



Transitory Phases Seen In Micro-View

Boiling water and melting ice are some of the more spectacular examples of phase transitions that are studied on a microscope level by theoretical physicists.

The 88th Brookhaven Lecture, to be given on Wednesday, December 3, by Martin Blume of the Physics Department will explore this fascinating subject both theoretically and experimentally.

Dr. Blume, a native of Brooklyn, went from Abraham Lincoln High School to Princeton to get his bachelors degree in physics in 1954. At Harvard in 1956 Dr. Blume qualified for his masters degree and then stayed on to receive his Ph.D. in theoretical physics in 1959.



As a Fulbright Fellow, he attended Tokyo University for a year before becoming a research associate at Harwell, England, for the AERE until coming to Brookhaven in 1962.

In addition to his work in solid state theoretical physics, Blume has served as consultant to the Bell Telephone Laboratories, and the Lawrence Radiation Laboratory at Livermore. He has been a visiting lecturer at Yale University, a commonwealth lecturer at the University of Massachusetts, and a lecturer at the International Center for Theoretical Physics in Trieste.

Dr. Blume currently resides in Sayville with his wife Sheila and their children, Frederick and Janet.

Dr. Blume's lecture, titled, "A Microscopic View of Phase Transitions" will examine discontinuities in the behavior of matter. According to Dr. Blume, "It is the job of the theoretical physicist to explain these continuities on a microscopic basis, i.e. by studying the collective behavior of atoms and molecules as the temperature of the phase transition is approached. There are many different types of phase transitions observed in nature. Many are not as obvious as boiling and melting, but they are in some ways more amenable to theoretical treatment."

A buffet supper will be served at the Brookhaven Center before the lecture from 6 to 8 p.m. Reservations should be made in advance by calling Extension 2453 before 5 p.m. on December 3. Refreshments will be available in the lobby of Berkner Hall after the lecture, which starts at 8:30 p.m.

Tune In! Letters Still Arriving

With the Tune In! program only a few days over a week old, letters are still coming in to the *Brookhaven Bulletin* in every mail.

After a brief delay caused by organizing problems, answers to the letters are being processed, and will now continue to be mailed out as soon as they are received.

Several conferences have been arranged, and many letters have been mailed to those who requested replies to be sent to their homes.

Several of the letters that were received, together with answers are printed on page 2 of this issue of the *Brookhaven Bulletin*.

No Bulletin Next Week!

Because of the Thanksgiving Holiday next Thursday and Friday, the *Brookhaven Bulletin* will not be published again until the issue that will be distributed on December 4.

Pay checks for both weekly and monthly employees will be distributed on Wednesday, November 26. A memorandum has been sent to all Departments about the handling of monthly time cards.

Deadline for copy for the December 4 issue of the *Brookhaven Bulletin* is noon, Wednesday, November 26.

Foot and Mouth Research Reported



Dr. Leonard D. Hamilton, Medical Department, has reported recent work with synthetic RNA which can have important implications in the cure of Foot and Mouth disease. Dr. Hamilton has been working with Dr. Jonathan Richmond of the Plum Island Animal Disease Laboratory in using the synthetic RNA to control the foot and mouth disease virus. —Humphrey

Synthetic RNA Used To Fight Foot & Mouth Virus

A two-pronged interagency bio-medical program has produced evidence that a newly synthesized two-stranded RNA has induced in mice an anti-viral (interferon) response to foot-and-mouth disease virus. These are the first results to show a conclusive correlation between a given dose of two-stranded RNA, its ability to induce measurable levels of interferon, and meaningful survival statistics. The two agencies are the Plum Island Animal Disease Laboratory and Brookhaven National Laboratory.



Dr. Hamilton holds a container of two-stranded RNA produced in the laboratory of the Medical Department at BNL.

The encouraging results with foot-and-mouth disease in mice are not only an initially unexpected spin-off from basic bio-medical research, but also point up the benefits to be gained from interagency efforts.

The two investigators who headed the research teams are Dr. Jonathan Y. Richmond at Plum Island and Dr. Leonard D. Hamilton at BNL's Medical Research Center, whose initial scientific report is in the September issue of the Proceedings of the National Academy of Sciences.

Synthetic RNA

Key to the success achieved to date and the first prong in the research was the production of an unequivocally two-stranded



Theresa Young (left) and Roberta Klimasky (right) are technicians who worked with Dr. Hamilton to produce the synthetic RNA.

synthetic RNA at Brookhaven. The second prong was the use of the synthetic two-stranded RNA on foot-and-mouth disease virus (FMDV) at Plum Island.

Dr. Hamilton had been studying the ability of synthetic polynucleotides (the building blocks of nucleic acids - the genetic material) to form well-ordered, two-stranded complexes, which are very much like native RNA. Following up published reports that multi-stranded RNA from biological sources as well as complexes of synthetic polynucleotides induced interferon and afforded protection against some viruses, Dr. Hamilton decided to test the efficacy of his unequivocally two-stranded synthetic RNA (polyriboinosinic and cyti- (Continued on page 2)

Tech Scholarships Offered For 5th Year

Brookhaven and other multi-program AEC Laboratories have for the fifth year been asked to make nominations for the Technical Scholarship Program for the academic year 1970-1971. The purpose of this program is to provide an opportunity for selected contractor personnel with technical proficiencies to accelerate their completion of the bachelor's degree in a field of interest to the AEC. To date, three of our employees have received their degrees and five others are working toward this goal at Brooklyn Polytechnic Institute, Cornell University, Queens College, State University of New York at Stony Brook and the University of Illinois.

It is expected that one or two Brookhaven employees will be selected to begin full-time studies at a college or university in the summer or fall of 1970. Each must

be a U.S. citizen and full-time employee of the Laboratory who can complete his bachelor's degree in two calendar years or less. Appointments will be made for up to 12 months and renewable up to an additional 12 months on full salary plus tuition and fees. Also, the employee's full Laboratory fringe benefits will continue.

