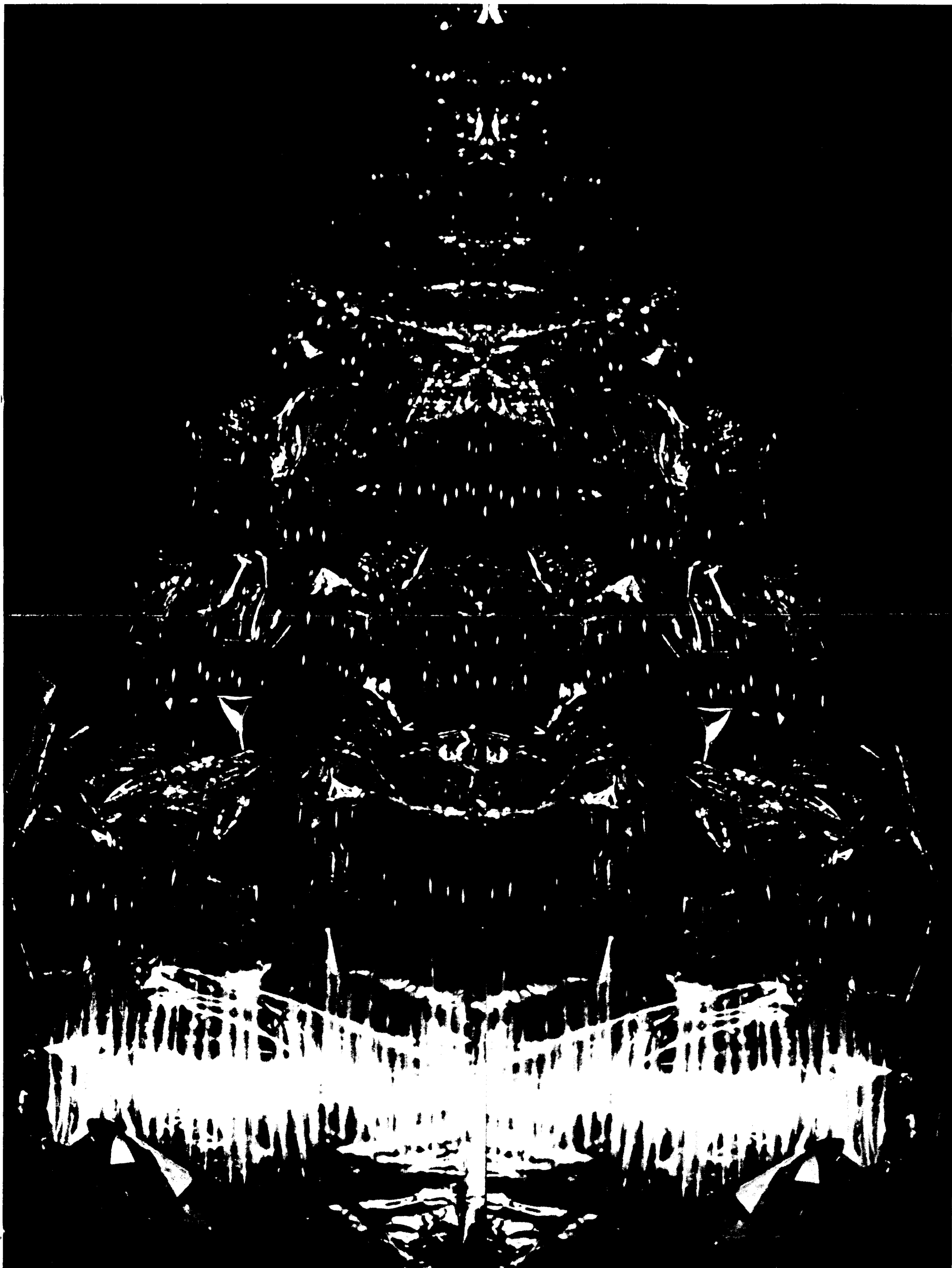


BROOKHAVEN BULLETIN

Vol. 46 - No. 49

December 18, 1992

BROOKHAVEN NATIONAL LABORATORY



Season's Greetings

Distinguished R&D Awards Go to Five BNL Scientists

This past Monday, December 14, the five Brookhaven scientists named below were honored as recipients of the Laboratory's Distinguished Research & Development Award. BNL Director Nicholas Samios presented each of the five with a check for \$5,000, before taxes, and an engraved memento.

