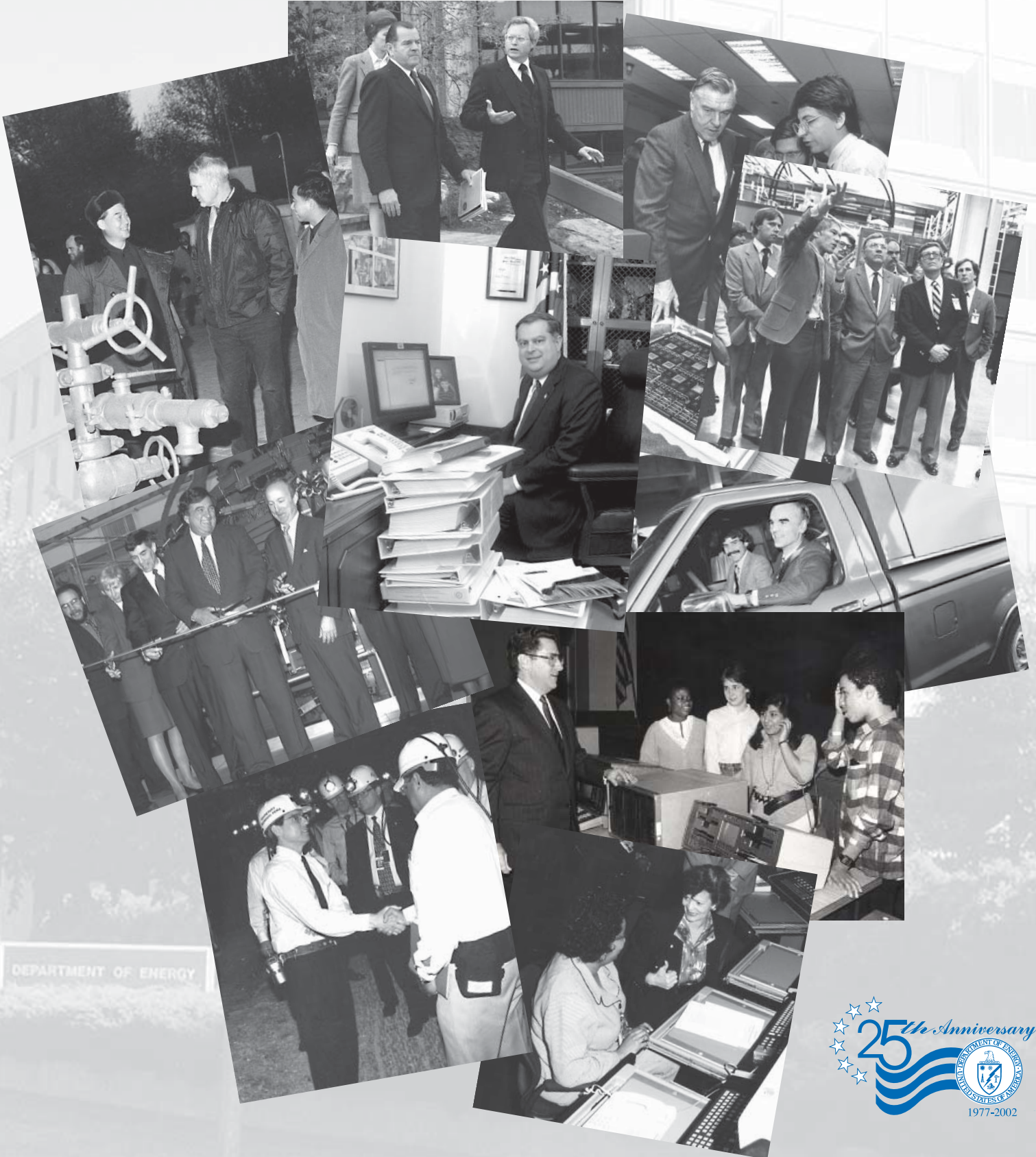


# DOE

U.S. DEPARTMENT OF ENERGY

## This Month

OCTOBER 2002



U.S. Department of Energy



Published monthly in Washington, D.C., by the Department of Energy, Office of Public Affairs, for the information of Department employees and affiliates and available to others by paid subscription.

The Secretary of Energy has determined that this periodical is necessary in the transaction of public business as required by law. Use of funds for printing has been approved by the director of the Office of Management and Budget. The content is reprintable without permission and pictures are available for media reproduction upon request.