Employees who wish to be considered are asked to complete a formal application available at the Personnel Office and return it to that office no later than January 5, 1970. The BNL Scholarship Selection Committee will review all applications and select candidates. These candidates will be presented to the AEC Headquarters Selection Panel in February for the final decision. Questions concerning this program may be directed to Peter Paige on Extension 7244.

Udall Lecture Plays To Packed House



Stewart L. Udall, tenth AUI Distinguished Lecturer spoke to a "standing room only" audience on November 12. Udall was introduced by Dr. Gerald Tape, President of AUI. More pictures on page 2. —Humphrey

Udall Visit and Tour



Dennis Flanagan, editor of Scientific American, (right) toured part of the Lab before going to the Udall lecture.



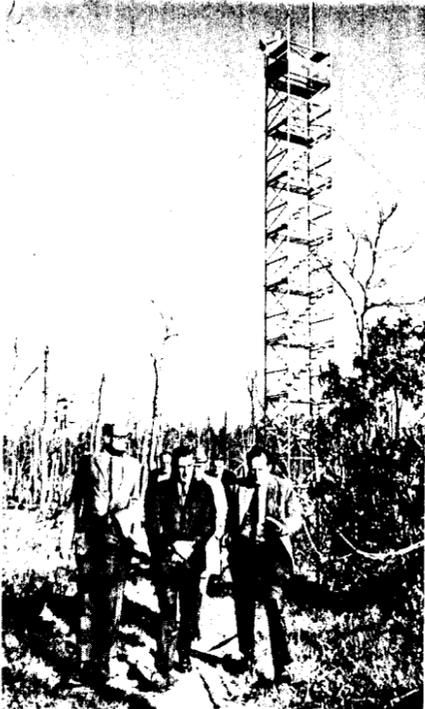
John Blewett (left) gets the answer to a question from Stewart Udall.



R.C. Anderson shakes hands with Stewart Udall as a beaming George Woodwell looks on.



John Toll, president of Stony Brook (center) monitors a conversation between Udall and lecture guests.

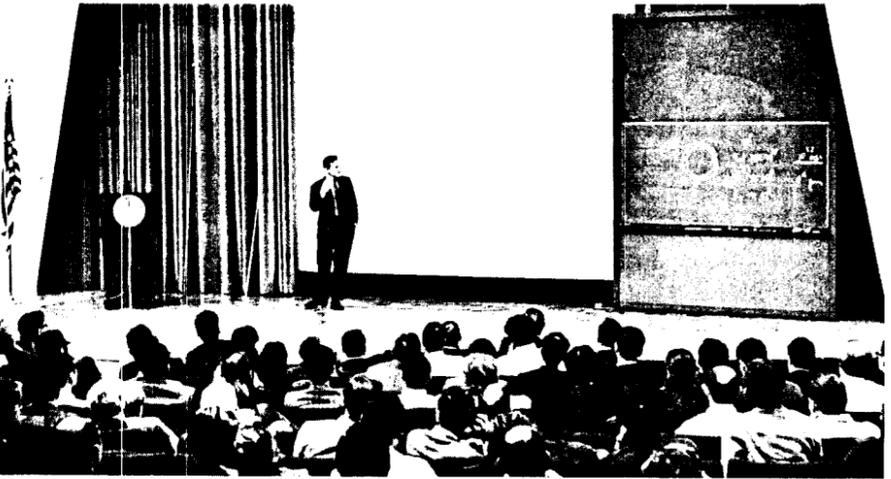


Stewart Udall (center) flanked by members of the BNL staff walks away from the Ecology Forest after an inspection and tour.



Dr. Gerald F. Tape (left) and Dr. Maurice Goldhaber (right) chat with Stewart Udall.

Laboratory Colloquium



Thomas Gold, former AUI Trustee, Cornell University, is shown as he spoke at a Laboratory Colloquium in Berkner Hall on November 11. The colloquium, sponsored by the Physics Department was devoted to "Pulsars."
—Humphrey

Synthetic RNA Used To Fight Foot & Mouth Virus (Continued)

dylic acids - commonly called "Poly I:C") against several viruses.

Dr. Richmond, a microbiologist at Plum Island, had been conducting basic research on interferon as a means of inducing protection against FMDV. As is the case with certain other viruses, FMDV itself is a rather poor inducer of interferon. In the search for a nonviral agent which might be a more effective inducer of interferon against this virus, Poly I:C was a logical choice for further research.

Drs. Richmond and Hamilton reported that their initial efforts to induce interferon effective against FMDV began with mice. The mice were injected with microgram quantities of the Poly I:C solution 18 to 20 hours before being injected with a lethal dose of virus. Under the appropriate experimental conditions, up to 100 percent survival of the mice occurred 10 days after the virus challenge. It was further observed that many mice were

protected if the Poly I:C were administered up to 18 hours after the lethal inoculations of FMDV. Repeated experiments indicated that more than 80 percent of the mice survived challenge injections of up to 500 times the amount of FMDV needed to produce a 50 percent mortality rate.

Other Viruses Examined

The report of Drs. Richmond and Hamilton referred to other work which stated that protection with double-stranded polyribonucleotide complexes extends to other kinds of viruses, such as herpes simplex (a DNA virus), so far only tried in mice and rabbits. Herpes virus can cause serious disease in man, as well as less serious ones, such as conjunctivitis or pink eye. Both researchers stressed that much work remains to be done with foot-and-mouth disease virus. Although the utilization of a double-stranded polynucleotide to induce interferon in foot-and-mouth disease

Here and There

Claire Lamberti

Gerhart Friedlander (Chemistry) attended a meeting of the ORNL Chemistry Advisory Committee on October 8-10.

Alex Tsolis (Chemistry) has accepted a teaching assignment at the State University of New York at Stony Brook. He will give a course in organic chemistry during the October-January term.

M.M. Small and J.J. Hennessy (both of PE&P) attended the ASME Solid Waste Conference at C.W. Post College on November 8.

Alfred Wolf (Chemistry) gave a talk on careers in chemistry at the Corning College Days Series in Elmira, New York.

