

High Points — 1990

For BNL, one of the first high points of the year 1990 came at the end of January when the Relativistic Heavy Ion Collider (RHIC) was included for construction funding in the Presidential budget submitted to Congress. By the end of the year, Congress had approved a budget which included RHIC, and it looked like the project would begin construction in 1991 with \$13.5 million.

As Congress was voting its confidence in RHIC, the project was proving itself: On November 1, the first "full cell" of prototype superconducting RHIC magnets successfully passed their initial tests, which continued through December. And throughout the year, work proceeded apace on the Booster, the small but mighty new accelerator that is an important component in the chain of BNL accelerators that will serve as the injector system for RHIC. The other links are the Tandem Van de Graaff and the Alternating Gradient Synchrotron, which celebrated its 30th year in July.

New facilities were celebrated throughout the year. In March, the Central Chilled Water Facility officially began serving the site with chilled water for air conditioning and process cooling, as well as compressed air for laboratory, instrument and service use. In October, a ribbon-cutting ceremony marked the formal reopening of BNL's Inhalation Toxicology Facility, which has been extensively remodeled to make it one of the most modern inhalation laboratories in the country. In early December, a double ground-breaking ceremony marked the formal beginnings for the Lab's new Science Education Center and Child Development Center.

Ongoing work at the National Synchrotron Light Source (NSLS) bore much fruit this year. On October 5, human heart images were made using NSLS x-rays, marking the first use at BNL of an experimental technique called transvenous angiography to picture the coronary arteries. Then on October 21, electron beam was stored for the first time in the first room-temperature prototype of a compact superconducting x-ray lithography source built in the U.S.

Another 1990 BNL research milestones was the development of a method of determining the sequence of the nucleotide components of human DNA, the basic genetic material, work that could be crucial to the nation's new Human Genome Project.



In January 1990, BNL's Relativistic Heavy Ion Collider (RHIC) got the go-ahead from President George Bush, who included a recommendation for construction funding in his 1991 budget submittal. Then, RHIC construction was approved in the budget that Congress passed in October. Here, (from left) Thomas Ludlam, Deputy RHIC Project Head; Satoshi Ozaki, RHIC Project Head; BNL Director Nicholas Samios; Physics Department Chairman Peter Bond; and Eric Forsyth, then Chairman of the Accelerator Development Department, look over the RHIC site.

Another important development for RHIC came November 1 when the first "full cell" of prototype superconducting magnets for RHIC successfully passed its initial tests. In mid-November, 83 representatives of 33 companies gathered at BNL for the RHIC Magnet Industrialization Program — a major step toward full-scale industrial production of RHIC magnets.

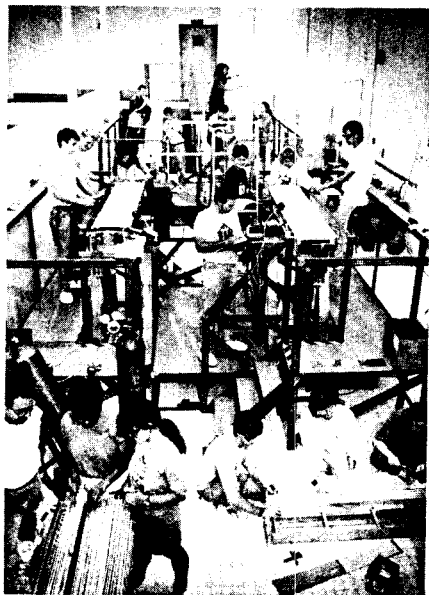


What kinds of global changes may be resulting from increases in carbon dioxide and other "greenhouse" gases thought to cause global warming? To address this broad question, BNL's Department of Applied Science (DAS) initiated a research program on global change in January.

The new program is unique in that it draws on expertise in a number of areas, represented here by: (clockwise from left) Ronald Peierls, computational science; Paul Michael, atmospheric science; Paul Falkowski, oceanography; Stephen Schwartz, environmental chemistry; DAS Chairman Leon Petrakis; Joyce Tichler, data management; and Bernard Manowitz, scientific liaison.