**Spencer Abraham**  
Secretary of Energy

**Jeanne Lopatto**  
Director, Office of Public Affairs

**Bonnie Winsett**  
Editor

**Visual Media Group**  
Graphic Design

SUBSCRIPTION price for 12 issues is \$22 (\$27.50 foreign). Send check, or provide VISA or Mastercard number and expiration date, to: Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954. Credit-card orders can be called in 8 a.m.-4 p.m. ET, 202-512-1800, or faxed to 202-512-2250. Cite "DOE This Month (EINS)."

**Circulation Office:** 202-586-2050

**News Office:**  
*DOE This Month*  
Office of Public Affairs - PA-40  
U.S. Department of Energy  
Washington, DC 20585

**Internet Mail Address:**  
doe.thismonth@hq.doe.gov

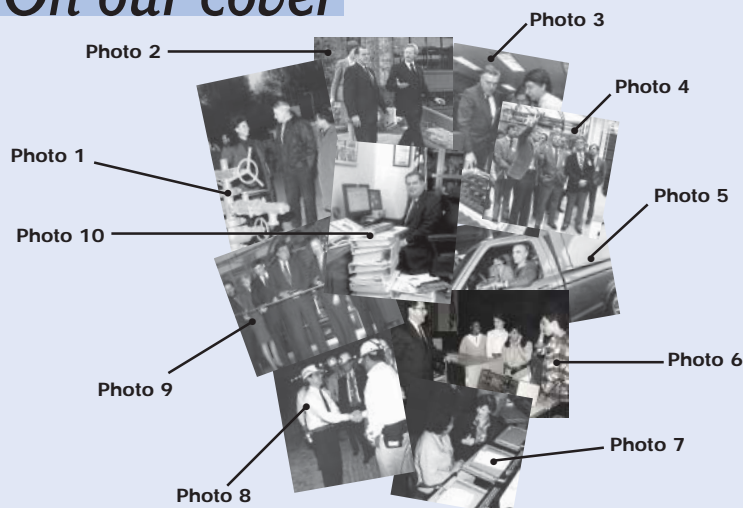
**HQ cc:mail:**  
THISMONTH,DOE

Deadline for submissions: 15th of every month for the following month.

**DOE PA-0025-10**  
**Vol. 25, No. 10**

***DOE This Month is printed on paper containing at least 50 percent recycled materials.***

## On our cover



**T**he Department of Energy (DOE) began operations as the 12th Cabinet-level Department on Oct. 1, 1977. In the course of 25 years, 10 Secretaries of Energy have provided the overall vision and leadership of DOE. The photographs offer a brief glimpse of the past.

**Photo 1:** Secretary James R. Schlesinger (8/5/77-8/23/79) talks with Chao Seng-chen, Deputy Director for Foreign Affairs of the Minister of Petroleum Industry, at the Taching oilfield in the People's Republic of China in November 1978.

**Photo 2:** Secretary Charles W. Duncan, Jr. (8/24/79-1/20/81) walks with Robert L. McPhail (right), Administrator, Western Area Power Administration, at the Colorado facility in October 1979.

**Photo 3:** Argonne National Laboratory computer scientist Rick Stevens (right) explains a circuit board for a parallel computer to Secretary James D. Watkins (3/9/89-1/19/93) during his February 1990 visit.

**Photo 4:** Secretary James B. Edwards (1/23/81-11/5/82) (center) and Senator Pete V. Domenici of New Mexico (right) receive a briefing on Los Alamos National Laboratory programs in 1981.

**Photo 5:** In late 1984, Secretary Donald Paul Hodel (11/11/82-2/7/85) test drives a natural-gas powered Ford Ranger pick-up truck outside DOE Headquarters' Forrestal Building in Washington, D.C.

**Photo 6:** In May 1986, Secretary John S. Herrington (2/7/85-1/20/89) presents computer equipment and chats with science students at "adopted" Woodrow Wilson High School in Washington, D.C.

**Photo 7:** Secretary Hazel R. O'Leary (1/22/93-1/20/97) gives the thumbs-up sign to operator Teresa Simmons on March 12, 1996, after pushing the button to start operations at the Defense Waste Processing Facility at the Savannah River Site in South Carolina.