Joseph F. Krikawa (PE&P) visited the Edison Electric Institute, Washington, D.C. on October 20 and presented a paper entitled "Fossilelectric Ratio," which was co-authored with Henry B. Hansteen (PE&P).

Ronald Withnell (Chemistry) attended the Vacuum Society Meeting held in Seattle, Washington, October 28-31.

M.M. Small and J.J. Hennessy (both of PE&P) were in Cincinnati, Ohio on November 5-7 to demonstrate the Solid Waste Handling System at the Black-Clawson Co.

Mortimer Kay of the Puerto Rico Nuclear Center is spending six months in the Chemistry Department as a Research Collaborator to carry out research on neutron scattering.

Hospitality News

The next Hospitality Committee coffee meeting will be held on Monday, November 24, from 10 a.m. until noon in apartment 9-C. Candle making will be demonstrated by Mrs. Elaine Garfield. Everyone is welcome - bring the children.

UFLI Pledge Cards Are Now Available

Pledge cards for the United Fund of Long Island's Fall 1969 campaign have been sent to all employees.

The United Fund helps support 81 health, welfare, and character-building agencies, hospitals, and services in Nassau and Suffolk Counties through its annual fund-raising campaign. These include the Red Cross, Salvation Army, Mental Health Association, Legal Aid Society, Catholic Charities, Jewish and Lutheran Services, YMCA and YMHA, Arthritis, Cancer research, Cerebral Palsy, and many, many more.

Those wishing to participate should fill in the card and send it to the Payroll Supervisor, 37 Brookhaven Avenue, as soon as possible. The information on the cards will, of course, be confidential. Please note that the pledge card requires your signature, as well as the beginning and ending dates of your "Fair Share" deductions. All pledges currently in effect from the 1968 campaign will terminate on December 31, 1969.

and in other virus-caused disease is promising, it is too early to consider field use at this time. Cattle and goats, which are naturally susceptible to the disease, will be the next experimental animals. Preliminary experiments extending these findings to guinea pigs and cattle indicated that protection against FMDV may be induced with Poly I:C.

Foot-and-mouth disease can be studied in the United States only at the Plum Island Animal Disease Laboratory, the Nation's only research center for the study of contagious foreign animal diseases. It is operated by the U.S. Department of Agriculture and the island location of the laboratory (1½ miles from the eastern end of the north fork of Long Island) is itself a part of the safety precautions. Because of its isolation, as well as its special facilities, the laboratory is able to study FMDV and other exotic animal virus diseases without endangering livestock on the mainland.

BROOKHAVEN BULLETIN

Published Weekly for the Employees of Brookhaven National Laboratory

CARL R. THIEN, Editor
CLAIRE LAMBERTI, Editorial Assistant

40 Brookhaven Ave. Upton, N.Y. 11973
Telephone 516 924-6262 Ext. 7238

NORBERT J. DERNBACH
Public Relations Officer

Tune In!

#15 - I have heard rumors to the effect that the Laboratory is planning to do away with Snow Days (Emergency Closings), and instead give employees the option to either come to work in spite of weather conditions or to stay home at their own expense (vacation or LWOP). I would like to know whether or not this is true.

In reply to the Tune In! letter #15 concerning a change in Laboratory policies of snow days please convey to the writer my assurance that the policy regarding emergency closings in the case of inclement weather such as snow days has not been changed. I do not know what the foundation of a rumor such as this one could be but I am glad to have this opportunity to put it to rest.

George Vineyard, Deputy Director

#18 - The Bank's ventilating system must never work, because the atmosphere is stifling with odors, smoke and stale air, especially when it rains.

There is no ventilating system in the bank. Occupants feel that there is no problem. There is an attic fan which draws from the bank area via ceiling louvers. The bank manager was recently instructed in how to use this fan. This should help the situation.

Plant Engineering and Planning

#24 - On Visitors' Day I worked as an usher during the showing of the Brookhaven Spectrum. The film was very enlightening and more of the public should see it. Would it be possible to use the film for the day to show it to children in a private school, and then show it to an audience of adults that night? We have our own projector and would be very careful of the film.

I was pleased to learn of your interest in the Brookhaven Spectrum, which you saw when you were serving as an usher on Visitors' Day. Copies of this film, and many others, are available from the BNL Library (Ext. 2327), as well as copies of the film catalog which describes the many other films that are available for loan.

Dennis Puleston, Information Officer

#1 - Why is parking permitted on the street in front of the cafeteria entrance? On rainy days this street is almost completely blocked. Drivers wishing to unload passengers in front of the cafeteria cannot drive through the street. The parking lots are only a short walk from the side entrance. Parking should be prohibited in front of the cafeteria.

Parking is indeed prohibited in front of the cafeteria entrance. Enforcing the no-parking rule is difficult without the full cooperation of all employees. The considerate employee will certainly avail himself of the parking facilities either next to the cafeteria or adjacent to the theater.

Edward Burke, Security Officer

Cooking Exchange

The next meeting of the Cooking Exchange will be held on Thursday, December 4, from 3 to 5 p.m. in the Apartment Area Recreation Building. Festive desserts will be featured in the demonstration.

A fee of 50¢ will be requested from each adult to defray the cost of the demonstration and the babysitters.

Arrivals & Departures

Arrivals

- John J. Downey Medical
- Arthur J. Dunn, Jr. Accelerator
- Douglas W. Gillette Accelerator
- Warren K. Marks Physics
- Peter Schubelin Physics
- Richard Vorraro P.E.P

Ronald G. Walter of the Accelerator Dept., who has been on military leave of absence since February, 1968, returned to work on November 17, 1969.

Departures

- Thomas Baratta App. Math.
- Gary W. Meyer App. Science
- Elaine D. Taylor App. Science
- Joanne L. Whaley Physics

BERA Member Art Show Opens



Dr. Robert A. Love, Medical, examines Carol Wawrzusin's painting, "From a Window in Venice."



Jules Varella's "One From Column B" (top) and "The Fishing Pond," by Linda Asselta.