Of the hundreds of students who came to BNL last summer to participate in 12 different programs, 18 worked on building this new "straw tube" detector for Alternating Gradient Synchrotron Experiment 850. It should begin collecting data in the spring.

The 12 summer programs are part of the 50 educational opportunities that BNL's Office of Educational Programs coordinates each year. A ground-breaking ceremony was held on December 3 for a new Science Education Center to house this effort. Sharing the ceremonial limelight was the groundbreaking for BNL's Child Development Center, for which construction actually started on November 7. Both centers are expected to open next fall.



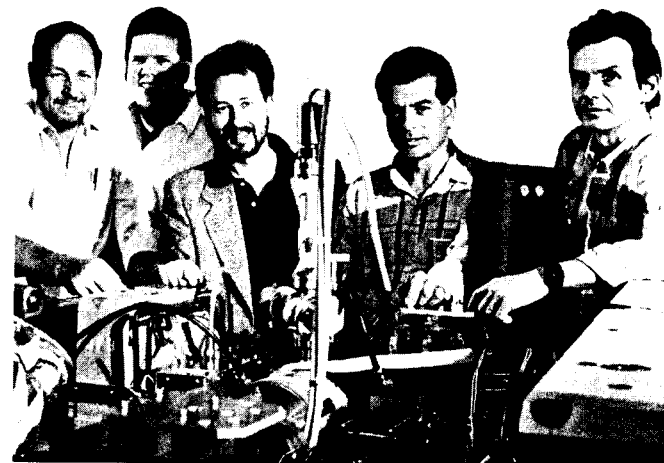
"Be a Recyclist!" BNL employees were urged beginning in November, when Plant Engineering kicked off a Labwide recycling program modeled after a pilot effort begun at the NSLS in June. Shown here with some recyclable paper are some of those involved with recycling efforts at BNL: (from left) William O'Brien, Michael Kelly, Johnny Kirkland, Nelson Tyler, Michael Guacci, Roy McWilliams and Oscar Blevins.

Reducing the Lab's nonhazardous, non-recyclable wastes became particularly important in mid-December, when the site landfill was closed to comply with the New York State law closing all Long Island landfills.

Teams at the National Synchrotron Light Source (NSLS) had several impressive achievements in 1990. On October 21, a project team represented by this group — (from left) Richard Heese, Joseph McKenna, James Murphy, Thomas Romano and Stephen Kramer — reached a major milestone in the international race to build a compact superconducting synchrotron dedicated to producing supercomputer chips by x-ray lithography, by storing electron beam in the first U.S.-built, room-temperature prototype of such a source.

This achievement came close on the heels of another triumph at the NSLS — where a BNL-directed research collaboration first used NSLS x-rays on October 5 to produce the human heart images by transvenous angiography, an experimental technique for picturing the coronary arteries.

The wild blue lupine is a flowering plant native to Long Island, but in recent years its BNL population has dwindled. The Plant Engineering Division last summer assigned Dolly Johnson (right) to work with Karen Blumer (left), ecologist and former employee, on a pilot project to augment the on-site population of these native wildflowers.



A major event of the year was a U.S. Department of Energy Tiger Team visit for a month beginning at the end of March, to assess BNL's compliance with environmental, health and safety regulations. In its draft assessment, made public in June, the Tiger Team did not identify any problems at Brookhaven that present an undue risk to public health or the environment.

April saw the debut of *GLANCE*. This videotaped program about the people and work at BNL plays daily in Berkner Hall from 11:30 a.m. to 1:30 p.m. Other employee-oriented programs begun this year were the series of Outreach workshops introduced in September, to deal with psychological issues and social problems that may affect employees' lives and work. In November, the health side of employees' well-being was addressed by the revival of the health promotion program.

Looking back, 1990 was clearly a year of impressive achievement, despite a rocky start due to funding cuts. The new year starts out much the same way: While the RHIC project and other Lab research programs offer much reason for excitement and optimism, once again the budget picture is unclear. As soon as BNL's budget situation is clarified, it will be reported in the Bulletin.



To Your Health Carry Out Your New Year's Resolutions

To help employees and their dependents carry out two healthy New Year's resolutions, the Health Promotion Program of the Occupational Medicine Clinic is again sponsoring two on-site activities: Weight Watchers groups and the American Lung Association's smoking cessation workshop.

