BROOKHAVEN BULLETIN
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BROOKHAVEN NATIONAL LABORATORY

Kirk Joins Lab as Associate Director, High Energy & Nuclear Physics

Thomas Kirk first came to BNL as a student in the 1960s, while working on his thesis. After earning his Ph.D. in 1967, he continued working on high energy physics research at Brookhaven as a member of the Harvard University staff. By the middle of the 1970s, he was very familiar with the Lab, having participated in four experiments at the Alternating Gradient Synchrotron (AGS).

On October 3, Kirk will return to Brookhaven as the Laboratory's Associate Director for High Energy and Nuclear Physics. He succeeds Laurence Trueman, who had served in an interim capacity since September 1, when Melvin Schwartz, who had been Associate Director since 1991, left BNL to return to academia as the I.I. Rabi Professor at Columbia University.

Thomas Kirk

In his new position, Kirk is responsible for both the Physics and AGS Departments, the Instrumentation Division and the Center for Accelerator Physics.

Additionally, Kirk will act as BNL's liaison for the CERN collaboration. With the demise of the Superconducting Super Collider (SSC), some of Brookhaven's high energy physics projects have been redirected to the Large Hadron Collider, which is planned to be built at CERN, the European particle physics laboratory.

"I am pleased to announce Dr. Kirk's appointment," Laboratory Director Nicholas Samios said, "Tom, who has headed the High Energy Physics Division at Argonne National Laboratory, was most recently the Deputy Director of the SSC Laboratory. Before assuming that position, he was Project Manager and Department Head for the Solenoidal Detector Collaboration (SDC) at the SSC. Tom brings to Brookhaven wide experience in both high energy and heavy-ion physics. He has been active in the heavy-ion physics STAR collaboration, was Neutrino Department Head at Fermilab, and participated in four high energy physics AGS experiments."

In welcoming Kirk, Samios also said, "I would like to thank Larry for stepping in and serving for this last month. As expected, everything ran extremely well with Larry at the helm." Trueman, a Senior Physicist in the Physics Department, had earlier held this Associate Directorship from 1988-1990, when he opted to return to research.

Samios also praised Schwartz's contributions to BNL as "critical to setting the course for the experimental program at the Relativistic Heavy Ion Collider (RHIC)," and he looked forward to Schwartz's continuing use of BNL facilities.

Of his new position, Kirk said, "My goal is to continue the Laboratory's great tradition of exciting physics with its anticipated rewards of new discoveries about nature. With the advent of RHIC, the focus of forefront physics research

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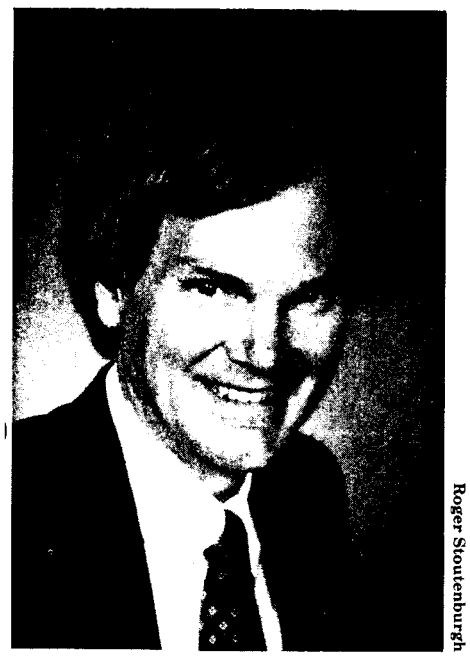
New Administration for DAS — James Davenport Named Chair



Roger Stoutenburgh

James Davenport

James Davenport, Associate Chair of the Physics Department, will move to the Department of Applied Science (DAS) on October 1 — as the new Chair. Davenport will succeed Leon Petrakis, who has chaired DAS since 1989 and will be returning to research.

DAS encompasses a broad range of research, from applied physics and materials science to chemical and environmental sciences. As Department Chair, Davenport will oversee the work of some 200 employees in eight divisions.

To aid him in the leadership of this large, diverse department, Davenport selected oceanographer Paul Falkowski, a Senior Scientist in DAS, to assume the new position of Deputy Chair.

On announcing Davenport's appointment, BNL Director Nicholas Samios commented, "He is one of our distinguished scientists in materials

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AUI Distinguished Lecture

Nobelist Explores Instrumentation: Its Evolution and Applications

Georges Charpak

In 1968, physicist Georges Charpak invented the multiwire proportional chamber — a detector that changed the course of experiments not only in high energy particle physics, but, subsequently, in other fields, such as medicine and biology. For inventing and developing this innovative detector and others, Charpak won the Nobel Prize in Physics in 1992.

On Wednesday, October 5, in an AUI Distinguished Lecture entitled "From Imaging of Particle Trajectories to Applications in Biology and Medicine," Charpak will discuss the development of these detectors and their uses. The lecture will be held in Berkner Hall at 4:30 p.m.

Charpak's multiwire proportional chamber was revolutionary because it relied on electronics and a computer — rather than slower photographic methods — for tracking the paths of subatomic particles after they smash against a target or against each other in accelerators.