The highest of the four types of awards in the Employee Recognition

Per Bak, Senior Physicist, Physics Department, has done pioneering work on the phenomenon of self-organized criticality. This recognizes that many large dynamical systems can organize themselves into a critical state of equilibrium in which a small perturbation can produce either small, large or devastating effects.



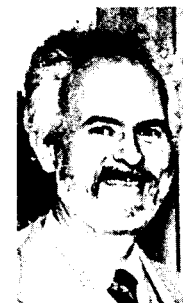
Krsto Prelec, Senior Physicist, Alternating Gradient Synchrotron Department, is a world-renowned expert in the R&D of ion sources. His contributions in this field and to accelerator physics have had a major impact on the design and construction of beam preinjector systems for high-energy accelerators over the past 20 years.



Masaki Suenaga, Senior Metallurgist, Department of Applied Science, was honored for his materials science research and engineering of superconducting materials, especially niobium-tin. His work has found practical application in composite wires and tapes, for use in high-field magnets and power-transmission lines.



Peter Takacs, Physicist, Instrumentation Division, has made significant contributions to the metrology of mirror surfaces. He has developed techniques and instrumentation for characterizing x-ray mirrors used at synchrotron radiation sources, benefiting experimentalists and mirror manufacturers worldwide.



Literacy Volunteers of BNL



Roger Stoutenburgh

Having just completed a training workshop given by Literacy Volunteers of America (LVA), 14 BNLers are now ready to tutor any employee, visitor, guest or spouse in basic reading. For those interested, tutoring is free, individual, private and confidential.

The 14 new reading tutors include: (standing, from left) Jackie Mooney, Physics Department; Frances Ligon, Office of Equal Opportunity; Marilyn Pandorf, Personnel Division; Lydia Lever, National Synchrotron Light Source Department (NSLS); Eileen Pinkston, NSLS; (seated, from left) Jean Byrne, Staff Services Division; James Teahan, Division of Contracts & Procurement; Mitchell Sussman, Safety & Environmental Protection (SEP) Division; Barbara Kponou, Instrumentation Division; Janice Lamb, Director's Office; and Katherine Vivirito, Technical Information Division (TID). Missing from the picture are: Rose Almasy, TID; Kathryn Kolsky, Computing & Communications Division; and Robert von der Linn, SEP.

If you or anyone you know wants to learn to read or become a better reader, to arrange for tutoring, call Marilyn Pandorf, Ext. 5251; Frances Ligon, Ext. 3709; or the local LVA office, 286-1649.

Tour Includes Magnet Factory

From Department of Energy (DOE) headquarters in Washington, D.C., Robert Simon, Principal Deputy Director of the Office of Energy Research, and Thomas Heitman, Special Assistant to the Director of the Office of Nuclear Safety, visited BNL in October.

After an overview of the Lab from BNL Deputy Directory Martin Blume and Carson Nealy, Manager of DOE's Brookhaven Area Office, Simon and Heitman reviewed safety and environmental issues with M. Sue Davis, BNL Associate Director for Reactor, Safety & Security, and Robert Casey, Head of the Lab's Safety & Environmental Protection Division. Then, they toured the National Synchrotron Light Source and the Relativistic Heavy Ion Collider (RHIC) Project, including the Bldg. 902 Magnet Factory. There, Simon (left) discussed the development and testing of full-sized, 9.7-meter RHIC dipole magnets with Peter Wanderer, head of the Project's Magnet Test & Measurement Section.



Roger Stoutenburgh

In Memoriam

Harold W. (Bill) Siegelman, a Senior Biochemist in the Biology Department, died of lymphoma on December 3. He was 72.

After arriving at BNL in July 1965 as a Plant Biochemist, Siegelman became Acting Chairman of the Biology Department in 1969, then Chairman, 1970-74. In 1973, he was named Senior Plant Biochemist, becoming Senior Biochemist in 1975.

Siegelman's primary research interest was in the colored proteins that gather and use light energy in plants. Before coming to BNL he did pioneering work on phytochrome, a protein that triggers the responses of plants to changes in day length.

Much of his work at BNL was concerned with the structure and properties of phycobilisomes, a system to funnel light energy into photosynthesis in blue-green algae, and the carotenochlorophyll proteins of dinoflagellate algae. He also worked



on algal toxins and, more recently, phages that infect cyanobacteria.