To sign up for either class, contact Health Promotion Specialist Mary Wood, Bldg. 490, by Monday, January 7. For more information, contact Wood on Ext. 5923 or 4567.

You Can Stop Smoking in 1991

Turn over a new leaf in 1991 by turning away from the tobacco leaf. To kick the tobacco habit, sign up for the fourth smoking cessation workshop to be given on site by the American Lung Association of Nassau-Suffolk.

The four-week workshop will run from 5 to 6:30 p.m. on Monday, January 14; Tuesday, January 22; and Mondays, January 28 and February 4. To be held in the dining room of the Brookhaven Center, the workshop is open to all BNL employees and their dependents, but the class size is limited to 20.

As the Lab is sharing the cost with each participant, the program fee is \$30, which is to be paid to Mary Wood, Bldg. 490, in a check made out to the American Lung Association, by Monday, January 7.

The American Lung Association program is based on the premise that smoking is a learned habit. Accordingly, quitting should involve unlearning the automatic behavior of smoking and substituting new, healthy alternatives.

In a step-by-step plan, the workshop will introduce different tactics to help smokers gain control over their behavior. By the third session, participants are expected to be off cigarettes, so staying off them will be the focus of the final class.

Weight Watchers Returns to BNL

If you made a New Year's resolution to lose weight, then 1991 is your year. Weight Watchers (WW), the international diet and support group, is returning to BNL after a two-year hiatus, and both BNL employees and their dependents are invited to join.

This year, three sets of eight-week WW classes will be offered: two lunchtime groups on Mondays (or Tuesdays in case of Monday holidays), from noon to 1 p.m.; and an after-work session on Wednesdays, from 5 to 6 p.m. Each class is limited to 35 people.

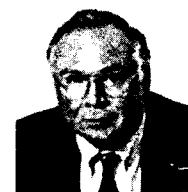
Registration for the Monday classes will take place at the first session on Monday, January 14, at noon in the dining room of the Brookhaven Center. Sign up for the Wednesday group is on Wednesday, January 16, at 5 p.m., at the same location.

As part of the cost will be paid by BNL, the per-person fee for both employees and their dependents will be \$62, which will be collected at registration.

To take advantage of this 1990 price, however, BNL employees and their dependents must sign up by returning the bottom portion of the yellow flyer mailed to all employees during December to Mary Wood, Bldg. 490 by Monday, January 7.

In Memoriam

Ralph Fairchild, a scientist in the Medical Department, died suddenly of a heart attack on December 17, at the age of 55. He was vacationing with his wife Kit in New Zealand, after attending a conference in Australia on boron neutron capture therapy, a focus of his extensive research activities.



Fairchild's research was directed at improving cancer radiotherapy, particularly of brain cancers and melanoma, with new approaches involving photons, neutrons and radioactive substances that can destroy cancer cells.

His knowledge of nuclear engineering and physics enabled him to develop programs in boron neutron capture therapy, which led to the development of a new, highly efficient, epithermal beam at the Brookhaven Medical Research Reactor, currently the world's best facility for these studies. Fairchild's work in photon activation therapy resulted in his being a co-developer of special samarium-145 radiation sources that significantly improve brachytherapy of brain and other cancers.

Said Senior Scientist Eugene Cronkite, Fairchild's colleague in Medical, "Ralph generated enthusiasm among others. For example, his dedicated work on glioblastoma and melanoma treatment caused chemists and pharmacologists to develop promising new boron-containing compounds."

Another Medical Department colleague, Senior Scientist Victor Bond, said of Fairchild, "He was internationally recognized as the leading American investigator in boron neutron capture therapy. His presence and stimulating role will be sorely missed at national and international meetings on radiotherapy, as it will be at BNL."

Fairchild earned his B.S. from St. Lawrence University in 1958, his M.S. in nuclear engineering from Cornell University in 1961, and his Ph.D. in physics at Adelphi University in 1975. He joined BNL's Medical Department as a technical associate in October 1961, becoming an associate scientist in 1976 and scientist in 1979. He was also a research associate professor at the medical school at the State University of New York at Stony Brook.