Because of Charpak's invention, physicists were able to collect data approximately 1,000 times faster than in the past — an important factor when sometimes only one particle interaction in a billion is of scientific interest. Thus, this new instrumentation enabled physicists to detect very rare particle interactions that often

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BNL Lecture: Safety of Next-Generation Reactors

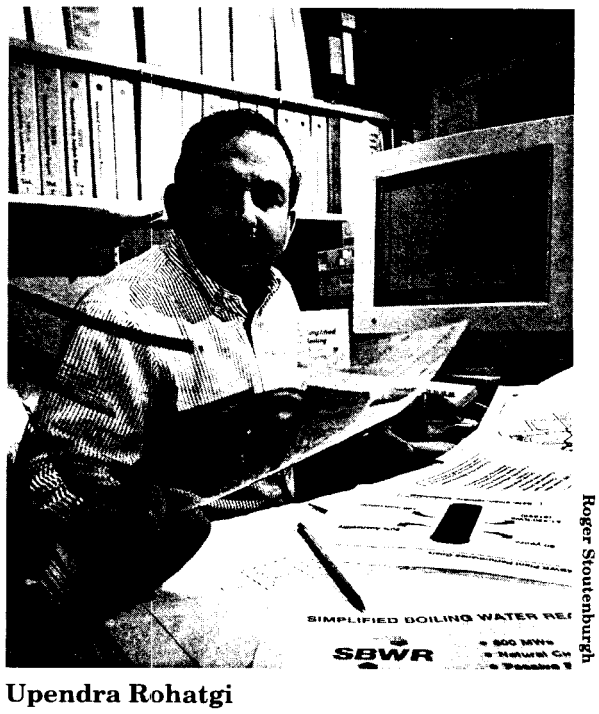
Right now, some 111 nuclear reactors provide about 22 percent of the electricity used in the United States, and as oil and other power sources are depleted, this percentage may be expected to rise.

Yet, since a 1979 accident at the Three Mile Island plant's Unit 2 in Pennsylvania and the much more serious 1986 accident at Chernobyl in the then Soviet Union, many Americans react negatively to nuclear power.

Resolving the public's concern has been a prime consideration of both government and industry, with the result that safety and reliability are foremost among the driving forces generating today's most advanced reactor technology.

To trace how planning for safety has revolutionized reactor design, and to explain BNL's role in performing research and providing technical assistance to the U.S. Nuclear Regulatory Commission (NRC) in its investigation of safety and licencing issues for these advanced designs, Mechanical Engineer Upendra Rohatgi, Department of Advanced Technology, will give the 298th Brookhaven Lecture, the first of this 1994-95 season.

Entitled "Safety of the Next-Generation Reactors," the talk will begin at 4 p.m. in Berkner Hall on Tuesday, October 4. Rohatgi will be introduced by DAT Deputy Chairman Robert Bari.



Roger Stoutenburgh

Upendra Rohatgi

After a brief introduction to the history of chain reaction, U.S. power requirements and the evolution of power reactors, Rohatgi will describe some current designs of light water reactors, their containments, safety goals and engineered safety systems. He will explain lessons learned from the Three Mile Island accident, and how this incident helped provoke a new generation of advanced reactor designs based largely on the concept of passive safety.

Passive safety in a reactor means that if part of the normal system fails, built-in, natural safety features will start working automatically to prevent potential hazards from developing. These features are characterized by uncomplicated components that work through simple mechanics or gravity, without the intervention of an operator. Rohatgi will describe some of the revolutionary passive-safety reactors under consideration today.

But all new designs need to be assessed. To help in the evaluation process, Rohatgi will relate, the NRC has continually drawn on DAT researchers, specialists in

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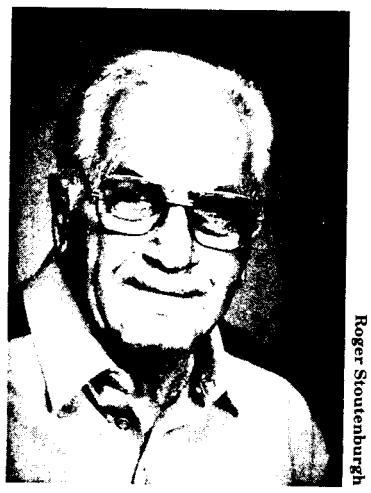
Leaving the Lab — After 35 Years or More

The Bulletin salutes the following employees who are retiring with 35 or more years of service to the Laboratory.



Roger Stoutenburgh

Leonard Bacelli

As Leonard Bacelli, an Electrician A Group Leader in the Plant Engineering Division, retires today with 35 and a half years of service, he recalls that his first experience at the site dated from January 1941, when, as an inductee in the U.S. Army, he was detailed to work on the hospital wards of Camp Upton. After the war, his army career brought him back to Upton, this time as a ward master. Then, he left the army and the site.

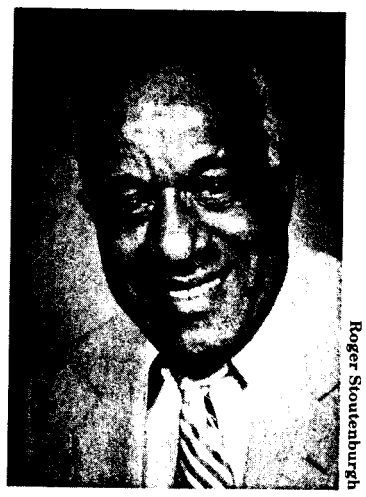
But fate meant Bacelli and Upton to stay together. Still on Long Island, Bacelli went into his own business as an electrician, while Upton got busy building a new national laboratory. By the early 1950s, the Lab needed outside help for electrical work on many new projects — and guess who became a contractor?

"My partner and I were contracted to work on the graphite pile [for the Brookhaven Graphite Research Reactor], and the AGS [Alternating Gradient Synchrotron], as well as on converting the old hospital to apartments," remembered Bacelli. "There was a lot of work to do here, and they needed more staff. After we'd been on the job for a while, we were asked if we wanted to join the Lab. We'd met a lot of nice people, and business was beginning to slow down on the outside — so we said yes. We hired someone else to finish our contract, and within a week, we were in!"

That was February 2, 1959, and Bacelli never regretted his decision. At that time, the AGS was just a tunnel, where steel girders were being installed for the magnets. "I was assigned there and stayed there," Bacelli said. This took him through changes in the name of his division — it started as Plant Maintenance in 1960, changed to Plant Engineering and Planning in 1968, and became Plant Engineering in 1972 — and through changes in his position — he was named Group Leader in 1982. "I never wanted to leave," he commented. "I'd been part of the AGS from the beginning, and it seemed like my place."