**Photo 8:** Secretary Federico Peña (3/12/97-6/30/98) (left) tours the underground portion of the Waste Isolation Pilot Plant in New Mexico in April 1997.

**Photo 9:** On Feb. 26, 1999, Secretary Bill Richardson (8/18/98-1/20/01) (center) cuts the ribbon to begin experimental operations on the National Spherical Torus Experiment at Princeton Plasma Physics Laboratory.

**Photo 10:** On Feb. 14, 2002, Secretary Spencer Abraham (1/20/01-present) digitally transmits to President George W. Bush his formal recommendation of the Yucca Mountain site as the Nation's long-term geological repository for high-level nuclear waste.

**For more on the Department of Energy's 25th Anniversary celebration, see pages 3, 8, and 9. ❖**



### TO DOE EMPLOYEES:

I am proud to serve as Secretary of Energy during the Department's 25th Anniversary celebration. My congratulations and thanks to the many talented employees who have worked so hard for so many years on behalf of the American people. There is much to show for your dedicated efforts.

In 1977, the new Department of Energy brought together for the first time not only most of the Government's energy programs but also science and technology programs and defense responsibilities that included the design, construction, and testing of nuclear weapons. At that time, a score of organizational entities from a dozen departments and agencies, each with its own history and traditions, joined together.

Now, in addition to the diversity that characterized our beginnings—which over these past 25 years has proven to be one of our great strengths—we share a common history. But more importantly, we share a common future. And we share a common overarching mission: national security. As we look ahead, I am optimistic that we will fulfill our responsibilities and our success will be a great contribution to our energy and national security for generations to come.

## Department celebrates its 25th anniversary

The Department of Energy (DOE) marked its 25th anniversary on Oct. 1, 2002. DOE was established as the 12th Cabinet-level Department in the Federal Government on Oct. 1, 1977, under the provisions of Public Law 95-91. The Energy Research and Development Administration, Federal Energy Administration, Federal Power Commission, and energy programs from several other Federal Departments and agencies were consolidated within the new Department.

Activities throughout the month at DOE Headquarters and at several field sites focused on the significant milestone. On Oct. 4, Secretary of Energy Spencer Abraham unveiled a banner with the theme of the anniversary celebration, "Proud of Our Past, Securing the Future," for display the entire month outside Headquarters' Forrestal Building in Washington, D.C.

A program commemorating the momentous occasion and honoring Department employees was held in the Forrestal Building Cafeteria on

Oct. 8. Secretary Abraham was joined at the ceremony by the first Secretary of Energy James R. Schlesinger and former Secretaries James B. Edwards, Admiral James D. Watkins, USN (Retired), and Hazel R. O'Leary.

The United States Navy Band opened the program with several patriotic music selections. Deputy Secretary Designate Kyle McSlarrow, serving as Master of Ceremonies, welcomed DOE employees and invited guests to the anniversary celebration and read a congratulatory message from President George W. Bush. The Joint Armed Forces Color Guard presented the colors. The invocation was given by Dr. Lloyd John Ogilvie, Chaplain of the United States Senate, following the playing of the National Anthem.

Secretary Schlesinger's keynote address featured a series of vignettes about the startup of DOE and the state of energy matters in 1977. He closed his remarks with the words "DOE forever," which he first said on the occasion of the Department's

fifth anniversary. Secretaries Edwards, Watkins, O'Leary, and Abraham each paid tribute to DOE employees and, in turn, repeated Secretary Schlesinger's words "DOE forever."

At the conclusion of remarks, the five Secretaries unveiled a bronze plaque dedicated to DOE employees. Identical plaques will be placed in prominent locations at both the Forrestal and Germantown Headquarters sites. A certificate of recognition and appreciation will be given to about 2,000 DOE Federal employees who have served the Department continuously since Oct. 1, 1977.

Exhibits are on display at DOE Headquarters during the month of October. A 25th anniversary history exhibit has panels for each year featuring photographs of significant events and accomplishments.

Additional historical and 25th anniversary information is available on a web site established by DOE especially for the occasion, <http://www.25yearsofenergy.gov>. ❖

# Secretary travels worldwide in support of international energy security

On Sept. 16, 2002, Secretary of Energy Spencer Abraham began an official international visit in support of international energy security. The visit included stops in Vienna, Austria; Baku, Azerbaijan; Tokyo and Osaka, Japan; and Anchorage, Alaska.