Fairchild is survived by his wife Kit; his four children, David, James, Stefanie and Jovi; two grandchildren; his mother, Sara Fairchild Masland; and his sister, Virginia Pabst.

Contributions in Ralph Fairchild's memory may be sent to: The Wilderness Society, 1400 I Street N.W., Washington, D.C., 20005.

Outreach Workshop Parents, Children and Divorce

Staying together "for the sake of the children" was the reason given in bygone days for parents not to end irreconcilable marriages.

Now that divorce is common, ex-spouses who are parents must reconcile themselves with the fact that they have divorced each other, not their children. Now for the sake of the children, divorced parents must continue their parenting roles, while trying to share their kids cooperatively with their former partners.

"My Parents Don't Live Together: Parents, Children and Divorce" will discuss the issues that parents and children face when couples divorce.

As the fifth Outreach workshop sponsored by BNL's Employee Assistance Program (EAP), it will be presented on Tuesday, January 8, by Arline Glassel, M.S.W., from noon to 1 p.m. in Berkner Hall.

Glassel will review the topic from both parents' and children's points of view.

From the former, she will discuss how to tell the children of an impending divorce, parental feelings of guilt, and difficulties that parents have after separation, including anger towards an ex, money, visitation, dating and remarriage.

How children may feel and act in reaction to their parents' divorcing will also be reviewed.

During the workshop, Glassel will invite discussion with the audience, and she will answer participants'

questions at its conclusion.

Arline Glassel is a Board Certified Diplomate in Clinical Social Work. She has a private practice in Commack, working with children, adolescents and adults individually and in



families. She is a former faculty member and supervisor of the Adelphi University School of Social Work.

To sign up for this workshop, return the bottom portion of the green Outreach flyer that was sent to all employees at the end of December to Staff Psychologist Donna Friedman, Bldg. 490. For more information about EAP and its Outreach program, call Ext. 4567.

Outreach Workshops 1991

Dates	Topic	Leaders
Jan. 8.	My Parents Don't Live Together: Parents, Children and Divorce	Arline Glassel, M.S.W., C.S.W.
Jan. 15, 22	Psychotherapeutic Approach to the Treatment of Heart Disease	Alan Weiss, Ph.D.
Feb. 5, 12, 19	Anger: Making It Work for You	Ellen Herling, M.S.W., C.S.W.
Mar. 5, 12	Caring for Elderly Parents or Loved Ones	Maureen Devin, C.S.W., R.N.
Mar. 19, 26	Separated and Divorced Singles	Jess Friedman, M.S.W., C.S.W.; Ilene Wasserman, Ph.D.
Apr. 9, 16	Intimacy	David Bernstein, Ph.D.
May 7, 14	Working Mothers	Holly Gotta, D.S.W., C.S.W.
May 28	Retirement: Who's Life Is It?	Frank Verdicchio, Ph.D.
Jun. 11, 18	Adoption	Alan Weiss, Ph.D.
To be announced	Stress With Children	Carol Helmer, Ph.D.; James Williams, M.S.W., C.S.W.

Anniversary Note: Synthetic Insulin

Twenty-five years ago Sunday — on January 6, 1966 — a BNL Medical Department team led by Panyotis Katsoyannis announced that they were the first to synthesize human insulin.

Diabetics lack insulin to control their metabolism of carbohydrates. When this research was undertaken, diabetics were being treated with animal insulin, which could cause allergic reaction after years of use. Synthesized human insulin was not expected to cause such reactions.

First accomplished at Brookhaven in 1964, this achievement was the

first chemical synthesis of a human protein. It also paved the way for later production of human insulin by modern recombinant DNA techniques. For these reasons, the synthesis of human insulin was one of the Lab's programs that was highlighted in BNL's 1987 publication, *The First Forty Years*. As described therein:

The insulin molecule consists of two polypeptide chains linked together by two disulfide bridges. In doing the synthesis, the major hurdles were the synthesis of the individual chains and the combination of the chains to generate insulin. In the

end, the procedure that worked was quite complicated, especially to achieve high yields, and would have been very expensive to use commercially.