Myron Ledbetter shows two of his mobiles; "Cross," and an untitled creation.



Arthur Beckwith views Virginia Wilson's "Stags Head." His own creation, "Yellow Leg Snipe" is in foreground.



More than 160 paintings, collages and sculptures were on display in the Exhibit Hall for the Annual BERA Members Art Show.

BERA Art Show Opens

A large and enthusiastic crowd attended the opening last Monday evening of the fourth BERA Members Art Exhibition. This is the largest showing to date of the artistic talents of BNL employees and their families, both in terms of the number of entries and of the variety of media.

The exhibit will continue through December 2, and will be open on weekdays between 8:30 a.m. and 5:00 p.m. except on Friday November 21, Friday November 28, and Tuesday December 2, when it will remain open until 8:30 p.m.

Since the Art Committee wishes to keep the show open during the evening of the last day, it will be appreciated if art contributors will pick up their work on December 3, instead of on the 2nd as announced originally.

IBEW Meeting Notice

The next General meeting of the IBEW, Local 2230, will be held November 24, 1969, at the K of C Hall, Patchogue, at 8 p.m. The agenda will consist of General Business plus reports of Committees, including a report of the Stewards Dinner to be held in December at the Brookhaven Center.

Center Holiday Schedule

The Brookhaven Center will be closed on Thursday and Friday, November 27 and 28. The Snack Bar in the cafeteria will be open from 9 a.m. until 2 p.m. Thursday through Sunday.

Bowling News

Irma Carl

Purple League

It was shake, rattle and roll as we tightened up the league last night - only seven points from first to fifth place. Designers went back into first place followed by S & M, Repulsives, Exots and the Electrons.

Joe Cuccia just missed the 600 award with a 208-200-594 series; Phil Borzi contributed a 212-523 to a losing cause; Vinnie Felice 192-521; Charlie Tomesch 184-520; Bud Lacey 177-518; Tom Holmquist 189-515; Joe Nocar 193-512; Ed Sperry 171-511; Jack Lauber 194-505; and Mike Iarocci a 203-494.

Red League

After the second position night the Fireflies solidly sewed up first place while the Dimwits came in second. R. Bone rolled a 219, Dick Schonberg a 200 and Nick Parinello a 204.

Pink League

Lil Hillerud and Marge Stoekel of the Pinsplitters gave the Alley Oops a good pace to follow in their battle for second place. (If the standings remain this close until December 9 the All Toes and Pinsplitters should have quite a night!). Marie Brenner with her 443, Pat Oster (177-482) and Helen Caisey (185-502) are performing well as "anchors."

Safety Item Issue Times

Safety shoes and glasses will be issued from the lower level of Building 535.

Soccer

M.T. Hutchings

Yale Graduates 3 V. BNL 4 (0-2)

It wasn't quite clear whether we were supposed to play water-polo or soccer when we arrived at New Haven on Saturday Nov. 8th. However, blue skies tended to help us forget the fact that the pitch was almost covered by one inch of water with deeper puddles in front of each goal. In such playing conditions, the side which adapts itself best usually runs out winners, and in the first half we played much the better football. Cox scored the first goal as the ball stuck in the mud, and Gelletly neatly headed in the second. We came very close on many other occasions and indeed should have been more than 2-0 up at half-time. Matters were rectified early in the second half when Webster scored with a grand shot from the edge of the area, and Boyun pushed in the fourth. Just as we were wondering "how many?" things began to go wrong. Yale changed their tactics and began to use the through ball more. Three defensive slips in the mud let in three goals in fifteen minutes as the Yale forwards took on new life. However, our poise was gradually restored and time ran out. During the rather dull Yale V. Penn football game afterwards, we couldn't help feeling the spectators would have had more fun watching us!

Grumman Res. 0 V. BNL 10 (0-6)

Sunday, Nov. 9th, found the Soccer Club's defense shivering in a cold wind under cloudy skies, as the forward line overwhelmed Grumman's Res. team. The BNL side of fifteen players included only six of those who beat Yale, yet displayed a depth of talent which completely paid off our 1-2 defeat by the combined first and second Grumman teams earlier in the season. Alo-Nielsen (who hails from Denmark, the home of such famous soccer players as Nels Bohr) started off the attack with two quick goals, and when Cox added a third after a scramble in the goal mouth the trend of the game was clear. Alo-Nielsen connected again for number four. Numbers five and six were tallied by Hubberstey, whose agile and aggressive play accounted for four of the goals, one a beautifully-placed penalty shot to the right of the beleaguered goalkeeper. Boyun added the rest, including a nice header into the right-hand corner following a good cross from Mariscotti.

(Reported by Ralph Fairchild)

Monday night, 7:30 p.m., is the time for indoor five-a-side soccer in the Gym. We'll try and arrange a match or practice game for the weekend Nov. 22nd-23rd. Call Ext. 7608 or 7193 if you wish to join.

Slo-Break Basketball

by George Latham

The 1969-70 Basketball season will get underway tonight. Scheduled games are as follows:

- 5:30 AMD - Highballs
- 6:40 Knacks - Dirty Dozen
- 7:50 Tandem - Biology
- 9:00 Chemistry - Medical

Copies of the season's schedule can be picked up at the Recreation Office if you haven't already gotten one.

The Basketball Committee consisting of George Latham - Chairman, Jim Hooper - Vice-Chairman, and Bob Barone - Secretary/Treasurer, are doing everything possible to guarantee a season of good fun for all the ball players.

Incidentally, spectators are always welcome at the games. Pick your favorite teams and cheer them on. If you get hungry or thirsty during the evening, refreshments will be available before and after the games.

BNL Christmas Cards

Have you stopped by the Film Service Office to see the Christmas cards on display? If you're looking for something different to send to your friends, we have just the cards for you.

We're sure that Macy's, A&S, Gimbles or any independent stationery store can't offer you beautiful photo-micrograph prints of "moon rock" crystals and dust. This is really an exclusive - only to be gotten at the Film Service Office.