While Bacelli has many memories of good friends and good experiences at the Lab, "The biggest thrill was when they threw everything on for the first time at the AGS and it WORKED!" he said. "In the control room, we all went mad — scientists and engineers were jumping for joy — we were all proud. It was a great moment."

Bacelli regrets retiring, but he and his wife Grayce will be spending the winter in Florida — a new experience. "We'll see what it's like," he said. — Liz Seubert



Roger Stoutenburgh

Theodore Johnson

On February 3, 1953, a new hospital orderly, who had just completed five years of military service, joined the BNL Research Hospital. Theodore Johnson had begun his long career in BNL's Medical Department, and he retires today after 41 and a half years.

"I'd been trained in the U.S. Army as a medic for the operating room," explained Johnson, "and among other experiences, while I was in Germany, I was in charge of a 21-bed dispensary. So when my uncle, who worked at the Lab, told me they had a hospital here, I applied. Within a week I was working, and I've been here ever since."

In 1953, the Lab hospital cared for inpatients in what is now the apartment area. Not until December 1958 was the Medical Research Center dedicated. "Mostly, the patients had cancer, hypertension, then Parkinson's disease, and nephrosis — that was mainly children," remembered Johnson. "When we moved into the new building, there were four pavilions of patients with Parkinson's, brain tumors and leukemia. We were always busy, looking after the patients, accompanying them by ambulance to and from airports or Massachussetts General Hospital, where the doctors worked with our scientists — it was constant go, go, go, go. But at the end of the day, you always felt you'd *accomplished* something."

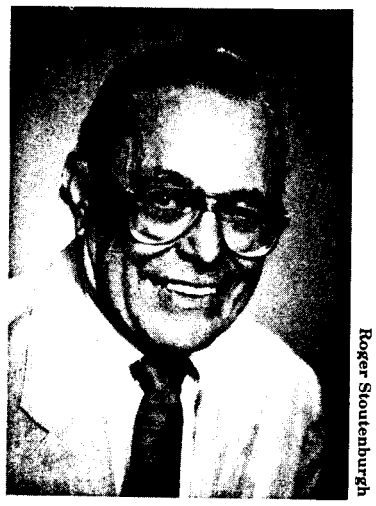
Later, when funding and research changes meant that BNL treated only outpatients, Johnson missed the old days, even though they entailed occasions like a big snowstorm of the early 1960s, when he was asked to come in on Thursday and never got home till the next Tuesday night.

"But we are still useful to the patients — getting them ready for tests, helping them know what they have to do, making it less strange for them. Most places at the Lab, the group you work with becomes like a family, and this makes it a good place to come to. I *never* got out of my bed and hated to come to work," Johnson declared.

Over the years, Johnson was promoted through Medical Services Assistant, Assistant Clinical Services Supervisor, Clinical Services Supervisor, to his present position as Hospital Services Supervisor, in 1980. Now, "After 41 years, I'm going to miss coming in," he admitted.

But with four children and two grandchildren in Massachussetts, Connecticut and Oklahoma, Johnson and his wife Theresa won't be spending all their time at home in Riverhead. Oklahoma's first on the visiting list, for Thanksgiving. "I'm looking forward to it," he said. — Liz Seubert

Paul Michael



Roger Stoutenburgh

After 36 years during which he pursued two distinct careers — both in essentially the same department — Paul Michael is officially retiring today from BNL.

Michael arrived at Brookhaven on August 25, 1958, as an assistant physicist in the Nuclear Engineering Department (NED). Over the years, NED evolved to the Department of Applied Science (DAS), in 1969; briefly transformed into the Department of Energy & Environment (DEE), from 1977 to 1983, when it became DAS again. Michael's first career in reactor physics was largely in NED, while his second career in atmospheric sciences has taken place in DAS and DEE.

Reactors were on Michael's mind when he applied for a position at BNL while studying for his Ph.D. at New York University. "My advisor Lyle Borst was one of the early designers of the Brookhaven Graphite Research Reactor," he said, "so Brookhaven seemed very attractive."

The attraction was mutual, so Michael came to NED as a member of Jack Chernick's Reactor Physics Division. His first assignment was to work on the core physics design of the High Flux Beam Reactor, which came on line in 1965. This was followed by research on neutron and reactor physics and a growing interest in the numerical solutions of fluid-flow equations. And it was accompanied by promotions to Associate Physicist in 1960 and Physicist in 1969, and the awarding of tenure in 1967.

Michael's work with fluid-flow equations was key to his career change. When a general cutback in funding support limited the future for his reactor development work, he turned to the burgeoning field of atmospheric sciences. "Though the fields are very different, we are looking at the same sort of equations," he said, "so I was able to make the transfer from looking at diffusion of neutrons to looking at diffusion of gases and particulates in the atmosphere."

Thus, Michael joined DAS's Meteorology Group in 1970, as a scientist, and was named the group's Head in 1972. At that time, the DAS Chair was Warren Winsche, whom Michael called his "number one mentor."

During this period, Michael was often found at the beach. But he wasn't swimming or sunbathing, he was taking part in a study of dispersion in the off-shore atmosphere, to help answer questions surrounding plans to locate nuclear power plants on floating barges moored off shore. This Coastal Meteorology Project, Michael recalled, spawned the oceanography program in DAS, as the Energy Research & Development Administration, the forerunner of the U.S. Department of Energy (DOE), collected as much information as possible about the coastal region.

In 1975, Michael was named Head of the Atmospheric Sciences Division (ASD) in the area of Environmental Programs overseen by Bernard Manowitz, then DAS Associate Chairman. Much of the division's research during the following years dealt with acid rain, and Michael was instrumental in the design and responsible for the scientific coordination of one part of DOE's National Acid Precipitation Assessment Program known as PRECP, for PRocessing of Emissions by Clouds and Precipitation.