But the story continues. In later years, a major pharmaceutical firm, Eli Lilly, discovered how to make the polypeptide chains using bacteria. To do so, they made use of advancements in recombinant DNA techniques, and, originally, they relied on Brookhaven's procedure for purifying the chains, as well as on our method for combining those chains into insulin.

Today, diabetics who cannot take animal insulin have an alternative, thanks in part to Brookhaven.

Equipment Demo

ElectroCAD Incorporated will present a seminar on technologies available for design automation, on Thursday, January 10, from 10 a.m. to 2 p.m., in Berkner Hall. The software and hardware to be presented will address computer-aided design, printed circuit layout, schematic capture, simulation, engineering analysis and mechanical drafting.

Coming Up

Chemist Richard Hahn, Chemistry Department, will present the next Brookhaven Lecture on Wednesday, January 16, at 4 p.m. in Berkner Hall. His topic will be "Hunting for Elusive Solar Neutrinos."

90 VIPs Honored for 1990

What do James Cottingham and Herbert Susskind, as well as Veronica Brooks, Nicholas Cipolla Jr., James Costanzo, Haskell Frei, Rudolf Funn, Robert Gottschalk, Donald Horne, Kurt Jellett, Richard Larsen, Thomas Morris, Gertrude Neuhoff, John Ruscica and Donald Schweitzer, have in common?



What factor connects Charles Anderson, Wilbur Bailey, Paul Bezler, Ron Clipperton, Nicholas Combatti, Robert Dagradi, William DeVito, Peter Fallon, Kurt Fuchel, Michael Guacci, Walter Hensel, William Jordan, Robert Kehl, Fred Kuehl, William Lehman, William Love, Russell Lowell, Frank McNulty, Edward Miezianka, George Munoz, Frank

Norton, Evelyn Ritter, Kenneth Robins, Theodore Robinson, John Rothmann Jr., Frances Scesny, Frances Scheffel, Richard Seebeck, Richard Squires, William Stars, James Sutherland, Harvey Wegner, Thomas Wild and Michael Zguris?

And what about John Aloï, William Anderson, Patrick Asendorf, Kenneth Asselta, Clarence Barrett, John Baum, Charles Bohnenblusch, John Brown, Robert Brown, Richard Carlsen, Alan Carroll, Conrad Dabrowski, Frankin Densing, Horst Foelsche, Joseph Gatz III, Robin Gianopoulos, Beverly Gwathney, Walter Jahnig, Joseph Klemish, Conrad Koehler Jr., Robert Kowalski, Thomas Lanigan,



Daniel Mahalic, George Martin Jr., Edward McKenna, Raven McKenzie-Wilson, Mordechai Montag, David Niebuhr, John Niemczyk, Wayne Rasmussen, Herbert Schulman, Harold Siegelman, Gary Smith, Sharon Smith, Bruce Style, Suzanne Van der Kolk, Albert Velasco, Richard Watson, Richard Witkover, Raymond Zaharatos and Charles Zein Jr.?

All 90 were Brookhaven's 1990 VIPs — Very Important People — who were honored at a reception held December 10 for employees who received awards for 40, 35, 30 and 25 years of service during 1990. In the above list, Cottingham and Susskind were 40-year honorees; all those from Brooks through Schweitzer were honored for 35 years; those from Anderson through Zguris have been at the Lab 30 years; and Aloï led the list of those who observed 25 years.

Special guests at the reception included 12 employees who have over 40 years of BNL service — Andrew Brems Jr., Robert Brown, Garman Harbottle, Murray Klein, Virginia Pond, Seymour Rankowitz, Paul Roman, George Schoener, Ralph Shutt, Roland Sick, Gerhard Tiller and Joseph Trebing.

Also, 22 employees were there who have been at the Lab 35 to 39 years: John Bittner, Peter Colombo, Helen Connell, Eugene Cronkite, James Cumming, Charles Flood Jr., Eleanor Grist, Theodore Johnson, Robert Jones, Gerald Kinne, Seymour Lindenbaum, Martin Montag, Harry Munkelwitz, Daniel Oldham Jr., Thomas Prach, David Rahm, Eugene Raka, Lloyd Schairer, Rita Straub, Charles Waide, Edward Walsh and John Weeks.

Congratulations to all!



