Barbara. In July he plans to attend a summer institute at La Jolla, and in the fall will be found at Harvard, as he says, "to study physics."

Commenting on the scientific strides made at Brookhaven during the last ten years, Vineyard notes in particular the conception of the ISABELLE project, the securing of its authorization and the start of construction; and the design and execution of the Light Source. He points out that this was also a period in which a number of new programs were added in the applied science areas.

Among other notable advances, he named the pulmonary toxicology facility which has been added to the Medical complex, the Scanning Transmission Electron Microscope in the Biology Department, the newly-arrived cyclotron for isotope production in Chemistry, the upgrading of the HFBR and the successful operation of the cold moderator in this reactor.

Vineyard considers the biggest changes at the Laboratory during the last decade to have been brought about by the changing nature of the prime funding agency. He says that life was relatively simple under the AEC, which "had a well defined set of goals, but a broad view of the kind of research that could be done." For instance, he maintains that George Cotzias' discovery of the treatment for Parkinson's disease came about not only because of Cotzias' genius, but because the AEC was willing to let him pursue an idea outside its particular mission. With the changeover to ERDA, and then to DOE, "goals became more complicated," Vineyard says; he was unwilling to predict what the shape of things will be if the Lab's funding is placed under the Department of Commerce, as is now proposed.

Vineyard is pleased that basic science, which has remained more nearly a constant throughout, is still appreciated on the federal scene. In addition, the Reagan Administration has a clear commitment to nuclear energy and BNL has some strong programs in this and related areas. He remarks that getting and keeping programs is a challenge to an administrator and "you have to be fast on your feet."

As his administration ended, Vineyard said, "It has been a privilege to be associated with the management of this Laboratory over a number of years. It is one of the great laboratories of the world, and we have done many things of which we should be extremely proud. The greatest asset it has is its exceptionally competent and devoted staff and I am sure BNL will have a brilliant future."

George Vineyard

Congressional Staff Visit

Doug Humphrey

Earlier this week, Rick Schmidt (left), aide to Representative William Carney (1st CD-NY), accompanied Mary Ann Bach on a tour of the Laboratory. Bach is Minority Technical Consultant of the Subcommittee on Natural Resources, Agriculture Research, and Environment, of the House Science and Technology Committee, of which Congressman Carney is the ranking minority member. Her BNL tour was part of a week spent on Long Island to become acquainted with activities and facilities in the Congressman's district. Here, Bach and Schmidt inspect a monochromator at the National Synchrotron Light Source.

BNL Lecture Weather Wise

When most people think about weather, they are usually only concerned with how it affects what clothes they wear or what activities they plan. "But through all civilizations, weather has influenced literature, religion, music and the arts," says BNL meteorologist S. SethuRaman.

Weather is born of the interaction of land, ocean and atmosphere. In a BNL Lecture on Wednesday, January 20, SethuRaman will discuss his research on various aspects of the physics of the atmospheric boundary layer, the lowest one to two kilometers of the atmosphere. His talk, entitled "Between Wind and Water - Meteorology At the Interface," will begin at 8 p.m. in Berkner Hall.

One area of major interest is the atmosphere's capacity to diffuse pollutants. Says SethuRaman, "Everyone living near the ocean is familiar with sea breezes, which have a cooling effect on hot summer days. But in terms of air pollution, sea breezes could have an adverse effect by recirculating pollutants."

Doug Humphrey

S. SethuRaman

Basic studies have been done on the phenomenon of sea breezes. A monsoon is a giant sea breeze, explains SethuRaman, and in 1979, BNL scientists participated in the International Monsoon experiments conducted in India. The mean rainfall over the Indian plains during monsoon season, June to September, is about 36 inches, while for the rest of the year, rainfall averages only two inches.

Other studies include coastal experiments being conducted at Tiana Beach on Long Island and at Cameroon, Louisiana, on the Gulf of Mexico, to better understand over-water atomospheric processes.

For experiments farther offshore, air-sea interaction buoys have been designed and developed at BNL to study marine meteorology, wave dynamics and oceanography. "These buoys can be deployed anywhere in the world's oceans," says SethuRaman, "because of their unique data acquisition system with microprocessor-based satellite-telemetry capability." (See box.)

During his talk, SethuRaman will also describe his trip to India in 1980 to observe a total solar eclipse and to study basic atmospheric boundary layer processes.

S. SethuRaman joined BNL's Division of Atmospheric Sciences, in DEE, in 1972. He holds a Ph.D. in Civil Engineering, with a specialization in Fluid Mechanics, from Colorado State University, and undergraduate degrees from the University of Roorkee, in Roorkee, India, and the Institution of Engineers, Calcutta, India. He taught civil engineering at a Government Polytechnic near Madras, India.

A buffet supper is served at 6:30 p.m. at the Brookhaven Center. The price is $6.50, and reservations should be made by calling Ext. 3541 before 5 p.m. on the day of the lecture.