Michael headed ASD until 1990, when he became a senior scientist in the Oceanographic & Atmospheric Sciences Division. There, he was responsible for the advance planning for establishing a climate research site in the locale of the Gulf Stream, as part of DOE's Atmospheric Measurements Program (ARM). ARM is a multi-laboratory DOE program designed to obtain comprehensive atmospheric radiation and meteorological data to predict global climate changes.

Despite his retirement, Michael plans to continue his atmospheric inquiries at the Lab, pursuing an independent study modeling the unique sea breezes of this area, as they flow from the Atlantic Ocean, over Long Island, then over Long Island Sound and over Connecticut.

Michael has also served on several BNL committees. He was a member and chair of the Reactor Safety Committee, 1978-88, and a member of the Computer Policy Committee, 1975-88. Since 1988, he has sat on the BNL Lectureship Committee, which handles the AUI Distinguished Lecture and Pegram Lecture Series. He also was a member of the BNL Council, 1990-93, serving as chair 1991-92.

BERA activities too have commanded Michael's attention. Early on, he was busy with the Softball League and the Camera Club. Then after a long period of more work and less play, Michael joined the Swim Club when it was formed in 1985. He was even elected president in 1988 because, he joked, "I was out of the country when elections were held."

In seriousness, Michael said, "I have always enjoyed making new associations with other people, and when I look back at my years at BNL, the thing I think about most is the many wonderful people I have met here, in my work and in my recreational activities. I particularly think of Jack Chernick, Warren Winsche and Bernie Manowitz, who provided creative leadership and were all very open and easy to work for — very supportive of their subordinates' ideas."

Though Michael plans to remain part of the BNL landscape for the immediate future, he and his wife Norma, who live in Setauket, do expect to travel more. This will start next week with long-planned family visits, but he'll return by the end of October to begin his retirement in his office at BNL. — Anita Cohen

Inside Info

Douglas Humphrey becomes Photography Supervisor in the Photography & Graphic Arts Division (P&GA) tomorrow, as he assumes the position being vacated by **Morton Rosen,** who leaves the Laboratory today.

"Doug brings to this job many years of experience as both photographer and, most recently, Video Supervisor," said P&GA Manager John Laurie. In his new role, Humphrey will continue to oversee BNL Video, as it merges with Photography.

Humphrey joined the Photography Group in December 1959, as a photo technician. He was named Senior Photographer in 1967, Technical Photographer in 1968, and Senior Technical Photographer in 1973. He began supervising P&GA's video services in 1985.

Rosen had started at the Lab in March 1958, as a photographer. Over the next 36 years, he was named Technical Photographer in 1964, Senior Technical Photographer in 1968, and Photography Supervisor in 1988.

"I want to thank Mort for his many years of dedicated service to the Laboratory," said Laurie. "His talent, good nature and professionalism have made my job so much easier. He has been a teacher who will be remembered not just because of who he is, but through his many memorable photographs and portraits of others."

1994 Healthfest

BNL Health, Fitness & Safety Fair

Two fitness activities, three talks and a two-day information fair will be featured during *Healthfest* 1994 — BNL's second celebration of health, fitness and safety, which is scheduled for October 10-13.

Sponsored by the Director's Office, *Healthfest* '94 is being organized to encourage BNLers to take personal interest and responsibility for their individual health, fitness and safety.

The festivities will begin and end with fitness activities:

• **2-mile Fitness Walk, Monday, October 10** — Hosted by the BNL Walking Club, the walk will start at noon at the Science Education Center, Bldg. 438.

• **5-kilometer (3.1-mile) Fitness Run, Thursday, October 13** — The BNL Roadrunners Club will host this jogging or running tour of BNL's big machines, starting at noon at the Medical Department, Bldg. 490.

The first 200 registered walkers and 100 registered runners will receive a 1994 *Healthfest* T-shirt. In addition, those *Healthfest* walkers and runners who use the Lab pool at least once from October 10 through Sunday, October 16, will each be considered BNL Biathletes of the Week — and the first 50 will be awarded another *Healthfest* memento.

Healthfest will also feature three talks sponsored by the Health Promotion Program of the Occupational Medicine Clinic, each running from noon to 1 p.m. in Berkner Hall:

• **"Ergonomics — Reducing Physical Stress at Home and at Work," Tuesday, October 11** — Cynthia Roth of Ergonomic Technologies Corporation will discuss ergonomics — the study and design of work and equipment in relationship to the physiological and psychological capabilities of people — applying these concepts to making everyday life less stressful. Roth holds a degree in occupational registered nursing from the University of Pittsburgh and in labor relations/industrial management from Cornell University.

• **"Stress Management From a Behavioral Medicine Perspective," Wednesday, October 12** — Clinical psychologist Susan Dermit, will demonstrate how a behavioral medicine approach can help a person reduce feelings of stress and see positive physiological changes, such as a decrease in blood pressure. At the State University of New York at Stony Brook, where she earned her Ph.D., Dermit is Assistant Professor in the Department of Psychiatry and Behavioral Science. She is also in private practice in Port Jefferson.

• **"Smoking — How to Quit and Stay Quit," Thursday, October 13** — Stuart Green, President and Founder of Green Seminars, Inc., will explain the behavior modification techniques that his company's seminars combine with hypnotic experiences to help participants stop smoking. Green is a graduate of San Jose State University with postgraduate training and experience in the field of clinical psychology. He was trained in hypnosis at the New York Institute for Hypnotherapy.

The main feature of *Healthfest* '94 is a **Health, Fitness & Safety Fair**, to be held on both Tuesday and Wednesday, October 11 and 12, from 11 a.m. to 2 p.m. in Berkner Hall.

During the two days, BNLers are invited to peruse displays on such topics as AIDS awareness, back safety and ergonomics, cancer and heart-disease prevention, on-site mental health and substance-abuse services, and Weight Watchers at work.

While picking up information, *Healthfest* participants may witness demonstrations of fire safety, and exercise and personal protective equipment. And those attending *Healthfest* may partake in health analyses, including body composition, blood pressure and foot screenings.