A Winter Look at Summer Science

In the summer, of course, schools close — but BNL remains open. And that provides a wonderful opportunity for neighborhood students to share in the research of Lab scientists.

That's the idea behind the Community Summer Science Program offered by the Office of Educational Programs (OEP).

Last summer, over 40 BNL researchers participated in the five-week program. They delivered morning lectures to students from throughout Suffolk County who had just finished their junior or senior years in high school. Their talks were

presented under the general headings of condensed matter and atomic physics, nuclear and particle physics, applied physics, chemistry and the life sciences, and medical and environmental science.

Selected students also participated in research projects in the afternoon as science interns.

High school students who are children of BNL employees are invited to attend next summer's program. Science and math teachers are also welcome to participate.

To sign up for the program or to obtain more information, call OEP, Ext. 4503.

1991 Social Club Calendar

The Social Club has the following trips planned for 1991:

• **Ski Trip** — Lake George, Feb. 1-3; \$184/person/double, \$174/triple, \$164/quadruple; transportation, four meals, beginner's lesson, total due Jan. 11.

• **Ice Capades** — Nassau Coliseum, Sat., Feb. 9, 11 a.m., Barbie and the Simpsons, only 25 discount tickets at \$12.50, money due Jan. 11.

• **Ski Trip** — Davos, Switzerland, Mar. 7-15, \$1,149, or Mar. 21-29, \$1,049, both / person/double; round trip by Swissair, breakfasts, four-course dinners, indoor pool and sauna, transportation from airport to hotel.

• **New Orleans** — May 8-12, five days, \$749/person/double, \$739/triple, \$969/single; transportation, three breakfasts, three dinners, Mississippi River cruise, tours; \$100 deposit, final payment Mar. 4.

• **Walt Disney World** — July 10-27, eight days, \$689/person/double, \$679/triple, \$889/single; transportation, four days unlimited admission to Disney World and MGM Studios, one day at either Universal Studios or Sea World, Avis rental car w/ unlimited mileage; \$100 deposit due ASAP, final payment May 16.

• **Hawaii** — Honolulu, Pearl Harbor, Maui, depart Oct. 31; \$1,549/person/double, \$1,529/triple, \$2,049/single; round-trip air, four breakfasts, four dinners, hotels, tours; deposit of \$100, final payment Aug. 27.

For more information, call Doris Terry, Ext. 7610.

Note to Employees:

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

On the Menu . . .

<h3>◆◆◆ Appetizers ◆◆◆</h3> <p>Fried Mezzarella Served with Italian sauce \$3.10</p> <p>Wing Dings Chicken wings fried golden and served with BBQ sauce \$3.00</p> <p>Ultimate Nachos Crisp corn tortilla chips topped with cheddar cheese, black olives, guacamole and salsa \$3.95</p> <p>Golden Fried Shrimp Fried crisp and served with a mild cocktail sauce \$3.50</p> <p>Loaded Potato Skins Baked potato skins, scooped and fried until golden crispy and loaded with cheese and bacon bits \$3.65</p> <p>Classic Vegetable Combo Fried mushrooms, zucchini, and cauliflower florets served with ranch dressing \$3.25</p>		<h3>◆◆◆ Hamburgers ◆◆◆</h3> <p>All hamburgers are served on a kaiser roll with cole slaw, pickle and chips</p> <p>Hamburger U.S.D.A. Choice \$1.75</p> <p>Double Burger Our double decker hamburger \$3.00</p> <p>Cheeseburger Smothered in melted American cheese \$1.95</p> <p>Deluxe Burger Served with lettuce, tomato and onion \$2.00</p> <p>California Hamburger This cool western style burger served with lettuce, tomato, onion, avocado and french fries \$2.85</p> <p>Bacon Cheeseburger Topped with crisp bacon slices and smothered in melted cheese \$2.30</p>	
<h3>◆◆◆ Soups and Salads ◆◆◆</h3> <p>French Onion Soup Sautéed onions simmered in a rich broth topped with a large croûton and a layer of provolone cheese \$1.05</p> <p>AU House Salad Crisp iceberg with mushrooms, olives, onions, peppers and tomatoes with your choice of dressing \$0.95</p> <p>Soup du Jour Made daily by our Chef \$1.05</p>			
<h3>◆◆◆ Sandwiches ◆◆◆</h3> <p>All sandwiches are served with a pickle, chips and cole slaw</p> <p>BNL Club Turkey, bacon, lettuce, and tomato on your choice of bread \$3.15</p> <p>Roast Beef Prime cut meat served on your choice of bread \$3.10</p> <p>Fillet of Chicken Deep fried boneless breast of chicken topped with lettuce, tomato and mayonnaise on a fresh kaiser roll \$3.15</p> <p>Ham and Cheese Sliced Ham with American cheese on your choice of bread \$2.75</p>			
<h3>◆◆◆ Specialties ◆◆◆</h3> <p>Philly Cheese Steak Sandwich Four oz. steak grilled with sautéed mushrooms, peppers and onions smothered in melted American cheese and served on a sesame seed steak roll with pickle, chips, cole slaw \$3.95</p> <p>Cheese Melt Our own three different cheeses melted together for a flavor out of this world, served on your choice of bread with pickle, chips and cole slaw \$1.95</p> <p>Pizza for One Our BNL style crust topped with authentic Italian marinara sauce and melted mozzarella cheese \$3.25</p>			
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <p>Ask about our Daily Special 5:00 - 7:00 p.m.</p> </div>			