Remembering Siegelman, Richard Setlow, Associate Director for Life Sciences, said, "My office was next to Bill's. He was always enthusiastic about his own laboratory work — work that he took great joy in doing until he was hospitalized. Moreover, he was extraordinarily generous in lending equipment, setting it up and in sharing techniques and ideas."

Siegelman is also remembered by Bill Studier, the present Chairman of

the Biology Department: "Bill was a helpful and generous friend who freely shared his enthusiasms, whether for science, gardening, computers, or finding the best bargains in restaurants. He gave a lot to this Department in many ways, and we will miss him."

Bill Siegelman, who was a resident of Stony Brook, is survived by his wife, Anne, and their daughter Lynn and son Richard.

Retired Technical Specialist John

F. Donnelly died suddenly on October 9, at the age of 64. He began his 34-year Lab career on October 22, 1956, as a technician B at the accelerator project of the day, the Cosmotron. Donnelly retired on December 31, 1990, from the Accelerator Development Department. Having resided in Rocky Point, Donnelly is survived by his wife Rose, daughters Sharen, Heather and Erin, mother Ellen, and sister Margaret Doherty. Contributions in his memory may be made to the American Lung Association.

NRC Thanks Weiss for Annual Effort



Roger Stoutenburgh

Every year since 1985, Allen Weiss (second from left), Administrative Technical Assistant in BNL's Department of Nuclear Energy (DNE), has coordinated the annual Water Reactor Safety Information Meeting for the U.S. Nuclear Regulatory Commission. For this Washington, D.C.-based meeting, some 500 nuclear scientists from all over the world gather annually to report on the past year's research on reactor safety. With this year's meeting, held in October, Weiss concluded his annual organizational efforts — and earned a Certificate of Appreciation from the NRC, which was presented to him by Eric Beckjord (second from right), Director of the NRC's Office of Nuclear Regulatory Research, during a recent visit to BNL. Also on hand were DNE Deputy Chairman Robert Bari (left) and Brian Sheron, Director of the NRC's Division of Systems Research.

Holiday Notes

The Lab will be closed for a half day on Christmas Eve, Thursday, December 24, and the entire days on Christmas, Friday, December 25, and New Year's Day, January 1. The following schedules will be in effect.

- **Brookhaven Bulletin** — There will be no Bulletin next week, but a two-page Bulletin will be distributed on Thursday, December 31. The classified ad deadline for that issue is 4:30 p.m. on Wednesday, December 23; the deadline for other submittals is noon on Monday, December 28. The classified ad deadline for the next issue, on January 8, will be 4:30 p.m. on Thursday, December 31.
- **Credit Union** — The Teachers Federal Credit Union will close at 1 p.m. on Christmas Eve and on New Year's Eve, December 31, and will be closed Christmas and New Year's Days. The automatic teller machine in the foyer of Berkner Hall will be open throughout the holidays.
- **Food Services** — The Cafeteria will be open for snack bar service from 7:30 a.m. to 12:30 p.m. on Christmas Eve, and will be closed Christmas and New Year's Days. On the weekends following the holidays, the Cafeteria will be open for normal weekend snack bar service, from 9 a.m. to 2 p.m. The Brookhaven Center Club will be closed Christmas Eve, Christmas Day, New Year's Eve and New Year's Day. The Vended Food Service, Bldg. 912, will be open at all times and serviced regularly.
- **Gymnasium & Pool** — The pool will continue its maintenance shutdown throughout the holiday, while the gym will be closed both holiday weekends, from Thursday through Sunday, December 24-27, and from Friday through Sunday, January 1-3, remaining open during the work week. For both the gym and the pool, usual scheduling will resume on Monday, January 4.
- **Recreation Building** — The Recreation Building in the apartment area will be closed from Monday, December 21, through Sunday, January 3.
- **U.S. Post Office** — The service window at the Upton Branch of the U.S. Postal Service will close at noon on Christmas Eve and remain closed until Monday, December 28. It will also be closed on New Year's Day.
- **Weekly Calendar** — The deadline for submittals for the Weekly Calendar for the week of December 28 is noon on Monday, December 21; the deadline for the week of January 4 is noon on Monday, December 28.