Healthfest organizers include the Central Shops Division, Occupational Medicine Division, Personnel Division, Plant Engineering Division, Public Affairs Office, Safeguards & Security Division, Safety & Environmental Protection Division, as well as the BNL Roadrunners Club, the BNL Swim Club and the BNL Walking Club.

To register for the Fitness Walk, Fitness Run, any lectures and/or a podiatry foot screening, complete the coupon at left. For more information, contact Mary Wood, Ext. 5923 or 4567.

Healthfest '94 Registration Form

Name: _____ **Life number:** _____

Bldg.: _____ **Ext.:** _____

I would like to participate in the following:

- ❑ **2-mile Fitness Walk**, Monday, October 10, noon to 1 p.m., Start at the Science Education Center, Bldg. 438. *First 200 registered participants receive 1994 Healthfest T-shirt.*
- ❑ **5-k (3.1-mile) Fitness Run**, Thursday, October 13, noon to 1 p.m., Start at the Medical Department, Bldg. 490. *First 100 registered participants receive 1994 Healthfest T-shirt.*
- ❑ **Lecture, "Ergonomics,"** Tuesday, October 11, noon to 1 p.m., Berkner Hall.
- ❑ **Lecture, "Stress Management,"** Wednesday, October 12, noon to 1 p.m. October Berkner Hall.
- ❑ **Lecture, "Stop Smoking,"** Thursday, October 13, noon to 1 p.m., Berkner Hall.
- ❑ **Podiatry Foot Screening**, *registration limited to 75 people.* Tuesday & Wednesday, October 11 & 12, 11 a.m. to 2 p.m., Berkner Hall.

Complete and return this form to Mary Wood, Bldg. 490, by Tuesday, October 4.

Thomas Kirk (cont'd)

at BNL will move to heavy-ion collisions, an area of nuclear physics that will explore conditions not present in the universe since the brief instant after the 'Big Bang.' Brookhaven is poised to explore this unknown territory with the most sophisticated scientific instruments ever assembled."

The AGS will also continue to play an important role at BNL, according to Kirk, with a strong experimental program of its own. In addition, he said, "Studies of heavy-ion collisions under way at the AGS will pave the way to the higher-energy RHIC experiments and prepare us for the phenomena we will see there."

Kirk added, "To allow continued progress in particle physics, ongoing efforts in the development of accelerators and detectors must match the ever-increasing needs of experiments. Brookhaven's Center for Accelerator Physics and Instrumentation Division meet these needs in a superb way. The former seeks to advance the state of the art for particle accelerators and the latter supports the entire Laboratory in cutting-edge instrumentation. The continued success of these BNL assets will be a priority of mine."

Thomas Kirk earned a B.S. in engineering/physics from the University of Colorado, in 1962, and an M.S. and Ph.D. in physics from the University of Washington, in 1964 and 1967, respectively.

Upon graduation, Kirk taught physics at Harvard University until 1972, then for the next three years, he taught at the University of Illinois, Urbana. In 1977, he joined Fermi National Accelerator Laboratory, where he held various scientific and management positions, including Magnet Division Head of the SSC Central Design Group.

In 1989, Kirk went to Argonne National Laboratory to become Director of the High Energy Physics Division, a position he held until he became the SDC Project Manager and Department Head at the SSC. In 1994, he became SSC Laboratory Deputy Director, helping to manage the termination of the huge accelerator project that had been discontinued by a vote of the U.S. Congress in October 1993.

Kirk is a fellow of the American Physical Society and a consultant for various private and government organizations, including Massachusetts General Hospital, the National Science Foundation, the state of Texas and the U.S. Department of Energy.

—Diane Greenberg

Davenport (cont'd)

science and has a broad and deep interest in many fields of science. We are fortunate that we have such a capable person willing to serve in this crucial Laboratory position."

Samios also thanked Petrakis for "invigorating and reorganizing DAS," adding, "The department is now on a solid foundation. The new programs that he nurtured, such as the Global Change Initiative, have been important additions to the Lab. Significantly increasing the number of young postdoctoral appointments has enlivened DAS. He successfully campaigned for much needed additional space which is now slated for construction in fiscal year 1995. Now that he is returning to research, he has my strong support and best wishes."

Davenport also noted Petrakis's contributions, saying, "The U.S. is looking for practical applications from research conducted in national labs, and Leon Petrakis has left the department in a strong position, both intellectually and financially, to help fulfill that goal."

Concerning the role of basic research, he added, "I believe that policymakers are aware that their own goals in applied areas cannot be met without a vigorous and well-founded program in basic research. I think it's clear that DAS has outstanding research programs across the spectrum — from basic to applied — and these programs interact with one another synergistically. This means that our work on the environment, in materials and chemical sciences, in mathematical and computational science, and in energy-efficiency should be near the top of the national agenda."

Davenport sees DAS' new administrative team as just right for meeting this challenge. "My skills are in solid-state physics and chemistry, while Paul Falkowski is a world-class oceanographer who brings to the team skills in environmental science and oceanography," he said. "I believe our combined knowledge will provide a balance that will be good for DAS."

A theoretical physicist, Davenport has been leader of the Solid State Theory Group in the Physics Department since 1986. He specializes in calculations concerning the properties of metals and alloys and has written approximately 80 scientific papers dealing with the electronic structure of solids and solid surfaces.

Davenport holds two degrees in electrical engineering — a 1967 B.S. from Brown University, and a 1968 M.S. from Princeton University. He received his Ph.D. in physics from the University of Pennsylvania in 1976, and did postdoctoral work at the Institute of Theoretical Physics at the Chalmers University of Technology in Sweden.

In 1978, Davenport started his career at Brookhaven as an assistant physicist in the Physics Department. He was named an Associate Physicist in 1981, Physicist in 1983, and Senior Physicist in 1994. Last year, he was promoted to the Physics Department's Associate Chair.

Davenport has served on many professional committees, including the ESnet Steering Committee, which is responsible for the U.S. Department of Energy's portion of the information superhighway. He is also a member of several professional organizations, including the American Physical Society and the New York Academy of Sciences.