Mahlmann Heads Plant Engineering

Edward Shelton and Alfred Mahlmann of Plant Engineering worked together last month to prepare for divisional changes that became effective on January 1. At that time, Mahlmann became Manager of Plant Engineering, the position in which Shelton had served since 1971. Mahlmann, who came to the Lab in 1962, has served in a number of Plant Engineering positions, most recently as superintendent of the Electrical Division. Shelton's new staff responsibilities include coordinating the Lab's power allotments from LILCO and PASNY. He is also involved in cogeneration studies aimed at devising means of producing some of the Lab's electrical power and heat in the same physical plant.

Doug Humphrey

Edward Shelton and Alfred Mahlmann

Accompanying the change of managers was a partial restructuring of the Plant Engineering organization. The Electrical Division was combined with the Mechanical Division to form an Engineering Division. The new division is headed by M.J. Rose, who formerly headed the Mechanical Division. J. Bruce Medaris has been named manager of a new unit, Maintenance Management. This group is responsible for the productivity improvement program as well as personnel, training and safety. John Iulo and Jack Hennessy will continue their responsibilities as managers of the Architectural and Site Divisions, respectively.

Investment Option (Cont'd)

three plans: the TIAA/CREF SRA and a maximum of two families of mutual funds. Within each family, employees can invest in one or several of the funds offered.

Since all the AUI fund choices (with the exception of the Fidelity Magellan Fund) are "no load" funds, employees will pay no charge for buying or selling fund shares, but will be charged a minimal annual custodial fee for each separate fund.

While the TIAA/CREF SRA has immediate "cash-in" provisions, IRS regulations bar employees from withdrawing mutual fund monies unless one of the following conditions is met: the employee reaches age 59-½, becomes disabled, dies, suffers serious financial hardship, or terminates employment with AUI. When monies are withdrawn, someone familiar with the employee's personal situation and applicable tax laws might assist in making decisions about distribution and reinvestment of account balances.

Employees wishing to begin participating in February must enroll through the Personnel Division by January 29. Salary reductions will be reflected in the February 11 paycheck of weekly employees and in the end of February paycheck for those paid monthly. Thereafter, participation can start at the beginning of any new pay period.

Next week, detailed information about the new mutual funds option will be distributed to all eligible employees. The Personnel Division is also planning orientation sessions at Berkner auditorium on January 19 and 20. Representatives of Fidelity Group, T. Rowe Price and TIAA/CREF will be present to explain the various investment opportunities.

Film On Dr. King

A two-part documentary, "Dr. Martin Luther King, Jr. ... An Amazing Grace," will be shown free of charge on Thursday and Friday, January 14 and 15 in Berkner Auditorium, in commemoration of the birthday of the slain civil rights leader and winner of the Nobel Peace Prize. The film is a historical overview of the struggle for racial equality in America, using Dr. King's own words, and footage from major events of his time.

Part one of the film will be shown on January 14, first at noon and again at 12:35 p.m. Part two will be shown at the same times on the following day.

The Afro-American Culture Club is sponsoring the film, which is open to all BNL employees.

Two Pennies Saved...

Recently, the cost of first class postage increased 11%, from 18¢ to 20¢. To most people that 2¢ increase doesn't seem like much, but to BNL, which paid $108,000 to send out 600,000 pieces of first class mail last year, that translates into an annual increase of $12,000.

One way to reduce that increase is to reduce the amount of first class mail. Check the Mail Users Guide to make sure that your mail should go first class. For example, it's not necessary to use Foreign Air Mail First Class Service when the mailing contains printed matter. Air Printed Matter costs less than half as much and still travels by air.

If you can't find your Mail Users Guide, call the Mail Room, Ext. 2534, to request a new one.

Going 'Round The Bend

Look out over an ocean and you'll see a line where sea meets sky. That distant horizon is where the ocean bends out of sight as it curves around the earth.

Scientists who do air-sea experiments beyond sight of the shore face a problem transmitting data from an ocean collecting station to an onshore receiver. Because of the earth's curvature, line-of-sight telemetry is limited to a range of 40-50 miles, depending on the height of the transmitting towers.

That's why SATDAS was developed. Short for Satellite Data Acquisition System, SATDAS transmits data to a space satellite, which in turn sends signals back down to earth, thereby getting around the range restrictions of line of sight transmission. The system was designed and developed about a year ago by S. SethuRaman, meteorologist in the Atmospheric Sciences Division of DEE, with help from Raytheon Oceans Systems Company and Ocean Data Equipment Company. Gerd Dimmler and Seymour Rankowitz, both in the Instrumentation Division, also helped design the system.

Although it is now being used on a meteorology tower out on Tiana Beach, near Shinnecock, L.I., SATDAS can gather data from anywhere in the world's oceans or at remote land sites.

Explains SethuRaman, hardware for the system is housed in a watertight box about the size of an office typewriter. Forty-eight different types of information, ranging from wind speed to wave heights to ocean currents, can be collected continuously, and a mini computer in the box samples the data and does statistical processing.

The system has three types of memory. One collects data for an hour period, then stores it in a cassette tape which has a three-month capacity. The second can be tapped at any time for diagnostic tests. The third and largest memory keeps three hours of data at a time.