Added Addresses

- Brookhaven Natl Labs
- Brooke Heaven Lab
- Administrator of Pilot Engineering
- Brookhaven National Laboratory Department of Energy
- Broke Heaven
- Brookhaven Nut Labs
- Brooklyn National Laboratory Uptown, NY
- Frances Data Bernstein Brookhaven National Labor
- Brook Haven Laboratory
- Broodhaven National Labora ASG - 75 Brookhaven Ave. Lipton, Ny 11973

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 1992 draws to a close, the Editor and editorial staff of the Brookhaven Bulletin gratefully acknowledge the indispensable, year-round contributions of the following people:

- Public Affairs Office**
Anne Baittinger, Diane Greenberg, Mona Rowe, Janet Sillas
- Photography & Graphic Arts Division**
Ken Boehm, Phyllis Domenech, Dolores Jones
- Composition**
Leo J. Casey, Cyndy Chisare, Michele Hale, Dolores Knighton
- Copy Service**
Philip Allen, Kevin Collins, Jerry Gaeta, Joe Hanson, Kelly Mazzaola, Joe Perry, Fred Wunder
- Offset Printing**
Andy Brems, Kevin Hester, Neal Jackson, Jeff Knighton, Leon Lawrence, Bruce Style
- Photography**
Stan Cherouski, Maj Britt Hansen, Michael Herbert, Peter Horton, Howie Jones, Bill Marin, Helga Pirozzi, Mort Rosen, Joe Rubino, Roger Stoutenburgh
- Graphic Design**
Kathy Foy, Theresa Esposito, Alan Schmidtchen, Pat Yalden
- Illustration**
Whitney Calazza, Judy Otto, Irma Reilly
- Staff Services Division, BNL Mail Room**
Luerne Allen, Selestine Brown, Jean Bunselmeyer, Esther Larios, Frank Norton, Dinorah Silva, Veronica Varlack
- Personnel Division, Personnel Records**
Louisa Barone, Sharon Goode, Bonnie Miller, Darlene Peragine

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

Inside Info

The Brookhaven Bulletin won two Awards of Excellence in the 1992 Publications and Art Competition of the New York Chapter of the Society for Technical Communications. One award was for general publication excellence in the category of Newsletters; the other for artistic interpretation, as shown in the Winter Holiday Cover of December 21, 1990.

Santa's 10th Anniversary



This is the tenth year that Santa (Firefighter Rich Richard) and his elf helper (Sergeant Chuck LaSalla) will be making rounds on site, sharing their good cheer and distributing candy canes, compliments of BNL's Fire/Rescue Group of the Safety & Environmental Protection Division.

With Fire Engine #2 as their sleigh, Santa and his elf will go round the offices and laboratories beginning at 9:30 a.m. on Christmas Eve, Thursday, December 24.

While Santa and company will try to visit every building on site, if they have missed yours in the past (possibly because you have been naughty, not nice) or if you want Santa to make a special appearance in your workplace at a certain time, please call Ext. 2351 to make a reservation.

Reports Available

The following reports are available to Laboratory staff and affiliates of DOE, AUI and NRC. Others may purchase the reports from the National Technical Information Service, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, VA 22161. Staff members should call the designated contact.

NUREG/CR-5912
BNL-NUREG-52335
Contact: J. Hodgkinson, Ext. 4909
Review of the Technical Basis and Verification of Current Analysis. G. De Grassi.

NUREG/CR-4409 (Vol. 4)
BNL-NUREG-51934
Contact: M. Beckman, Ext. 3228
Database on Dose Reduction Research Projects for Nuclear Power. T.A. Khan, D.S. Vulin, H. Liang and J.W. Baum.

NUREG/CR-5924
BNL-NUREG-52339
Contact: A. Fort, Ext. 2114
Pilgrim Nuclear Power Station — High Pressure Coolant Injection. W. Shier and W. Gunther.

NUREG/CR-5816
BNL-NUREG-52312
Contact: N. Siemon, Ext. 2397
BWR Stability Analysis With BNL Engineering Plant Analysis. W. Wulff, H.S. Cheng, A.N. Mallen and U.S. Rohatgi.

On the Cover

O Christmas Tree!
RHIC's Christmas Tree!
How wiry are thy branches!



The "Christmas tree" on the front cover is the inspiration of Ginny Waterman, an administrative assistant with the Relativistic Heavy Ion Collider (RHIC) Project.