Paul Falkowski earned both a B.S. and M.A. in biology from the City College of the City University of New York, in 1972 and 1973, respectively, and he received his Ph.D. in biology/oceanography from the University of British Columbia in 1975. He did postdoctoral work at the University of Rhode Island in 1975-76.

Falkowski joined the BNL staff as Assistant Oceanographer in 1976, became Associate Oceanographer in 1978, and Oceanographer in 1980. After serving as head of the Oceanographic Sciences Division from 1987-91, he became Senior Scientist in DAS in 1993. —Diane Greenberg

Coming Up

The next BERA concert of the 1994-94 season will feature diverse chamber music performed by promising music students from the State University of New York at Stony Brook. It will be held in Berkner Hall on Wednesday, October 12, at 8 p.m., and a $6 donation is suggested.

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AUI Lecture (cont'd)

reveal new information on the structure of matter.

Almost every experiment in particle physics today relies on some form of Charpak's original invention. Also, Charpak has developed subsequent instruments, useful in the fields of medicine and biology, for imaging beta rays, determining protein structure and detecting ultraviolet radiation.

A French citizen born in Poland, Charpak earned his Ph.D. in Physics from the Collège de France, Paris. He has been a physicist at CERN, the European particle physics laboratory, since 1959, and for the past decade, he has been Joliot-Curie Professor at the Ecole Supérieure of Physics and Chemistry in Paris. Charpak holds an honorary doctorate from the University of Geneva, and he is a member of the French Academy of Sciences. In 1989, he received the High Energy and Particle Physics Prize from the European Physical Society.

Initiated in 1965 by Associated Universities, Inc., the AUI Distinguished Lecture Program offers talks of general interest by experts in various fields. Before Charpak's talk, refreshments will be served in the Berkner Hall lobby.

Note to Employees:

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

BNL Lecture (cont'd)

reactor physics, thermal hydraulics, probabilistic risk assessment, human factors, radiation protection and other engineering disciplines.

Rohatgi will also explain the variety of techniques used by BNL researchers to make their evaluations, including computer analysis based on reactor simulations and experiments using actual reactor components.

After earning his B.S. in mechanical engineering at the Indian Institute of Technology (IIT), Kanpur, in 1970, Upendra Rohatgi came to Case Western Reserve University in Cleveland, Ohio. There, he received his M.S. and Ph.D., both in mechanical engineering, in 1972 and 1975, respectively. He joined BNL in 1975.

Rohatgi has held visiting professorships at the Cooper Union School of Engineering, 1983-86, and at IIT in 1986. Currently, he is an adjunct professor at the State University of New York at Stony Brook. He has consulted for Colt Industries, Control Data Corporation and the United Nations Development Program, among others. He was an associate editor for the American Society of Mechanical Engineers' *Journal of Fluids Engineering*, 1988 to 1991, and received the U.S. NRC Appreciation Award in 1989.

After the lecture, all are invited to join the speaker for discussion and refreshments. To accompany him to dinner at a restaurant off site, call Linda Hanlon, Ext. 7517.

On-Site Training: Contract Management

BNL will offer National Contract Management (NCMA) Program courses on site, starting Wednesday, October 12. Developed to train industry and government personnel in the administration of government contracts, this program has been approved by the National Certification Committee of the NCMA for preparation of eligible candidates as a Certified Professional Contracts Manager (CPCM) or a Certified Associate Contracts Manager (CACM).

The full program consists of 11 courses, of which participants must complete eight to be eligible for certification. Each course costs $350 per student and consists of 15 two-hour sessions. Classes will be held on Wednesdays, in the Personnel Training Room, Bldg. 459, from 6 to 8 p.m.

To attend this program, contact Marilyn Pandorf, Ext. 5251.

Volleyball

The second Volleyball captains' meeting, originally scheduled for today, has been postponed to Monday, October 3, at noon, in the conference room of Bldg. 426.

Travels With BERA

Sign up for the following trips now at the BERA Sales Office in Berkner Hall, 9 a.m. to 1 p.m. daily. For more information, call Andrea Dehler, Ext. 3347, or Kay Dellimore, Ext. 2873.

Changes for Beauty and The Beast

A price reduction is one of the changes in BERA's plans for its trip to see *Beauty and The Beast* in New York City on Sunday, November 20. Now reduced from $121 to $109 per person, the trip will include lunch, instead of dinner, at Cafe 44, followed by a 6 p.m. show, rather than a matinee. Reserve a place now with a $50 deposit.

Back to the Boardwalk

Some seats remain for the BERA-sponsored, one-day trip to the Claridge Hotel and Casino on the Boardwalk in Atlantic City, Saturday, October 29. The initial cost will be $22, and the hotel/casino will give a $10 coin return.

Leaving BNL at 10 a.m., with an optional pickup at LIE Exit 63, the group will return at about 11:45 p.m., after a six-hour stay in Atlantic City.

Arrivals & Departures

Arrivals

Robert Von Hollen ..... Fiscal

Departures

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

Mei Bai ..... Biology
Robert J. Strzelinski ..... Physics
Pingzhong Tan ..... Chemistry
Claire Zahra ..... Plant Eng.