Secretary Abraham addressed the 46th General Conference of the International Atomic Energy Agency (IAEA) in Vienna on Sept. 16. He called for an international conference to address the threat posed by the potential misuse of radiological materials to construct Radiological Dispersal Devices, often referred to as “dirty bombs.”

“The IAEA has the technical expertise to help states respond appropriately to this problem. We must work together to develop appropriate national standards for accounting for and tracking radiological materials,” Secretary Abraham said. “The IAEA can help member states identify resources needed to safely dispose of unneeded radiological materials, serve as a clearinghouse for critical information, and make invaluable experience available to member states, as they address this concern.”

While in Vienna, Secretary Abraham met with Russian Minister of Atomic Energy Alexander Rumyantsev. A joint statement was issued on the completion of the report by the bilateral Expert Group on Accelerated Nuclear Material Disposition (*DOE This Month*, June 2002). Several areas were identified where joint cooperation could lead to the reduction of highly enriched uranium over-and-above commitments already in place under existing agreements. Potential new areas of near-term cooperation for weapon plutonium disposition also were identified. The report will be forwarded to Presidents George W. Bush and Vladimir V. Putin. The joint statement is available at <http://www.energy.gov/HQPress/releases02/seppr/jointstatement.htm>.

On Sept. 18, Secretary Abraham joined the Presidents of Azerbaijan, Georgia, and Turkey in Azerbaijan for a groundbreaking ceremony for the Baku-Tbilisi-Ceyhan (BTC) Pipeline. The pipeline project will provide for the export of crude oil from Azerbaijan, in the Caspian region, to Ceyhan, on the Turkish Mediterranean coast. The Caspian Sea region contains 10 billion barrels of proven oil reserves, with probable reserves of more than 230 billion barrels. “President Bush’s National Energy Policy calls for the United States to support the increase in energy production throughout the world, and the BTC pipeline is an excellent example of what international cooperation can accomplish to meet that goal,” Secretary Abraham said.

Secretary Abraham addressed the Generation IV International Forum (GIF) in Tokyo on Sept. 20. The GIF is an international collective of leading nuclear nations that agree on the importance of nuclear energy and are dedicated to joint development of the next generation of nuclear energy systems. Member nations are Argentina, Brazil, Canada, France, Japan, the Republic of Korea, South Africa, Switzerland, the United Kingdom, and the United States.

The Forum reached agreement on six Generation IV nuclear energy systems to be pursued for joint development: gas-cooled fast reactor, lead alloy liquid metal-cooled reactor, molten salt reactor, sodium liquid metal-cooled reactor, supercritical water-cooled reactor, and very high temperature gas reactor. Additional information is available at <http://www.energy.gov/HQPress/releases02/seppr/pr02185.htm>.

The official trip then continued on to Osaka on Sept. 21 where Secretary Abraham participated in and addressed the International Energy Forum Panel on The World Energy Situation and Outlook. On Sept. 23, Secretary Abraham was in Anchorage, Alaska, for the final stop of his trip, where he spoke at the annual meeting of “The Alliance,” an organization of Alaska’s energy suppliers and service providers.

The Secretary’s remarks at the IAEA General Conference, BTC Pipeline groundbreaking, the GIF meeting, International Energy Forum, and The Alliance are available at <http://www.energy.gov/HQDocs/speeches/2002/sepss/sepss.htm>. ❖

## Energy awareness materials available

October traditionally is observed as Energy Awareness Month and many Department of Energy (DOE) sites sponsor and participate in activities for employees and local communities. This year, DOE’s Federal Energy Management Program (FEMP) in the Office of Energy Efficiency and Renewable Energy developed materials around the theme “A Secure Energy Future: Conserve Energy to Ensure Affordable, Reliable Power Supplies” that can be used throughout the year to promote energy awareness. A new Energy Awareness Month poster features the DOE 25th anniversary logo. FEMP’s new outreach handbook, “Creating An Energy Awareness Program,” offers guidance to Federal energy managers on how to design and implement programs aimed at increasing energy-efficient behavior of employees at Federal facilities. Copies of the poster, the handbook, and other materials are available by calling 1-800-363-3732 or visiting <http://www.eren.doe.gov/femp/ordermaterials.html>. ❖

# Solar Village comes to the National Mall

The National Mall in Washington, D.C., is known as a location for celebrations, protests, tourists, and noontime exercise for local workers. But now it will be known for something new—a great place for a village, a Solar Village to be exact.