Waterman saw a photo of some stacks of cellophane-wrapped, partially completed superconducting wire destined to be made into the 30-strand cable that is eventually coiled into superconducting magnets for RHIC. She was instantly struck with the idea that, doubled with its mirror image, the photo would look like a decorated Christmas tree.

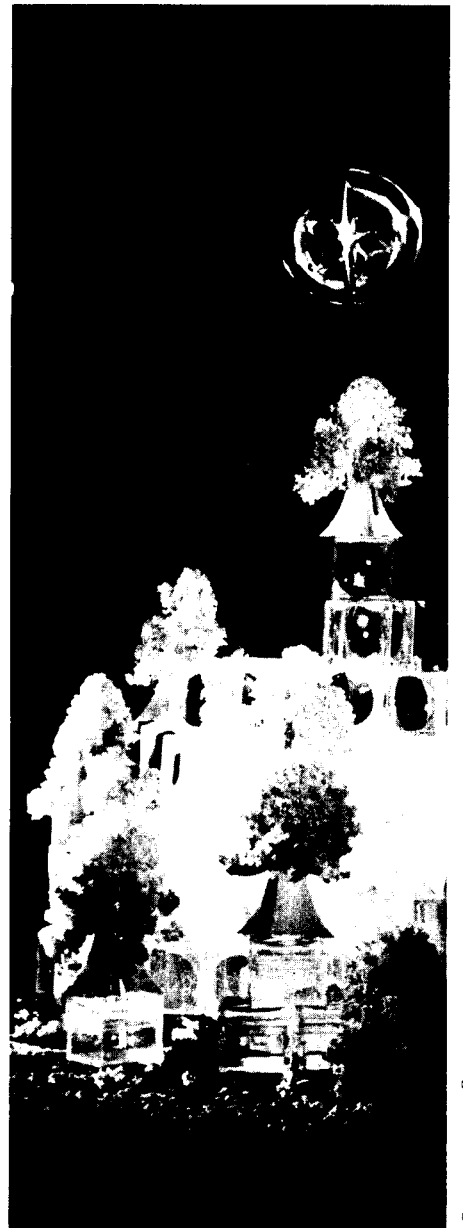
Thus, with expert assistance from the Illustration and Photography Sections of the Photography & Graphic Arts Division, and with permission to use the original photo from Oxford Superconducting Technology, New Jersey, the firm making the wire for BNL, the Bulletin's holiday cover was created.

Last Day for Science Store Magic

When science takes a hand with magic, an indoor winter wonderland's a breeze. All that's needed are an "ice" mountain of piled-up magnifying cubes, "snowy" firs that crystallize in a few hours when tree-shaped filter papers are soaked in "Magic Tree" powder mixed with water, and an unearthly body made from part of a gyroscope suspended on black thread.

These items, as well as many other weird and wonderful toys and *objets de science* can be bought today — the last day of the Winter Holiday Sales at the Science Store.

The store is located in the west side of Bldg. 701. So, from 10 a.m. to 3 p.m., after parking in the north parking lot, stock up on inexpensive gifts that teach the science on which so many "magical" effects are based.



Roger Stoutenburgh

1993 New York City Train Trips

This is the only time that the 1993 schedule of special, discounted trips to New York City (NYC) via the Long Island Railroad (LIRR) will be published in the Bulletin, so clip and save the information below:

• **Saturday trips** — The Patchogue-Medford Library runs trips to NYC on the third Saturday of every month, starting in March. The train leaves from Patchogue at 8:15 a.m. Purchase round-trip tickets, at \$7 each, at the library at least one week before the trip. For information, call 654-4700, Ext. 20.

• **Wednesday trips** — Diane Weid will run NYC train trips on the first, third and fifth Wednesdays of each month, leaving from Patchogue at 7:55 a.m. The round-trip cost is \$7.50 per person.

A minimum of 30 people is needed for each trip. For reservations, send a check payable to Cash to: Diane Weid, 654 Old Medford Avenue, North Patchogue, NY 11772. Checks must be received by the Monday before a trip and should include your phone number and the trip date. For more information, call Weid at 475-2394.

Wednesday trip dates are:

Jan. 6, 20	May 5, 19	Sept. 1, 15, 29
Feb. 3, 17	June 2, 16, 30	Oct. 6, 20
March 3, 17	July 7, 21	Nov. 3, 17
April 7, 21	Aug. 4, 18	Dec. 1, 8, 15, 22, 29