Contents of the third memory are sent hourly to a U.S. geostationary weather satellite about 23,000 miles over the equator. In a process that takes only two minutes, the satellite calls for the data, receives it, and sends it down to a computer at the National Environmental Satellite Service in Washington, D.C. BNL scientists can call up that computer and retrieve the data the same day.

The Tiana Beach tower is equipped with a cassette tape, which is retrieved once every two weeks, but the tape is really a back-up to the satellite, says SethuRaman. If data were being collected out in the middle of the ocean, satellite transmission would be the only reasonable way to get it ashore immediately.

SATDAS has other advantages. It sends real time data (or data as it happens), which can be useful for forecasting atmospheric conditions over a remote ocean. SethuRaman also points out that if the system is used in a large experiment out at sea, the advantage of instant communication is invaluable to researchers who have no other way of knowing if data is actually being collected.

Soc. Sec. Tax

Effective January 1, Social Security taxes will be deducted on the first $32,400 of each wage-earner's income at the rate of 6.7%. In 1981, the Social Security base was $29,700 and the rate of tax was 6.65%. This means the maximum Social Security tax a wage-earner pays in 1982 will be $2,170.80 compared with $1,975.05 in 1981, an increase of $195.75.

Starting in 1982, all sick pay will be subject to the FICA tax. In previous years, sick pay paid to employees whose salary was below the maximum Social Security base was not subject to this tax.

Public Sale — Motor Vehicles

Forty vehicles, located at Warehouse T-87, will be available for public sale.

Inspection will be permitted from January 11 through January 15, during the hours of 9 a.m. to 4 p.m., except Saturday and Sunday.

Bids will be opened on January 26, 1982, at General Services Administration, Business Service Center Bid Room, 26 Federal Plaza, New York, N.Y.

This will be an informal competitive bidding. Bid forms may be obtained at Buildings 87 and 211. For further details, please call Extensions 2302 or 2977.

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Welcome Back!

It seems that most people were pleased at being off the week after Christmas and wouldn't mind at all if it became a yearly institution. A decision whether or not to make the shutdown an annual event will be made when all the facts and figures are in.

Some of the comments heard around site after everybody came back to work, were — "I had no plans so I had a great time eating and spending money." "I loved sleeping late." "As soon as the shutdown was announced I got on the phone and ordered a ticket to Florida." "My family kept me so busy at home, I almost wished I were back at the Lab." "It was good not to have to think about work at all because, in a shutdown, there is nothing you feel responsible for. Even on a regular vacation, you tend to worry a little."

Exactly how much money was saved won't be known until the phone bill is received, the time cards tallied as to the amount of vacation or leave without pay taken, power and fuel usage compared to last year for the same period, and other factors are evaluated.

Cooking Exchange

You are invited to come and sample some Japanese delicacies at the next meeting of the Cooking Exchange on Wednesday, January 13. The Cooking Exchange is open to all BNL employees, visitors and their families. Meetings are held on the second and fourth Wednesdays of each month from 12:30 to 2:30 p.m. in the Recreation Building. The admission fee of $1.00 includes copies of recipes prepared at the meeting, a sample of each dish, coffee and/or tea. Babysitting is provided at 50¢ per child. For more information, call Ruth Fernow, 928-8465.

Women In Science

Dr. Betsy Sutherland will speak on "Sunlight, Skin Damage, and Cellular Transformations" at the Women in Science dinner meeting on Thursday, January 21, in Berkner Hall, Room A.

Dr. Sutherland received her B.S. and M.S. from Emory University and her Ph.D. from the University of Tennessee — Oak Ridge National Laboratory. Before joining the BNL Biology Department, she was a post-doctoral fellow at the Department of Molecular Biology and Virus Laboratory at the University of California at Berkeley and an Associate Professor of Molecular Biology at the University of California at Irvine.

Everyone is invited to this meeting at which dinner will cost $6.50 and start at 5 p.m. Reservations are requested. Send a check, payable to Women in Science, to Ellen Gannon, Bldg. 801, Ext. 4513, before January 18.

ANS Meeting

A dinner meeting of the American Nuclear Society will be held in the Gold Ballroom of the New York Statler Hotel, New York City, on Thursday, January 28. The cocktail hour, with a cash bar, will begin at 6 p.m. Following the 7 p.m. dinner, Mr. Corwin Rickard, President of ANS, will speak on the changes in national policy in the nuclear area and on recent regulatory developments. Members of the Long Island section of ANS should send reservations, at $21/person, directly to the New York Metropolitan section.

Reservations are also being taken for a bus to transport Long Island members to the dinner meeting. If a minimum of 25 persons sign up, at $7 per person, a bus will start at BNL and stop at several points along the Expressway. To reserve a seat on the bus, members should call Dianna Seaman (929-6774) as soon as possible, so that firmer plans can be made.

1982 Car Sticker

Registration forms for 1982 automobile bumper stickers are being distributed to all departments this week by the Police Group. Employees should return their completed forms as soon as possible to Police Headquarters, Bldg. 50, or stop in and pick up your sticker at the same time. Everyone is asked to have an '82 sticker by March 1.

Winter Whoopee!