Student teams from 14 colleges and universities competed in the first Solar Decathlon Sept. 26 to Oct. 6, 2002, to design and build energy-efficient, solar-powered homes. Secretary of Energy Spencer Abraham opened the 10-day competition and Solar Village on Sept. 26.

“The Department of Energy (DOE) is proud to sponsor the first-ever Solar Decathlon, a university competition that brings together our nation’s brightest minds to demonstrate practical ways of producing and using energy efficiently in the home,” Secretary Abraham said. In addition to DOE, the sponsors of the Solar Decathlon were BP Solar, The Home Depot, EDS, the American Institute of Architects, and DOE’s National Renewable Energy Laboratory.

The Solar Village was open to the public and proved to be a big attraction to tourists and the local community. “We hope that the Solar Decathlon will inspire those who tour these homes to think differently about the energy they use,” Secretary Abraham said.

The competing schools were Auburn University, Carnegie Mellon University, Crowder College, Texas A&M University, Tuskegee

University, University of Colorado at Boulder, University of Delaware, University of Maryland, University of Missouri–Rolla and The Rolla Technical Institute, University of North Carolina at Charlotte, University of Puerto Rico, University of Texas at Austin, University of Virginia, and Virginia Polytechnic Institute and State University.

DOE provided each team with a \$5,000 stipend toward the construction of its solar house. The teams raised the rest of the money they needed to design, construct, and transport the houses to Washington, D.C. The other sponsors provided free and discounted building materials, advice, funding for the Solar Village, wireless communications and Internet services, and volunteers.

Each roughly 500-square-foot house was judged on 10 criteria to determine which one most efficiently employed solar energy for heating, cooling, hot water, lighting, appliances, computers, and charging an electric car. World-renowned architects evaluated the attractiveness, livability, and effectiveness of each home’s design.

On Oct. 5, following all judging and phases of the competition, the



*Secretary Abraham (center) and Assistant Secretary for Energy Efficiency and Renewable Energy David Garman (right) tour the Solar Village.*



*The first-place solar house designed and built by the University of Colorado at Boulder .*

University of Colorado at Boulder took top honors. The University of Virginia placed second; and Auburn University, third.

Additional information about the Solar Decathlon is available at <http://www.solardecathlon.org>. ❖

# Retired Brookhaven chemist wins Nobel Prize

The Royal Swedish Academy of Sciences has named Dr. Raymond Davis, Jr., a retired chemist at the Department of Energy’s (DOE) Brookhaven National Laboratory (BNL), as a recipient of the 2002 Nobel Prize in Physics. Davis, who worked in BNL’s chemistry department from 1948 until his retirement in 1984, was awarded the Nobel Prize for detecting solar neutrinos, ghostlike particles produced in the nuclear

reactions that power the sun. The prize will be shared with Masatoshi Koshihira of Japan and Riccardo Giacconi of the United States.

“I take pleasure in congratulating Dr. Davis on this richly deserved honor,” Secretary of Energy Spencer Abraham said. “This Nobel Prize is testimony not only to Dr. Davis’ genius, but also to the high quality of the scientific work that the Department of Energy has underwritten throughout its

history.” DOE and its predecessor agencies have supported more than 70 Nobel Prize winners.

Davis was the first scientist to detect solar neutrinos. His research opened up a new area of physics not predicted by the Standard Model.

Additional information about Davis and his discovery of solar neutrinos is available at <http://www.bnl.gov>. ❖

# Presidential Rank Award winners recognized

On Sept. 6, 2002, the Department of Energy formally honored 22 current and former employees for receiving the 2001 Presidential Rank Award. Secretary of Energy Spencer Abraham presented plaques signed by President Bush at a special awards ceremony at DOE Headquarters, Washington, D.C. The Presidential Rank Award, the highest honor for career members of the Senior Executive Service (SES), is granted to only one percent of all career SES employees Governmentwide. There are two award categories—Distinguished and Meritorious.