BROOKHAVEN BULLETIN

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

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

As the New Year begins, the Editor and editorial staff of the Brookhaven Bulletin gratefully acknowledge the indispensable, year-round contributions of the following people:

- Public Affairs Office
Janet Sillas
- Photography & Graphic Arts Division
Ken Boehm, Phyllis D'Avanzo, Dolores Jones
- Composition Group
Leo J. Casey, Cindy Chisare, Michele Dickerson, Dolores Knighton
- Offset Printing Group
Andy Brems, Kevin Hester, Neal Jackson, Jeff Knighton, Leon Lawrence, Bruce Style
- Photography Group
Stan Cherauski, Dick Fuka, Peter Horton, Howie Jones, Bill Marin, Helga Pirozzi, Mort Rosen, Joe Rubino, Georgia Schwender, Roy Skarka, Roger Stoutenburgh, Debra Zahra
- Quick Copy Group
Eva Esposito, Jerry Gaeta, Joe Hanson, Marie Ingenito, Kelly Mazzola, Joe Perry, Fred Wunder
- Graphic Design Group
Kathy Foy, Theresa Esposito-Lippo, Alan Schmidtchen, Pat Yalden
- Illustration Group
Whitey Caiazza, Judy Otto, Walter Palais, Irma Reilly

Staff Services Division, BNL Mail Room
Cheryl Brown, Selestine Brown, Jean Bunselmeyer, Margaret Fennelly, Esther Larios, Frank Norton, Dinorah Silva, Veronica Varlack

Personnel Division, Personnel Records
Debbie Maceluch, Bonnie Miller, Darlene Peragine

35 Brookhaven Ave., Upton, N.Y. 11973
(516) 282-2345

In Stormy Weather: Dial 282-INFO

Cooking Exchange

The next Cooking Exchange meeting will be held on Wednesday, January 9, at the Recreation Building in the apartment area, from 12:15 to 2:15 p.m.

All are welcome. A fee of \$2 will be charged to help defray the cost of ingredients used in the demonstration. Baby-sitting will be provided at 50¢ per child. For more information, call Barbara Kowalski, 744-3569.

Bowling

Red/Green League

R. Eggert had a 244/211/623 scratch series, M. Guacci 233/602 scratch, R. Larsen 224/602 scratch, H. Dawson 222/201/604 scratch, E. Carter 221, R. Wells 217, R. Mulderig 216, C. Bohnenblusch 212, S. Dimaiuta 208, R. Jansson 205/205, T. Prach 203, K. Riker 202.

White League

Dick Adams had a 246, Jim Goode converted the 6/7/10 split, Larry Musso the 4/7/9/10.

Purple League

John McCarthy had a 214/208, Rich Scheidet 213, Ed Sperry IV 202, Gail Schuman 200/192, Sharon Smith, 198, Kay Conkling 180.

Film badges will be changed tomorrow. Please place your badge in its assigned rack space before leaving work today.