What's your pleasure? Dancing? Live theater? Fine food and drink? If you're looking for any of these delights, you'll find them all at the same place, at the BERA Winter Dance on Friday, January 29.

For only a $3.00 ticket, you can share an exciting evening at Berkner Hall with your co-workers and guests. In the cafeteria, you can swing and sway to the music of Charlie Zein and the Newports. Or you can visit discotheque Xenon 488 in room B and boogie down to Mr. "T" (Eddie Taylor).

Midway through the evening, your favorite BNL artists will perform live, on stage, in Berkner auditorium in the Showtime Revue.

Bargain prices will also prevail at the cash bar and at concessions which will offer hot and cold snacks throughout the evening.

Tickets, at $3.00 each, can be purchased at the BERA Film Service in Berkner Hall or from any of the people listed below.

	Bldg.		Bldg.
Pat Towey	120	Diane Olson	475
Marge Stoeckel	134A	Carol Beckner	477
Lew Jacobson	134C	Pat Carr	490
Betty Pergan	179A	Liz Russell	510
Blanche Laskee	185	Mary Doroski	515
Whitey Caiazza	197B	Cheryll Christie	535A
Lois Marascia	197C	George Walczyk	535B
Marge Weltz	211	Bonnie Weslowski	555
Rosalie Piccione	355	Jeannette Thiede	725
Chuck Watson	422	Sandy Lane	830
Ed Iberger	452	Anne Flood	902
Anne Mauro	460	Pat Oster	911
Irene Steele	463		

Blood Drive Recap

Last December 22, BNL employees donated 306 pints of blood at the Lab's second blood drive of 1981. While the number of donors was not large enough to warrant the two-day bloodmobile originally planned, chairman Len Emma considered the showing very good, since the drive took place with a minimum of publicity during a period when many employees were on vacation.

Another positive fact, said Emma, was that less than 7% of the people who came to the gymnasium to donate were not accepted. This is very low compared to the approximately 16% expected at a typical summer blood drive.

Emergency blood drives have been held at BNL in previous winters, but this was the first one specifically scheduled for the winter. "We hope to do this every year at holiday time," Emma said, "because blood is so vitally needed during the post-holiday period."

Volleyball

Standings as of 1/4/82

A Division	
Dinkers	6-0
Mixed Ups	5-1
Teddybares	5-1
High Society	1-5
Nuts & Bolts	1-5
Las Bolas	0-3
Leftovers	0-3
B Division	
Semi Tough	9-3
Puff & Stuff	9-3
Big Boopers	7-5
TNT	6-6
KMA	2-10
Quirks	3-9

Bowling

Pink League

High games were bowled by R. Rosati 165, K. Kissel 160, M. Connelly 170, A. Donegain 170, M-G. Meier 176/174.

White League

The Dips remain in first place by 5 with the Pinsplitters in second. High games were rolled by J. Roesler 213/202/588, D. Adams 215 (also converted the 6/7/10 split), C. Auguste 203, K. Asselta 219, G. Schuman 195, P. Manzella 201/537, N. Erickson 192/503, J. Mayeski 218/213/599.

Purple League

High games were bowled by C. Tomasch 202, W. Milian 255, D. Penoyar 212, C. MacDougall 186, J. Penoyar 181, B. Jellett 190, G. Riker 182. P. Bonti converted the 6/7 split and P. Lebitski the 1/2/7.

Motorcycle Club

Come to the meeting on Monday, January 11, and toast the new year along with the Motorcycle Club's new officers. Elected to serve in 1982 are President William Carapezza, Vice-President William Lenz, and Secretary/Treasurer Denis Donahue.

Besides enjoying the refreshments, you can also thumb through a copy of the Motorcycle Rider Course text, which will be sold at the meeting for $1.80 apiece.

Casting Call

The BNL Theater Group's spring production will be "The Play's The Thing" by Ferenc Molnar.

The cast requires eight men of various ages, and one young prima donna. Casting auditions will be held in Berkner Hall auditorium at 7:30 p.m. on Tuesday, January 12 and Thursday, January 14. Connie Fuchel will direct, but a full production staff is also required. Persons interested in any aspect of the production are invited to attend the auditions or to contact Karl Swyler, Ext. 7171.

Cafeteria Menu

Week Ending Jan. 15, 1982

Monday, January 11		
Cream of potato soup	(cup)	.60
	(bowl)	.70
Macaroni & cheese w/1 veg.		1.70
Western omelet w/fries		1.70
Hot Deli — Pastrami	(bread)	1.75
	(roll)	1.85
Tuesday, January 12		
Chicken & rice soup	(cup)	.55
	(bowl)	.65
Grilled pork chop & 1 veg.		1.75
Baked lasagna & 1 veg.		1.70
Hot Deli — Roasted turkey breast	(bread)	1.75
	(roll)	1.85
Wednesday, January 13		
Old-fashioned bean soup	(cup)	.55
	(bowl)	.65
Veal scallopini & 1 veg.		1.75
Swedish meatballs over noodles		1.70
Hot Deli — 8-foot hero		.85/inch
Thursday, January 14		
Minestrone soup	(cup)	.55
	(bowl)	.65
BBQ meatloaf & 1 veg.		1.70
Southern fried chicken & 1 veg.		1.70
Hot Deli — Sandwich steak w/peppers & onions	(bread)	1.80
	(roll)	1.90
Friday, January 15		
Fish chowder	(cup)	.60
	(bowl)	.70
Beef stew over noodles		1.80
Fresh fillet of fish & 1 veg.		1.70
Hot Deli — Clam boat		1.85

SCCC Spring Courses Announced

Suffolk County Community College will offer the following on-site courses for the Spring 1982 semester.