The cost of each card is 25¢. For quantity orders of 50-99, the price is 18¢ each; 100 or more, 15¢ each.

Next BERA Concert Features Haefliger

Ernst Haefliger, tenor, will be the featured artist of the BERA Concert the evening of December 2 at Berkner Hall, 8:30 p.m.

From the Atlantic to the Pacific, Ernst Haefliger has established his reputation as one of the foremost singers of lieder (German songs) and choral works. His recitals are highlights of the yearly Celebrity Series of metropolitan and university concert halls; season after season, leading orchestras invite him for return performances.

Ernst Haefliger was born in Davos, Switzerland. He studied at the Conservatory in Zurich and later on became a pupil of the noted German tenor, Julius Patzak. Devoting himself to lieder and choral works from the outset of his career,



Ernst Haefliger

he soon established a reputation for impeccable style, flexibility and unusual programs. He has performed in all major European concert halls, in recital and with orchestra. At Brookhaven, his program will consist of songs by Beethoven, Schubert and Schumann. He will be accompanied on the piano by Franz Rupp.

Ernst Haefliger first performed on the North American continent in 1959, at the Vancouver Festival, where Bruno Walter heard him and invited him to record Mahler's Lied von der Erde under his baton. Subsequently, he appeared with all major American orchestras; recitals took him from coast to coast. Especially noteworthy is his performance in Bach's St. Matthew Passion under Pablo Casals, in New York and Puerto Rico.

Single tickets may be purchased at the Recreation Office or Box Office for each event at \$3 for adults, \$1.50 for children, and \$3.50 for non-employee guests.

The dates and performers for the balance of the concert season are: Thursday, January 8, 1970 - Young Artist Recital (Free Admission), James Gemmell, Pianist; Tuesday, January 20, 1970 - Claude Monteux, Flutist; Thursday, February 5, 1970 - Mozartem Woodwind Quintet of Argentina; Thursday, March 19, 1970 - Marvin Hayes, Bass; Tuesday, April 7, 1970 - Pacific String Trio.

French Group of BNL

Keep open the evening of Wednesday, December 10, for a Christmas party with refreshments and a musical program.

Watch for details in the next issue of the Brookhaven Bulletin.

Cafeteria Menu

Week Ending November 26, 1969

Friday, November 21	
Clam & Celery Bisque	
Fried Stuffed Flounders/Sauce Tartar	.65
Braised Meatballs/Vegetable Gravy	.65
Broiled Halibut/Butter Sauce	.75
Monday, November 24	
Vegetable Soup	
Baked Ham w/Boston Baked Beans	.75
Spaghetti w/Italian Meat Sauce	.65
Hungarian Goulash on Noodles	.70
Tuesday, November 25	
Puree of Split Pea Soup	
Round Roast of Beef/Pan Gravy	.65
Cream Chicken on Rice w/Jelly	.75
Saute Steer Liver w/Bacon Strips	.75
Wednesday, November 26	
Chicken Gumbo Soup	
Broiled Link Sausage w/Apple Rings	.65
Pot Roast of Beef/Brown Gravy	.65
Fried Filet of Sole/Sauce Tartar	.75
Thursday, November 27	
Cafeteria Closed	
Snack Bar Open 9 a.m. - 2 p.m.	

Classified Advertisements

Positions Available

COMPUTER OPERATOR (Rotating Shifts) - Applied Math
RESEARCH SERVICES ASSISTANT (Temporary) - Applied Math
RESEARCH SERVICES ASSISTANT - Applied Science
TECHNICIANS - Applied Science, Photography & Graphic Arts
REGISTERED NURSE - Medical
PROGRAMMER/ANALYST - Systems & Data Processing

Employees interested in applying for above positions should inform their Supervisor and file a written request with the Employment Office.

Please note: New positions available will be listed once in the Brookhaven Bulletin and will not be repeated thereafter.

Autos & Auto Supplies

63 PEUGEOT - Model 403. \$100. Ruth, Ext. 2962, 567-2190 after 4.

64 PONTIAC CATALINA 2+2 - 2 dr, 389 V8, white/blk int, auto trans. \$850. F. Dacey, 585-2424.

68 VW FASTBACK - Dealer serviced, good cond. 744-8894.

61 TEMPEST - 2 dr, auto trans, runs well, good tires, new batt. Asking \$50. LT9-3269 after 6.

4 TIRES - "General G", 6.50x13, 4 ply rayon w/w, like new, used 5 wks, 3 w/rims - car totaled, must be seen. Cost \$75, sell \$40. Ext. 445.

SNOW TIRES - Goodyear, w/studs, used 1 winter, 1500 mi, 6.45x14, fit MGB. \$40. AT6-8945.

SKI RACK FOR SPORTS CAR - New. \$10. AT6-8945.
2-7.00x13 STUDDERED SNOW TIRES - W/rims, used 1 mo. \$50. Helen, Ext. 2962.

54 CHEVY - Excel running cond, ready for winter, only 3 owners, s/d trans, body rusted out, needs muffler & tail pipe. \$60. L. Osterer, Ext. 2930.

GOODRICH TIRES - 7.35x15, excel cond. Ronnie, Ext. 2198.

55 CHEVROLET PICKUP - Good cond, over cab spot light, motor in good cond. Asking \$200. Ext. 639/2412, 727-1267 after 6.

66 PONTIAC LEMANS CONV - Full sprint option w/Hurst floor shift, ps/pb, r/h, w/w. \$850. 475-8202.

59 PLYMOUTH - V8, auto trans, ps/pb, new tires & brakes, 47,000 orig mi. \$125. Herb, Ext. 2934.

67 CHEVROLET BELAIR - 6 cyl, 4 dr, excel cond. \$1000. Ext. 7516, 281-8708 after 5.

68 PONTIAC FIREBIRD - 3 spd, V8, low mileage, new cond. \$2000. Ron, Ext. 2969.

66 RENAULT 8 - 4 dr, std (4-) shift, 30-35 mpg, very good cond, avc12/5. Asking \$600. B. Warnquist, Ext. 613, 281-3467.

2 GOODYEAR SNOW TIRES - 8.45x15, mounted on Buick rims. \$30. Singer, Ext. 455.

64 MG MIDGET - British racing green, excel cond, r/h, extra wire wheels. 473-5546 after 5.

57 CHEVROLET BELAIR - 2 dr hd tp, Corvette V8, auto trans, new int. 363-7133 after 6.

64 JEEP WAGONEER - 4 w/d, 6 cyl Tornado eng, good shape. \$925. R. Young, Ext. 591.

62 OLDS - DYNAMIC 88 - Very good cond. \$250. North, Ext. 7363/2772 eves.

CAR RADIO - Am/fm Panasonic, new. \$65. Kasha, Ext. 2948.