In the photo, l-r, are J. Russell Dyer, Project Manager, Yucca Mountain Site Characterization Office; Thomas J. Gross, Deputy Assistant Secretary for Transportation Technologies, Office of Energy Efficiency and Renewable Energy (EE); Joseph S. Mahaley, Director, Office of Security Affairs; James J. Fiore, Deputy Assistant Secretary for Site Closure, Office of Environmental Management (EM); M. Brent Armstrong, Assistant Manager for Business and Logistics, Savannah River Operations; Secretary Abraham; Aristides A. Patrinos, Associate Director for Biological and Environ-



mental Research, Office of Science (Distinguished Award); Glenn S. Podonsky, Director, Office of Independent Oversight and Performance Assurance (Distinguished Award); Kenneth E. Baker, Principal Assistant Deputy Administrator for Defense Nuclear Nonproliferation, National Nuclear Security Administration (NNSA); Keith A. Klein, Manager, Richland Operations Office (Distinguished Award); Mark E. Rodekohr, Director, Energy Markets and Contingency Information Division, Energy Information Administration; Robert G. Rabben, Assistant General Counsel for Legislation, Office of the General Counsel; and John C. Tseng, Director, Office of Nuclear Material and Spent Fuel, EM.

Not pictured are Timothy M. Dirks, Director of Human Resources

Management, Office of Management, Budget and Evaluation/Chief Financial Officer (ME); Martin J. Domagala, Deputy Manager, Oakland Operations, NNSA; Abraham E. Haspel, Deputy Assistant Secretary for Planning, Budget and Management, EE (Distinguished Award); James S. Hirahara, Assistant Manager for Business and Financial Services, Oakland Operations, NNSA; Richard H.

Hopf III, Director, Office of Procurement and Assistance Management, ME (Distinguished Award); Carolyn L. Huntoon, Assistant Secretary for Environmental Management; James M. Owendoff, Principal Deputy Assistant Secretary for Environmental Management (Distinguished Award); Vickie A. Vanzandt, Vice President for Operations and Planning, Bonneville Power Administration; M. Patrice Wagner, Assistant Manager for Management and Administration, Albuquerque Operations, NNSA; and Camille Yuan-Soo Hoo, Manager, Oakland Operations, NNSA.

The winners' titles and organizations reflect their positions at the time of nomination in January 2001. ❖

## Lawrence Award recipients named

Secretary of Energy Spencer Abraham has named seven winners of the Department of Energy's (DOE) E.O. Lawrence Award. The award is given in seven categories for outstanding contributions in the field of atomic energy.

"We are all enriched by the contributions these researchers have made ranging from understanding the genetic code to measuring the expansion of the universe itself," Secretary Abraham said.

The winners and categories:

- Materials Research – C. Jeffrey Brinker, chemist, Sandia National

- Laboratories and University of New Mexico, Albuquerque;
- Life Sciences – Claire M. Fraser, biologist, The Institute for Genomic Research, Rockville, Md.
- National Security – Bruce T. Goodwin, physicist, Lawrence Livermore National Laboratory (LLNL);
- Chemistry – Keith O. Hodgson, chemist and structural biologist, Stanford University and Stanford Linear Accelerator Center;
- Physics – Saul Perlmutter, astrophysicist, Lawrence Berkeley National Laboratory;

- Environmental Science and Technology – Benjamin D. Santer, physicist, LLNL; and
  - Nuclear Technology – Paul J. Turinsky, nuclear engineer, North Carolina State University, Raleigh.
- The Lawrence Award was established in 1959 to honor the memory of the late Dr. Ernest Orlando Lawrence, inventor of the cyclotron and namesake of two major DOE laboratories. Each winner receives a gold medal, a citation, and \$25,000. The awards will be presented on Oct. 28 at a ceremony in Washington, D.C. ❖

# Secretary Abraham visits Ames Laboratory

On Aug. 28, 2002, Secretary of Energy Spencer Abraham visited and toured the Department of Energy's (DOE) Ames Laboratory in Iowa. His visit was the second by a Secretary of Energy since DOE's establishment 25 years ago.

Secretary Abraham, accompanied by Congressman Tom Latham, participated in a ribbon-cutting ceremony for the Midwest Forensics Resource Center. The Ames Lab facility serves the needs of regional crime laboratories and expands the capabilities of forensic science.

Secretary Abraham's tour of Ames Lab was designed to showcase the capabilities of the new forensics center. But he also saw materials research and met with three of the laboratory's R&D 100 Award-winning scientists: Ed Yeung, John McClelland, and Iver Anderson.