	Course	Cr.	Day	Hours	Start Date
EN15	Intro. to Engr. I	3	W	5:15-8:15	2/3
TE24	Electricity II	4	M	5:15-8:15	
			W	5:15-7:15	2/3
TE28	Digital Electronics II	3	Th	5:15-9:15	1/28
BL72	Business Law II	3	T	5:15-8:15	2/2
EG33	English Grammar & Voc. Develop.	3	W	5:15-8:15	2/3
EK22	Microeconomics	3	M	5:15-8:15	2/1
HS90	History of Religion	3	Th	5:15-8:15	1/28
SO11	Sociology	3	Th	5:15-8:15	1/28

Minimum class enrollment is 15, and courses are in session for approximately 14 weeks.

Registration Date:	Jan. 18-22, Building 460, Room 112.
Books:	Will be sold the first night of class.
Tuition Fee:	$32.00 per credit (no additional school fees).*
Tuition Refund:	Obtain proper form from Personnel and complete as instructed.
Classrooms:	To be announced.
Additional Info.:	Call Renee Flack, Ext. 3316

Note: If you no not have a high school diploma, SCCC will grant a General Equivalency Diploma (G.E.D.) upon completion of 24 credits.

*Visa, Mastercard, Checks or Money Orders will be accepted, payable to SCCC.

An Apple A Day...

The Cooperative Extension Association of Suffolk County calls the apple "nature's toothbrush" and says it is more effective in removing mouth bacteria than two minutes of brushing plus a gargle. In addition, one apple has only 90 calories, but its bulk satisfies hunger and its natural sugars provide quick energy. Apples contain vitamins A and C.

When shopping for apples, avoid bruised fruit because it decays rapidly at room temperature. At home, keep small amounts of apples refrigerated in plastic bags in the crisper. Put larger quantities in plastic bags with some holes punched in them, then store the bags in the coolest part of the cellar or in an unheated garage. Most apple varieties can take 28° F without any ill effects. Covering the fruit with a blanket may extend storage time.

Arrivals & Departures

Arrivals

Robert D. Clark ..... Biology
David U. Fluckiger .... Energy & Env.
Michael G. Luban ..... Energy & Env.
Joseph W. Schaedler ... Energy & Env.
Joey Shao ..... Nuclear Energy
Nancy J. Singletary ... Energy & Env.
Christopher Wennes ..... Reactor
Alexander Wolf ..... Physics

Departures

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

Maliheh Afrashteh ..... Accelerator
Lydia C. Amodeo ..... Accelerator
Francis W. Ascolese ..... Accelerator
Cosmo R. Azzara ..... Accelerator
Jaime Baron ..... Accelerator
Randolph L. Bowles ..... Accelerator
Robert H. Browne ..... Accelerator
David M. Brownstein ..... Accelerator
Clarence S. Campbell ..... Accelerator
Frank Capucio ..... Accelerator
Marjorie L. Christianson ..... Physics
Robert G. Cook ..... Accelerator
Stephen L. Crivello ..... Accelerator
Thomas C. Cromer ..... Accelerator
Alan E. Delahoy ..... Energy & Env.
John M. Donhowe ..... Accelerator
James S. Donnelly ..... Accelerator
Robert L. Donnelly ..... Accelerator
John Dorr ..... Plant Eng.
Adolf E. Emanovsky ..... Accelerator
Gloria Emanovsky ... Instrumentation
Karl C. Falconer ..... Accelerator
Arthur Friedman ..... Accelerator
Mariette I. Gray ..... Accelerator
David N. Haney ..... Biology
Daniel T. Huang ..... Energy & Env.
Gunter E. Hubner ..... Medical
Ellen Hupfer ..... Accelerator
Klaus B. Jaeger ..... Accelerator
James L. Jellett ..... Accelerator
Lewis Jiggetts ..... Accelerator
Stanley Kalinowski ..... Plant Eng.
Helena M. Keeley ..... Accelerator
Russell A. King ..... Accelerator
Timothy M. Kirkpatrick .. Accelerator
Malvina P. Krupski ..... S. & E. Prot.
Helen M. LaSauce ..... Physics
Stephen C. LaValle ..... Accelerator
Frederick Loeb ..... Accelerator
William C. McLaughlin ... Accelerator
Stanley K.Y. Mai ..... Accelerator
Cheryl P. Martin ..... Accelerator
Leonard Maucelli ..... Accelerator
Donald M. Miller ..... Accelerator
Saed Mirzadeh ..... Chemistry
James L. Miskovsky ..... Accelerator
Richard M. Mobley ..... Accelerator
Gary K. Mosley ..... Accelerator
Marianne E. Mucci ..... Physics
Lawrence Musso ..... Accelerator
Norman Nelson ..... Plant Eng.
Richard A. Occhiuzzo ..... Accelerator
Gary S. Perri ..... Accelerator
Thomas E. Petty ..... Accelerator
Carl J. Pozgay ..... Accelerator
Henry P. Serry ..... Energy & Env.
Lin C. Sinsabaugh ..... Accelerator
S. David Smith ..... Physics
Stanley D. Sodansky ..... Accelerator
Robert E. Stafford ..... Accelerator
Kevin G. Stevenson ..... Accelerator
Charles J. Thiessen ..... Accelerator
Florin G. Tinta ..... Accelerator
John G. Trunk ..... Accelerator
K. William Velia ..... Accelerator
Linda A. Woodson ..... Accelerator
Fannie Wyche ..... Physics
Edward H. Zellner ..... Central Shops
William M. Zeman ..... Accelerator
Mae T. Zucker ..... Accelerator