55 CHRYSLER IMPERIAL - Big hemi-head, all pwr, good running cond. Asking \$125. Dick, Ext. 2414, 585-3719 after 5.

65 CHEVY IMPALA - V8, auto trans, ps/pb, r/h, red/blk int, excel cond. 281-7965 eves.

TIRE - 8.00x8.25x14, mounted on '63 Olds rim, almost new. Ben, Ext. 2583.

66 MG CONV - New trans, carb, 3 tops, wire wheels, 35,000 mi. \$1350. Jerry, Ext. 2715.

61 PONTIAC STAR CHIEF - Auto trans, r/h, new tires, very good running cond. Ext. 624/526.

69 CORVETTE CONV - 427-390, 4 spd c.r., posi, side exhaust, trans ign, pb, pw, radio, alarm, 4800 mi. \$4250. Halpin, Ext. 7817.

2-6.50x13 SNOW TIRES - Mounted on Falcon rims, excel cond. Ed, Ext. 2816.

63 PONTIAC CATALINA CONV - Dk blue/white top, auto trans, ps/pb, snows, excel cond. \$750. Bob, Ext. 7333, GR5-8297.

69 CHEVROLET KINGSWOOD 3 SEAT WAGON - Perf cond, air cond, auto trans, etc, etc. won't last long. Ext. 2852, 929-6081.

STUDDERED SNOW TIRES - 6.50x13, mounted on Triumph Herald rims, good cond. \$40. B. Bornstein, Ext. 7411.

2 TIRES - W/w, 7.75x15, almost new, mounted on Ford rims. \$30/pr. I. Meyer, Ext. 463.

65 OLDS 442 - 4 spd, excel cond, blk on blk. 669-3878 after 5.

61 FORD STATION WAGON - 4 dr, r/h, ps, std trans, 4 new tires, must be seen. H. Rhodus, Ext. 2381-2, 924-3522 after 5:30.

58 CHEVROLET - V8, auto trans, ps, r/h, excel mech cond, some rust on body. H. Rhodus, Ext. 2381-2, 924-3522 after 5:30.

Boats & Marine Supplies

BRITISH SEAGULL - Outboard motor, 5 hp, w/clutch, long shaft model. \$40. B. Museler, Ext. 7676.

12' ALUM FLAT-BOTTOM - Sears boat. \$75. Ray, Ext. 2569.

ALL FIBERGLASS BOAT - '67 Winner Seville w/'68 Evinrude 85 hp & '67 Holsclaw 1275B trailer, compl unit w/all acces incl skis. \$1900. Joe, 585-6861.

INTERCEPTOR MARINE ENG - 265 hp 390 c.i. 1963, Warner 2:1 hyd red alt hi-risers, compl fresh water cooled, needs block. Tony Ext. 2411.

14' WHIRLWIND RUNABOUT - 35 hp Johnson motor, elec start, batt. controls, Lady Bee trailer '66, excel cond, extras, will demonstrate. 928-0086 after 6.

18 HP EVINRUDE 1969 - \$275; 12' alum Starcraft, extras. \$80. Ext. 2381-2.

STAR #1233 - W/2 sets of sails. \$200. Ext. 2981.

24' GARVEY CLAM BOAT - '67 hull, 75 hp elec start Johnson '62. \$850. Ext. 2749.

Miscellaneous

BIINKS AIR COMPRESSOR - Portable elec, 9.2 CFM, new. \$275. Ext. 2381-2.

PORTABLE OLYMPIA TYPEWRITER - Pica type, types perfectly, clean, make an excel Xmas gift. \$40. 473-8339.

2 ELEC HOMART HOT WATER HEATERS - 30 gal, \$35; 40 gal, \$45; both only 3 yrs old. Ext. 635.

35 MM PHOTO ENLARGER - Trays & tongs, \$25; boy's ski boots, size 6, \$6. R.P. Taylor, Ext. 2814.

5 DIN RM CHAIRS - Antique Hitchcock thumback \$40 ea. R.P. Taylor, AT6-0615.

BOWLING BALL & CASE - Men's, 15 1/2 lbs. \$5. Ext. 2816.

FISH TANK - 30 gal, w/stand, 5 gal tank, pump & filter. F. Chandler, Ext. 2231.

8 MM CAMERA - Turret 3 lens, projector & flood light set. \$50 for all. B. Shelter, Ext. 2266, 1:30-2:30 p.m.

LULLABY WALNUT CHEST - Robe & 6-yr crib w/ mattress, excel cond. \$60. 363-6850.

15" MURRAY TRICYCLE - Good cond, \$5; lg rocking horse, good cond, \$8. 363-6850.

BEIGE OTTER JACKET - Pastel mink collar, casual style, excel cond, wife anti vivisectionist. Bob, Ext. 7550, 692-8659.

8 MM MOVIE - Bell & Howell, auto zoom, reflex case & 3 cartridges, elec eye. Sacrifice, \$60. Dot, Ext. 7440, AT6-0247 after 7.

RHINESTONE NECKLACE - Bracelet & earrings, classic. Appraised at \$90, sell \$30 firm. Dot, Ext. 7440, AT6-0247 after 7.

DELICIOUS CAKES - Baked & decorated to order, only finest ingredients, beautiful sugar flowers & other designs. Amelia, Ext. 7717.