Cafeteria Menu

Monday, October 3	
Soup: Beef barley	.90/1.20
A la Carte: Kielbasa w/potato salad	3.85
Fitness: Vegetarian lasagna	3.50
Deli: Pastrami	3.20
Grill: Philly cheesesteak	3.30
Tuesday, October 4	
Soup: Chicken noodle	.90/1.20
A la Carte: Sausage & pepper calzone	3.50
Fitness: Macaroni & cheese	3.65
Deli: Virginia ham	3.20
Grill: Denver omelet	3.30
Wednesday, October 5	
Soup: Sausage & tortellini minestrone	.90/1.20
A la Carte: BBQ spareribs	4.25
Fitness: Spinach & feta quiche	3.65
Deli: Roast beef	3.20
Grill: Meatball hero	3.30
Thursday, October 6	
Soup: Senate bean	.90/1.20
A la Carte: Bonnie's chicken	3.85
Fitness: Pork chops	3.85
Deli: Corned beef	3.20
Grill: Ham & cheese	3.30
Friday, October 7	
Soup: New England clam chowder	.90/1.20
Display: Grilled chicken Caesar	4.65
Fitness: Pasta primavera	3.65
Deli: Roast turkey	3.20
Grill: Tuna melt	3.30

Center Club . . . *Watch Monday Night Football, enjoy 25¢ Buffalo wings during first half . . . Dinner specials nightly, 5-8 p.m.*

Yoga Practice

The BERA Indo-American Society will hold yoga practice sessions every Wednesday, from 12:10 p.m. to 12:50 p.m., beginning October 5, in the Recreation Building. A typical session will include breathing exercises, Sun salutation, asanas (postures) and relaxation. Participants should wear a loose outfit and bring a mat or a beach towel. There is no fee, but openings are limited due to space.

For more information, call Smita Sathe, Ext. 3924.

Bowling

Red & Green League

R. Mulderig Sr. 258/201/201/660 scratch series, R. Larsen 248/233/653 scratch, E. Larsen 224/202/614 scratch, R. Mulderig Jr. 243/625 scratch, S. DiMaiuta 234, R. Wiseman 232, A. Pinelli 222, J. Griffin 214, K. Koebel 214, O. Mirjah 214, J. Goode 210, R. Raynis 205, B. Giuliano 204, C. Bohnenblusch 203, T. Prach 202, E. Sperry III 201, A. Warkentien 200.

Purple/White League

G. Bryant 218, E. Sperry IV 212, M. Reynolds 211, L. Farmer 205/202, B. Belligan 197, J. McCarthy 197, K. Batchelor 190/182, R. Picinich 189, Doug Fisher 181, C. MacDougal 180, M. DiMaiuta 179, P. Pozzoli converted 6/7/9 split, D. Botts converted the 6/7/10 split.

Classified Advertisements

Placement Notices

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

Each week, the Personnel Division lists new placement notices. The purpose of these listings is, first, to give employees an opportunity to request consideration for themselves through Personnel, and second, for general recruiting under open recruitment. Because of the priority policy stated above, each listing does not necessarily represent an opportunity for all people.

Except when operational needs require otherwise, positions will be open for one week after publication.

For more information, contact the Employment Manager, Ext. 2882, or call the JOBLINE, Ext. 7744 (282-7744), for a complete listing of all openings.

SCIENTIFIC RECRUITMENT - Doctorate normally required. Candidates may apply directly to the department representative named.

SCIENTIST - Experienced in aerosol science, in particular aerosol instrumentation. Candidates with diagnostic modeling capabilities will be preferred. The research program involves investigation of the chemical and microphysical properties of aerosols and the distribution of aerosols in the atmosphere. Contact: Peter Daum, Department of Applied Science.

SCIENTIST - Experienced in chemical catalysis with an emphasis on reactivity studies, to join the Structure and Reactivity in Catalysis group. Studies may include use of the NSLS and the HFBR. Contact: Mark Andrews, Chemistry Department.

POSTDOCTORAL RESEARCH ASSOCIATE - Trained in physics and experienced in experimental and theoretical techniques relevant to x-ray computed microtomography using x-ray tubes and synchrotron radiation. Experience in developing new imaging methods based on diffraction and improved reconstruction algorithms is desirable. The research program is concerned with measurement of the microgeometry of rocks and a study of fluid rock interactions using synchrotron computed microtomography at the NSLS. Contact: Keith Jones, Department of Applied Science.

POSTDOCTORAL RESEARCH ASSOCIATE - Trained in physical chemistry or chemical physics, with experience in ultrafast laser development and application to electronic dephasing processes in the solution phase. Experience in the design and construction of femtosecond laser systems, nonlinear optics, solution phase photochemistry, and extensive computer skills are required. Experience in solution phase photochemistry, particularly in inorganic electron-transfer reactions, is strongly desired. Contact: Edward Castner, Chemistry Department.

POSTDOCTORAL RESEARCH ASSOCIATE - Trained in experimental nuclear chemistry/nuclear physics, to join the Solar Neutrino Group. Experience in radiochemical manipulations and counting is required, as is the ability to make periodic trips to Europe for GALLEX-related work. Contact: Richard Hahn, Chemistry Department.

LABORATORY RECRUITMENT - Opportunities for Laboratory employees.

DD 2050. COMPUTER ANALYST - (term appointment) Requires a BS in computer science or equivalent experience and a thorough knowledge of system software for the UNIX operating system as implemented on modern workstations such as the sgi Iris, IBM RS/6000, HP 9000 and SUN sparc. Familiarity with CERN software is highly desirable as is experience with state-of-the-art disk and tape technology. Responsibilities will include implementing new software tools, installing hardware, and maintaining and upgrading the system. Proficiency with scripting languages such as perl and awk and with C programming essential. Experience in high energy or heavy-ion physics desirable. (reposting) Physics Department.

DD 2794. ELECTRICIAN A - Under minimum supervision lays out, constructs, installs, maintains, repairs and operates electrical systems, equipment, controls and related devices. Plant Engineering Division.

DD 3603. SECRETARIAL POSITION - Requires an AAS degree in secretarial science or equivalent experience, excellent communication and interpersonal skills and a broad knowledge of Laboratory practices, policies and procedures. Will provide secretarial/administrative support to the Environmental and Waste Technology Center, including confidential administrative records, budgets, and reports maintenance; will work with and direct the work of other support staff. WordPerfect for Windows 6.0 or Microsoft Word for Windows 6.0, spreadsheets and database software experience essential. Department of Advanced Technology.