Classified Advertisements

Placement Notices

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

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

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

For further information regarding a placement listing, contact the Personnel Placement Supervisor, Ext. 2882.

There is currently a freeze on open requisitions, however, certain positions must be filled. The Director's Office has individually approved the filling of the following positions.

LABORATORY RECRUITMENT: Opportunities for present Laboratory employees.

1644. TECHNICAL POSITION - Requires demonstrated experience in computer maintenance, including digital peripherals and DEC UNIBUS. Experience with any DEC-CPU and/or Massbus is desirable. Requires the ability to work shifts (10 hours a day, 4 day shifts). In addition there may be the possibility of rotation of shifts. Applied Mathematics Department. (Reposting of Job #1642)

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

1645. SENIOR STATIONARY ENGINEER - Requires demonstrated experience in the maintenance, repair and operation of high pressure boilers firing #6 fuel oil. Current stationary or marine engineer license is highly desirable. Plant Engineering Division.

1646. INDUSTRIAL HYGIENE ASSOCIATE - Requires MS in industrial hygiene or its equivalent. Will assist in the development of Toxic Material Advisory Reports based upon literature review and on-site visits to manufacturers. Safety and Environmental Protection Division.

1647. CHEMISTRY ASSOCIATE - Requires a BS or MS in chemistry to work extensively with gas chromatography, mass spectrometers, and other analytical instrumentation. Must be familiar with equipment involved and be capable of handling routine operations and maintenance. Department of Energy and Environment.

1648. ENVIRONMENTAL SCIENCE ASSOCIATE - Requires MS in environmental science or engineering or equivalent background. Should have experience in the use of computer analysis techniques and knowledge of techniques for modelling of environmental pollutants. Duties include report writing and analysis and interpretation of data related to a variety of energy-environmental assessment problems. Department of Energy and Environment.

Autos & Auto Supplies

73 OLDS - good running cond, excel inside, full power, asking only $1,200. Ext. 4835 or 289-9811 after 6 p.m.

4 WD PARTS - front axle w/locking hubs, rear axle, 3 spd trans/case, good cond. $500. all or separate. Ken, Ext. 2350.

62 CHEVY - buy car or parts. Joe, Ext. 2556.

66 SCOUT - 4 WD , 4 cyl, 3 spd trans, good tires, runs OK, needs some work. $550. Ken, Ext. 2350.

73 FORD F-100 - pick up w/cap, hi miles, runs good. $1,500. AN 5-3731.

70 CAMARO (ENGINE ONLY) - 250 cu. in. runs good, need room in shop. $50. Dan, Ext. 2021 or 698-7322 complete.

73 STATION WAGON - Pontiac LeMans, 6 cyl, 3 spd, new clutch, excel mechanical cond, good MPG. $500. 698-7428.

TIRE - new Peerless s/b radial, 7R78x15 whitewall. $30. Sue, Ext. 7235 Tues - Thurs, 399-1736 after 5 p.m.

72 DODGE SWINGER - good mi. & good cond, Bud, 399-0864 after 5 p.m.

72 BUICK ESTATE WAGON - full power, good cond, must sell. $800. 281-0789 after 5:30 p.m.

TIRES - (2) new G78x15, $70. Must see. Bud, 399-0864 after 5 p.m.

UTILITY TRAILER - Sears, approx. 4'x4' w/cover, 1976. $250. Paul, Ext. 2071/2318 or 928-8171 eves.

TIRES - new steel belted radials w/w Goodrich, 4 for $120. sz. 155-SR13. John, Ext. 5152 or 281-2471.

76 VW SUPER BEETLE - conv. w/air cond, FM radio, new tires, new top. $6,600. Rich, 286-9197.

80 FORD BRONCO - 4x4, p/s, p/b, 10,000 mi, 302 V8, a/t, s/b radials, many extras, excel cond. $8,200. Financing available. Ext. 2192 or 473-1967.

71 PONTIAC - 350 V8, p/s, p/b, new engine, a/c, good cond. $600. 727-1764 or 727-6622 Dom.

FIBERGLASS LINER - and toolbox for pick up truck w/8 ft. bed. Ext. 2192 or 473-1967.