YARD SALE - Nov 21-22, 10-4, 3 Victory Pl, E. Patchogue, antiques, furn, baby items, lots more. Ext. 7333.

COOKER-FRYER - Brand new. \$9. Ext. 2492.

CHANDELIER - 24 starburst lights. \$12. Ext. 2492.

ARTIFICIAL SILVER XMAS TREE - 6', like new. \$5. Ext. 2492.

CAMERA - Minolta SR7, 3 auto Rokor lenses, many access, all in cases. Orig cost over \$650, asking \$250. A. Friedman, Ext. 7179.

SYLVANIA 19" TV - AM/fm radio record player combo. \$25. GR5-0244.

BARN SALE - Sat, 11/22, 10-4, milk cans, iron bed, copper flask, 1904 Victrola, copper boiler, old bottles & glassware, etc; 66 Baker St., Patchogue. Ext. 574.

BILT RITE BABY CARRIAGE - Converts to car bed, \$75 new, used 1 spring. Cheap at \$30. AT6-8945.

AC MOTOR - 1/2 hp, 208 v, 3 ph, 1725 rpm. \$15. AT6-8945.

CORNET - Olds model, w/case & mouthpiece, all in new cond. Lists for \$184, sell for \$90. Bill, Ext. 2393.

AKC ST BERNARD PUPPIES - Choice of several excellently marked males/females, will be ready before Xmas. From \$150. Ext. 418.

MAPLE CORNER TABLE - Excel. \$35. Ext. 586, GR5-7372.

WALL OVEN - Coppertone. \$35. Ext. 586, GR5-7372.

SECTIONAL - 4 pc, apt size, \$15 ea; coffee table, 36" round, maple, excel, incl glass top, \$45. Ext. 586, GR5-7372.

26" GIRL'S BICYCLE - 3 spd gear shift, front & rear hand breaks, basket, excel cond. \$40. EM3-6940.

EXPAND YOUR AURORA MODEL CAR RACING SET - Track & equipment all in A-1 shape, everything 1/2 price, good Xmas gift. Steve, AT6-1214.

MEN'S ICE HOCKEY SKATES - Size 8. R. Brown, AT6-1214.

STEREO PRE AMP & AMP COMBO - 7 1/2 watts PCR CH, \$25; portable tape recorder, \$20; ski racks for VW (roof), \$15; ski boots, size 8, \$15. Joe, 585-6861.

GILBERT CHEMICAL SET - No. 12056, w/24 chemicals & acc, used only once, \$10; GE hair dryer, \$3. Ann, 286-2280.

ELEC MOTOR - 1/2 hp, 1725 rpm, excel cond. \$15. Petruk, Ext. 2142.

AM & FM TUNER - Browning & 25 watt Williamson type amplifier. \$60. Torre, Ext. 423.

DELUX MATCH BOX ROAD SET - Excel cond. \$5. Barbara, Ext. 574.

GO CART - Briggs-Straton eng, auto clutch. \$100. YA4-3581 after 5.

RIVERSIDE RACE SET - Monogram 1/4 scale, 4 cars, plus extras. Cost \$40, sell \$15. GR5-5222 after 5:30.

GERMAN SHORTHAIR POINTER - Female, 3 mos old, excel w/children, AKC. Sacrifice, \$75. 281-5194 before 5.

LIV RM SET - 6 pcs, mod Danish, only 6 mos old. Ext. 2458, 281-6243.

UPRIGHT PIANO - AT6-8718.

GARAGE SALE - Furn, books, lamps, toys, sporting goods, etc, Sat 11/22, Fireplace Rd, Brookhaven. Ext. 7525.

GIRL'S WINTER COAT - Never worn, red 100% wool w/fur collar, too small for owner, price tag still on. Cost \$24, sell \$12. John, Ext. 2149/307.

CB RADIO - General MC-6-D104 mic & bridge, \$125; Lulaby colonial rock maple w/mattress, like new, \$80. Ext. 639.

PORCH SALE - Baby items, household items, etc, 11/22-23, 104 Weaver Rd, W. Sayville. 589-7327.

ITALIAN PROVINCIAL SOFA - Orange, new \$429, asking \$175; 40" wide fireplace screen, \$15. Sam, 473-8387.

WOOD DBL HUNG WINDOWS - Dbl unit, w/alum s/s, 75"x43". \$40. Sam, 473-8387.

ELEC MIXER-JUICER - \$2. B. Warnquist, Ext. 613, 281-3467.

HAIR DRYER - \$3. B. Warnquist, Ext. 613, 281-3467.

DYEABLE SHOES - Dk green peau de soie, med-high heels, sling back, worn 1/2 evening, like new, aprox 8 1/2 B or 9A. \$5. Ext. 2973, 941-3609.

WOMEN'S SKI BOOTS - Dbl lace, size 7, made in France. \$15. AT6-8952 after 3.

ACCORDION - Ferrari, 120 bass, excel cond, w/case, must be seen. \$100. George L., Ext. 7581.

BROWNIE CHALLENGER - .22 cal, semi-auto pistol, permit required. Andy, Ext. 2592, 281-8274.

CHRISTMAS TREE - Alum 6 1/2', w/revolving musical stand & multicolored revolving spot light. Ben, Ext. 2588.

HOTPOINT WASHER - 2 yrs old, 3 temp, 12 lb cap. Asking \$75. 929-6544.

DUAL 1009SK AUTO CHGR - W/deluxe base & grado cart, hardly used but damaged tone arm. (\$30 value of base, cart & holder) M. Tainiter, Ext. 2728.

PHONOGRAPH - Sm, portable, all record sizes & spds, solid state, like new. \$9. Ext. 7792.

CHILD'S PEDAL CAR - All metal, sturdy, smooth riding, very good cond. \$13. Ext. 532.

32" WOOD STORM DOOR - W/hardware. \$10. Ext. 7219.

BUILT RITE DELUXE CARRIAGE - Very good. \$45. S Kochis, Ext. 2411.