Anderson explained the high-pressure gas atomization process that

produces ultrapure, high-quality metal powders, which have applications in clean-burning, coal-fired power plants and light-weight engine and transmission parts for automobiles. At McClelland's laboratory, Secretary Abraham learned about a photoacoustic spectroscopy device that could eventually serve as a monitoring system for air-borne spores, such as anthrax, to ensure the purity of air in buildings on a 24-7 basis. Yeung explained the new instrument, the MCE2000, which is based on his award-winning chemical separation technology, multiplexed capillary electrophoresis using absorption detection. The device can rapidly run 96 separate analyses at one time and could be used for detection of anthrax and other substances.



*Ames Lab associate physicist John McClelland (seated) demonstrates the use of photoacoustic spectroscopy to identify air-borne spores, such as anthrax, for forensic analyses as (l-r) Secretary Abraham, Congressman Latham, and Ames Lab Director Tom Barton look on.*

At an all-hands meeting following the tour, Secretary Abraham praised the work of Ames Lab employees and emphasized the importance and value of basic research to the Department's mission of ensuring national security. ❖

## West Valley completes vitrification program

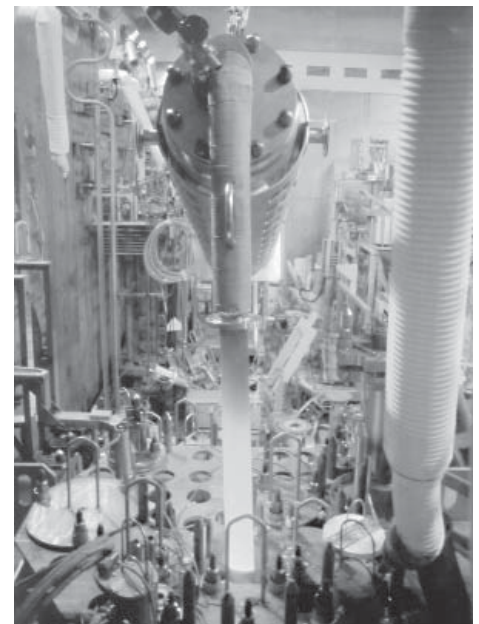
The Department of Energy's (DOE) West Valley Demonstration Project (WVDP) successfully completed the nation's first radioactive waste vitrification program on Sept. 5, 2002, when the glass melter was shut down and the melter feed cavity was cleaned by direct removal of the remaining molten glass. Two evacuated canisters were placed in the vitrification cell to "vacuum" the remaining molten glass from the melter feed cavity.

The WVDP filled its final stainless steel canister of high-level radioactive waste glass on Aug. 14, 2002, six years after beginning operations. During operations, the WVDP melter exceeded worldwide efficiency expectations and successfully solidified the high-level liquid radioactive waste from the underground tank at the nation's only former commercial nuclear fuel reprocessing facility.

President Jimmy Carter signed the West Valley Demonstration Project Act in 1980 to authorize the Department of Energy to conduct the facil-

ity cleanup after the former owner left the operation. Waste pretreatment operations and testing of the nonradioactive vitrification system were conducted in the 1980's. The full-scale system was constructed by 1995, and radioactive operations began in 1996. The WVDP vitrification team's accomplishments include: safe filling, welding, and on-site storage of 275 glass-filled, stainless steel canisters with an average surface dose rate of 2,700 rem/hour, approximately 86,000 curies per canister, and a weight of 2.5 tons each; successfully immobilizing 24 million curies of radioactive waste; and extracting all of the removable radioactive inventory from the underground high-level waste tanks.

"It is rewarding to know that what we designed, started, and operated has now been successfully completed," Alice Williams, DOE-Ohio/WVDP Director said. "I commend the men and women who worked so hard to make this possible. It is a great success story for DOE." ❖



*This close-up shot shows the snorkel assembly attached to the evacuated canister siphoning the residual molten radioactive waste glass out of the vitrification melter at the West Valley Demonstration Project.*



*Secretary Abraham unveils the 25th Anniversary banner outside Department of Energy Headquarters, Washington, D.C., Oct. 4, 2002.*



*Secretary Abraham meets and talks with employees at the banner unveiling ceremony.*



*Employees and guests assemble for the 25th anniversary celebration at Headquarters' Forrestal Building, Oct. 8, 2002.*