72 AMC HORNET - 4 dr. Sedan, new transmission, reliable. $200. Steve, 924-4826.

SANDBIKE - w/foot wide tires & 5 HP engine, good cond. $150. Ask for John, 878-8907.

68 CHRYSLER NEWPORT - runs well, body in good cond. $450. Ext. 4372 or 282-3032.

Boats & Marine Supplies

33' ULRICHSON - great live aboard, twin engines, includes winter storage & spring launch. $900. Rich, 286-9197.

Free

CAT - Help! I'm a spayed, declawed, litter trained, fully innoculated cat. My owners are splitting. Need home...(or else) Leave message for Misty 473-7667.

MALE CAT - need home for beautiful 7 mo. neutered cat, shots, wormed, clean, affectionate, house & litter trained. 924-5192.

MALE DOG - mixed breed, 3 yrs. old, good w/children. 281-8306.

Miscellaneous

MINK STOLE - sable brown, new orig. $600. Asking $275. 475-0144 eves after 6 p.m.

SEWING MACHINE - Sears Kenmore w/multiple attachments. Ext. 3671 days or 744-8632 after 6 p.m.

HOCKEY SKATES - Bauer, sz. 10 mens. Excel cond. $15. Joe, Ext. 5131.

DINETTE SET - white formica w/4 matching chairs, $35; cloth diapers training pants, $5. 924-5495.

TV - Sears portable 16" B&W, mint cond. $50. Firm. Pete, Ext. 3516 or 399-2813 after 5 p.m.

CHEST FREEZER - Sears Kenmore 15 cu. ft. white cond. $250. 929-6494.

BEAR BOW - Kodiak Hunter. $45. John, Ext. 4312.

BIKE - ladies Raleigh 3 spd Sturmey Archer, excel cond. Less than ½ price. $95. Firm. 727-3608.

SHALLOW WELL - 1 HP Jet pump system, 40 gal. plastic lined tank. $125. 475-8971 after 6 p.m.

SUBMERGIBLE PUMP - 4" casing, 50 gal. tank, wire & controls, 3 yrs. old has 2 yr. Warranty left. Best offer. 475-8219.

QUARTZ HEATER - 1500 watts, dual element, used only one season. Paid $55. Asking $30. Linda, Ext. 3632.

BASF BLANK TAPE CASSETTES - Ferrite, Chrome & Ferrichrome. $2.75 ea. Ext. 2521 or 928-8379 eves.

TYPEWRITER - Royal portable, like new $40; Collectibles Gourmet magazines. Sets 1974-1980. All $5. 929-8642.

FIREWOOD - seasoned oak, 4' x 8' x 16-18" lengths. $50. 924-3236.

REMINGTON - portable typewriter w/case, $25; Black & Decker bench grinder, 5" wheel. $25. Ext. 4976 or 744-4386.

FIREPLACE SCREEN - free standing, 33"x48", $10; popcorn maker, $8; Walter, Ext. 3397 or 567-9025 eves.

PIONEER - FM/8 track car stereo w/mount & (2) 20 oz. speakers, $45; Sears 48 mo. maintenance free battery (new) $40. cost $62. 473-7906.

LP GAS FURNACE - like new, good for workshops, garage, etc. Sue, Ext. 7235 Tues-Thurs. 399-1736 after 5 p.m.

SOUND PROJECTOR - Bell & Howell, 1 yr old hardly used, $130; B&W 25" TV console, good cond. $30. Ext. 3403 or 751-1826 after 5 p.m.

MAGNUS CHORD ORGAN - like new w/10 books. $25. 286-1522 eves only.

SKI BOOTS - ladies Raichle sz 8½-9; 46" alum. poles. Both good cond. $20. Ext. 3533 or 654-2076.

HANGING BASKET CHAIR - wicker. $40. Gail, Ext. 3338.

LIVING ROOM SET - Contemporary emerald green sofa & 2 burnt orange chairs, fair cond, make reasonable offer. Paul, Ext. 2447 or 878-1486 eves.

CASSETTE RECORDER - mini Emerson AC-DC, AC adapter included measures 6"x4½"x1-¾". $15. Ask for Pete, Ext. 3516.

BOOTS - Caber 9½, excel cond. $45; Kastinger World cups, $275; new $100. 475-7241 after 5:30 p.m.

COOKER - slo Westbend, new; hair dryer w/hood. 924-4991.

RECLINER - convert. couch; misc; bedroom, livingroom furniture; Osterizer; lamps; etc. 289-8182 after 5 p.m. or wkends.

AUTO HARP - Oscar Schmidt 21 chord w/attache case, like new. Bargain price. 286-1192.

KASTLE - 195cm skies, $25; 27" men's 10 spd bike, Columbia, $100; Head 720 skis. 203 cm, $20; Solomon 202 bindings, $25. 929-4886 after 5:30 p.m.

DOG BED - new 8"x20"x27", ½ price, $12; car coat, ladies 14-16; fur collar, worn 6 times, coco brown. $35. 589-1069.