Motor Vehicles & Supplies

92 PONTIAC GRAND AM - 26k mi., white/red int., loaded, mint, $12,000 neg. Bob. Ext. 7238.

89 CAMARO RS - 73k mi., black, V-8, passive alarm, excel. cond., $6,300. Tom, Ext. 5265.

88 PONTIAC - 4-dr., 2L, clean, silver, ac, a/t, p/s, p/b, 67k mi., stereo, tilt, fog, $5,400. 941-4011.

88 OLDS 98 - fully loaded, 61k mi., $6,000. Steven, Ext. 5694.

87 CHEVROLET MONTE CARLO - 108k mi., clean, 286-3906.

87 HONDA CIVIC - 4-dr., ac, needs new engine, 80k mi., Ted, Ext. 2620.

87 PLYMOUTH VOYAGER MINIVAN - many new items, 5-pass., fold-down bed, $3,750, seller motivated. Bob, Ext. 4637.

86 MITSUBISHI MIRAGE - m/t, excel. running cond., new brakes, tires, $1,100. Edward, Ext. 7502.

86 FORD TEMPO - high mi., reliable transportation, $800. Rich, Ext. 3499.

85 FORD LTD - ac, am/fm, cruise, new tires, muffler, distributor, runs very well, $800. Ext. 3842/7249.

85 FORD PICKUP F150 XL - a/t, cap, good tires, runs well, $2,300. 368-6115 after 6 p.m.

84 HONDA CIVIC - blue, 4-dr., 5-spd., 173k mi., reliable performance, $1,000. 924-5569, Ext. 261.

84 PONTIAC FIERO - needs engine, body & int., v.g. cond., $700. 744-7271 after 5 p.m.

84 TOYOTA COROLLA - 5-dr., 5-spd., ac, 30+ mpg, 136k mi, runs well,. some rust, $1,250. John, 821-2602.

83 CHEVY VAN - ¾-ton deluxe window van, 6.2L truck diesel, ac, a/t, p/s, p/b, clean, runs well. Bill, 298-8657.

83 LINCOLN CONTINENTAL - excel. cond., $2,000. Udo, Ext. 2245 or 286-1592.

82 CHRYSLER LE BARON - runs well, $1,000. Frank, 732-4224 after 5 p.m.

81 CADILLAC COUPE DE VILLE - 89k mi., $1,300 or best offer. Bruno, Ext. 1373.

79 CHEVY CAPRICE - rebuilt engine, many new parts, excel. running cond., $500. Peter, Ext. 4982.

77 CAMARO 350 - 4-bolt, a/t, p/s, p/b, sunroof, best offer over $1,000. Mike, 744-8910.

77 BUICK ESTATE WAGON - 9-pass., V-8, 135k mi., all acess., many new parts, snows on rims, runs well, asking $650. Suresh, Ext. 4459.

76 LANCIA SCORPION - 2-seat, mid-engine, drive while restore, make offer. John, Ext. 2788.

72 POP-UP CAMPER - Cox brand, sleeps 6, v.g. cond., $250 neg. 924-2298.

Yard Sales

BELLPORT - 10/1, 10-4 p.m., luggage, cooker, fryer, Avon collection plates, glassware, hope chest, linens, more, 61 Station Rd.

BROOKHAVEN - 10/1, household goods, oak table/chairs, bdrm. sets, other furniture, tools, etc., 8 Beaver Brook Dr., off S. Country Rd.

BROOKHAVEN HAMLET - 10/1, 8 a.m.-4 p.m., furniture, household, misc., rain date 10/2, 35 Chapel Ave.

ROCKY POINT - 10/1-2, 10 a.m.-4 p.m., rain or shine, multifamily, 145 Hallock Lane.

RONKONKOMA - Fri. & Sat., 9/30-10/1, 10 a.m.-3 p.m., baby items, toys, housewares, sewing material, Rolan Court off Patchogue-Holbrook Rd.

SHOREHAM - huge 10-family sale, 10/1-2, 9 a.m.-1 p.m., 35-48 Jomar Rd.

SHOREHAM - 10/1, 9 a.m.-4 p.m., tools, household goods, 55 Highland Down.

Car Pool

HICKSVILLE/PLAINVIEW - riders needed for BNL-sponsored van pool, will stop in Huntington. Ron, Ext. 2175.

LIE EXIT 36 - fourth person needed. John, Ext. 5181.

Wanted

BOOKCASE - wood, open-shelf cabinet, 4-5' high, but not more than 28" wide. John, Ext. 7671.

BOOKS - for children, 7 yrs. & up, good cond. Ext. 7192.

DOG - small size, preferably puppy, for loving family, will pay premium for Yorkshire Terrier or similar. Vasilis, Ext. 2830 or 543-0487.

DOG CRATE - for 60-lb. dog, must be in good cond. & reasonable. Doreen, Ext. 2457.

GUITARS - electric & acoustic. 467-1343.

HARD TOP - for 1988 Jeep Wrangler. Ext. 2831.

HOUSEMATE - female, share new house, priv. ent., full bath, bdrm., washing machine, d/w, shed, walk to priv. beach/Smith Point. 395-0584 eves.

HOUSE TO RENT - Center Moriches area, responsible graduate student. Karl, Ext. 3116/3826 or 878-9299 after 6 p.m.

OUTBOARD MOTOR - 15 hp, long shaft, good cond. Ed, 765-2017.

PIANO - free, must in good cond. John, Ext. 2913.

RABBIT HUTCH - reasonable, will pick up. Paul, Ext. 3848 or 821-1560.

SOFA BED - good cond., under $100. Marcus, Ext. 5238.

SOFTWARE - and parts for Mac, 512k computer. Keith, Ext. 5827.

TRAILER - small, utility or boat. Joe, Ext. 4139.

VACUUM - canister-type w/attach.; 128 oz. or 2½ gal. glass jars, wide mouth w/caps. Bill, 281-6498.

In Appreciation

Many thanks to all for being so considerate during my illness. — Louis Graziano

Ads left out of this issue due to lack of space need not be resubmitted to appear in the next issue.