2 RM DIVIDERS - Screen type, amber colored plastic w/walnut frames, approx 30" wide, adjustable hgt. \$10 ea. R. Hoyte, Ext. 7266.

XMAS TREE - 6 1/2' alum, w/stand, 201 branches. \$10. 298-4985.

DRY IRON - \$3; Channel Master radio, \$20; 2 air mattresses, \$5 ea; Coleman 1-burner stove, \$4; sun chair, \$2. Ext. 7716 after 6.

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

YAPHANK - 3 bedrm ranch, wooded plot 225'x200', den, laundry rm, workshop, appliances, \$9500 mort avail, must sell. Sacrifice at \$19,900. Ext. 7339/7780, YA4-6943 eves.

BROOKHAVEN/SOUTHAVEN - 7 rm cedar ranch on 1/2 acre w/trees, paneled den, 1 1/2 baths, eat-in kitchen, appliances, w/w, s/s, garage, fence, many extras, 6% mort. \$26,800. 286-8446.

2 ACRES - 500' off Jericho Tpke on Wilson Ave, Gordon Heights. \$6000. 732-3443.

BLUE POINT - 3 bedrm ranch, liv rm, din rm, sun porch, fireplace, built-in bookcase, expansion attic, fenced patio, 160x150 wooded plot. \$28,000. By appointment only, 363-9513 after 5.

LOVELY 3 BEDRM HOME - On landscaped acre, carpeting, panelled solarium, new kitchen, 2-car garage, oil heat, taxes \$600. Moving, must sacrifice at \$31,500. YA4-3519.

FURN HOUSE - 2 bedrms, w/attic, close to Lab, immediate accuracy for 3 mos or till 5/31. Ext. 2458, 281-6243.

Wanted

HUMIDIFIER - For 4 rm apt, good cond. Bob, Ext. 2242/7309.

WOODEN STORM WINDOWS - Approx 34x64-4 ea, 34x33-2 ea. Ext. 7635, 286-9450.

HARMONICA PLAYERS - W/an interest in forming a harmonica band. Torre, Ext. 423.

HOME MAINT - Grounds, attic, gutters cleaned, painting, trees removed, etc, reasonable. Bob, 732-9517.

FREE LANCE ART WORK - Reasonable rates, top quality. Whitey, Ext. 2179, JU1-7165.

NEED YOUR BASEMENT OR ATTIC - To convert into an extra bedrm or recreation rm. 286-8455.

STUDENT MICROSCOPE - Reasonable price & reasonable cond. AT6-8412.

DEER - Will skin & butcher. 584-5216.

TYPING - Term papers, etc., to do at home. Claire, Ext. 2131.

2-14" CHRYSLER PROD RIMS - For '62 Chrysler Newport, w/8.55x14 tires. F. Kuehl, Ext. 7501.

GO CART - In reasonable cond, w/wo motor. 286-0795.

HAWAIIAN ISLAND - Dole "Tell-A-Friend" Sweepstakes, have Kauai Island, need any 1 of 5 remaining islands. Ext. 2816.

SKATES - Boy's hockey, size 1. Ext. 2524.

CHILD'S TABLE & CHAIRS - Inexpensive. 281-7965 eves.

B♯ CLARINET - Professional model, "Buffet, Selmer, or La Blanc." Koehler, Ext. 7685.

PAIR OF SKIS - 6-6 1/2' for boy 13 yrs of age. B. Brehm, 744-6885 after 5.

35 MM CAMERA - Cheap, for a boy. Kasha, Ext. 2948.

1-45 CAL MILITARY PISTOL - Army, good working cond. J. Zahra, Ext. 7382-3, 473-2889.

GOOD HOME - For adorable part-Persian kittens, 6 wks, marvelous temperament. M. Tainiter, Ext. 2728.

TEACHER - For Wading River Co-op nursery school. E. Foelix, 744-3674.

HOME - For a spayed female Labrador Retriever, 2 yrs old. I. Meyer, Ext. 463.

SNOW TIRE - 8.55x14, in good cond. Ext. 319.

REFRIGERATOR - In good working cond. Baron, Ext. 2777.

SEWING TABLE ON WHEELS - Baron, Ext. 2777.

Carpools

DRIVERS WANTED - Join existing carpool from general vicinity of Exit 50 of LI Expwy. Elliot, Ext. 2103.

FORMING CARPOOL - In Bohemia, Oakdale, W. Sayville area. F. Chandler, Ext. 2231.

1 DRIVER WANTED - Carpool, Sayville (east). M. Rosen, Ext. 2181.

JOIN OR FORM CARPOOL - Vicinity of Centerport or Greenlawn area. Frank, Ext. 488.

Classified Ad Policy

Deadline is 12 noon Friday for publication the following week.

- The Brookhaven Bulletin's classified section may be used only by active and retired Laboratory employees.
- All items for sale or rent must be the advertiser's property.
- Ads for material acquired for resale in association with a full or part-time business cannot be accepted.
- Firearms offered for sale or trade may not be brought on site.

- Ads not carried because of space restrictions will be held for publication in the next issue.
- Ads are run only once and must be resubmitted if they are to be repeated.
- Ads should be restricted to 20 words or less and typed or printed on the form provided, and must bear the employees signature.

<input type="checkbox"/> For Sale: Auto & Auto Supplies	<input type="checkbox"/> Wanted	Check <input type="checkbox"/> the heading applying to your ad. Print or type your ad in 20 words or less.
<input type="checkbox"/> For Sale: Boats & Marine Supplies	<input type="checkbox"/> Carpools	
<input type="checkbox"/> For Sale: Miscellaneous	<input type="checkbox"/> Lost & Found	

Ads concerning property for sale or rent cannot be accepted on this form. Special Real Estate Ad forms are available at the Office of the Brookhaven Bulletin, Room 112, 40 Brookhaven Avenue.

(Name & Phone No. To Call)

Employee's Signature _____ Life No. _____ Ext. _____

Send to: Brookhaven Bulletin, 40 Brookhaven Avenue