FIESTA ACCORDION -120 base 2 tone changer. $100. 475-8219.

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 - house, furnished, 3 bdrm, for 12 mos. or less. Ext. 3335/3876 or 286-0269.

VERMONT CHALET - near Bromley, Stratton & Magic Mtns, XC adjacent to chalet, beautifully furn., stone fp, rent: wkends, wks & partial seasons. 757-5599 after 4 p.m.

CORAM - North Isle Apts. 1 bdrm apt. for sublease, $375/mo. includes gas heat & stove, and a/c. Ext. 2605 or 331-3310.

E. PATCHOGUE - Bayview Ave, 2 bdrms, kit, l/r, bath. #325/mo. heat incl. Walt, Ext. 2913 or 2907 or 698-0576 after 6 p.m.

HUNTINGTON - 1 bdrm apt. in house, priv. entr, w/w carpeting. $325/mo. pays all. Security deposit. 757-5248 after 7 p.m.

STONY BROOK - 4 bdrm, 1½ baths, l/r, d/r, f/r, Colonial, 2 car garage, all appl., partially furnished, walk to Univ. $695/mo. plus util. Ext. 4273.

RIDGE - 3 bdrms, 5 min. to Lab, wooded area, owner pays all util. Lease required. $450/mo. Ext. 3430.

For Sale

HAMPTON BAYS - ½ acre, south of Montauk Hway. $17,500. Ext. 2091 or 728-9673.

MILLER PLACE - comtempory ranch house, 4 bdrms, eik, l/r, den, fenced yard, excel cond. Rustic Acres. $78,500. 331-3724.

Wanted

MATURE WOMAN - to care for 5 yr. old boy on site summer 1982. 8:00 to 5:00 Ext. 3480.

COLLECTING OLD BEER CANS - or trade for yours. Rich, 363-6845.

AMBITIOUS PERSON - $200-$300/mo. 6-8 hrs./wk. 698-5861 after 7:30 p.m.

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

TRAINS - Lionel, American flyer, accessories, any cond. brings good price. Carole, Ext. 3362 or 924-4097 eves.

POOL TABLE - slate top, 6' to 7', reasonable. 924-6839 after 5 p.m.

OLD ACCORDIONS - Connie, 821-0104.

OLD DOLLS - Teddy Bears & unusual related items. Ext. 4251.

PERSON TO SHARE - 2 bdrm house in Rocky Point. $175/mo = util. Jayne, Ext. 7597.

PONY TACK - for small pony. 473-3977 after 7 p.m.

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

PERSON TO RENT - large room in Pt. Jefferson area, $50/wk. light cooking, nonsmoker, prefer professional person. 473-7987 after 6 p.m.

VW POP UP CAMPER - '70 to '73, good cond, reasonable price. Ext. 4321 or 3078.

ROLL TOP DESK - organ note books; girl's bike 20"; vacuum cleaner. 924-4991.

MATURE WOMAN - to care for 3 sm. children, our home, prefer own transpt. Ext. 3578 or 878-4864.

PERSON INTERESTED - in skiing wkend of Feb. 26th. For info call Bea, Ext. 3571.

WEST COAST MIRRORS - for Chevy Van, pair. Ext. 3084, leave message.

HOUSE OR APARTMENT - 2 bdrm, in riverhead area. Reasonable please. Ext. 7991 or 369-2783 after 6 p.m.

Car Pools

RONKONKOMA - driver to join existing pool near exits 58 & 59, 60. Victor, Ext. 2395.

AMITYVILLE/COPIAGUE AREA - would like to join existing car pool. Louise, Ext. 3617.

MASSAPEQUA/FARMINGDALE, POINTS WESTS - leave from off Exit 32 Southern State Pkwy. Plotkin, Ext. 4717.

Lost & Found

LOST - hubcap, '79 Dodge Van in front of Administration. 286-1192.

Services

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

PROFESSIONAL INCOME TAX SERVICE - by experienced preparer. Year-round service. Jack, Ext. 7942 or 864-2236.

PLUMBING & HEATING - lab discount. John, 654-8189.

FIREWOOD SPLIT - seasoned oak 4'x16'x18". $110. delivered. 924-4284 or 924-3919.

KEROSENE HEATERS REPAIRED - tune ups, wicks replaced, parts in stock for most brands. 581-0468.

FIREWOOD - for stove or fire place seasoned oak. $140. per cord. FREE delivery. Greg, Mobil Station.

LIMO SERVICE - luxury chauffered for proms, weddings, airport, all occasions. Roy, Ext. 4664 or 744-8779.

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

RESUMES - prepared, typed, printed. Bill Polvent, 821-9081.

BABYSITTING - days, nights, wkends. Reliable 18 yr. old, references upon request. Jodi, 924-7832.

FIBER RUSH - and caning, reasonable rates. Jim, Ext. 5025 or 821-1704 eves.

SMALL APPLIANCE REPAIRS - vacuums, typewriters, sewing machines, etc. 654-3900.

FIREWOOD SPLIT - and delivered. Hardwood $135. per 4'x4'x8' cord. 698-0592.

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