*The U.S. Navy Band provided patriotic music for the occasion.*





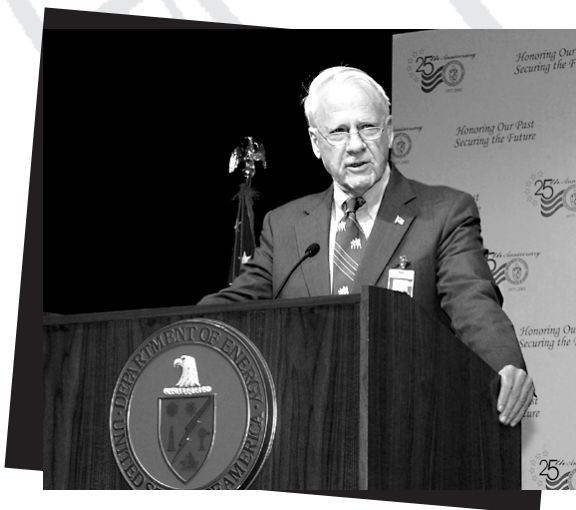
*Presentation of the colors by The Joint Armed Forces Color Guard. On stage, left-right, former Secretaries of Energy James Watkins and James Edwards, and Kyle McSlarrow, Deputy Secretary Designate and Master of Ceremonies.*



*Front, left-right, former Secretaries Watkins, Schlesinger and Edwards; Secretary Abraham; and former Secretary O'Leary applaud Department of Energy employees after the unveiling of a bronze plaque dedicated to the service of employees over DOE's 25 years.*



*On stage, left-right, former Secretaries of Energy James Watkins, James Edwards, and James Schlesinger; Kyle McSlarrow, Deputy Secretary Designate; Secretary of Energy Spencer Abraham; former Secretary of Energy Hazel O'Leary; and Dr. Lloyd John Ogilvie, Chaplain of the United States Senate.*



*Keynote speaker and the first Secretary of Energy James Schlesinger and current Secretary Spencer Abraham address the audience at the 25th Anniversary celebration.*

## DOE's best security officers train and compete

The Department of Energy's (DOE) 30th annual Security Police Officer Training Competition was held at the Department's Oak Ridge, Tenn., site in June 2002. The four-day event consisted of individual and team firearms/tactical competitions. Participants in this year's "Shootout in the Smokies" endured 90 degree and above temperatures and high humidity.

The annual training competition is open to Security Police Officers or Special Agents of the Department, DOE contractors, and other Federal and local law enforcement agencies by invitation. There are separate categories in the event for DOE Security Police Officers and Law Enforcement Officers.

SPO II Douglas Scott, employed by Wackenhut Services, Inc. (WSI) at the Savannah River Site, took top honors as the Department's Security Police Officer of the Year. The individual competition consisted of four separate handgun stages and a written examination of DOE orders and policies. Scott, a member of the Wackenhut security officer team since 1999, scored highest among the 62 individuals in the DOE category.

"The manner in which Doug achieved this accomplishment is indicative of how he conducts his job each day," said W.D. Phillips, WSI Director of Zone Operations. "He comes to work physically and mentally prepared, with a great deal of confidence in his skills and respect for his team members."

The Wackenhut Services security police officer team representing the Department's Rocky Flats Environmental Technology Site was named "Team of the Year," placing first out of 12 teams representing DOE facilities. The group also competed against a team from the United Kingdom Atomic Energy Authority Constabulary, military teams from the U.S. Marine Corps and the U.S. Air Force, three teams from the Department's Office of Transportation Safeguards, and two law enforcement teams.

The team competition is made up of five events testing the competitors' skills in combat shooting, physical fitness, and tactical obstacle courses. Events are designed to test a team's ability to respond to a situation effectively and efficiently, with team cohesiveness, decisiveness, and physical endurance playing a major role.

"Our security police officer team has proven itself to be the best of the best," said Marvin Brailsford, Kaiser-Hill Vice President for Material Stewardship. "The Rocky Flats protective force is made up of highly trained and skilled professionals and this team is an accurate representation of our entire protective force." ❖



*Douglas Scott*



*Rocky Flats team, front row, l-r, Todd Harrison and Chris Wieseler; back row, l-r, Randy Irmer, Muhtalar Dickson, Jim Krause, and Chris Duran.*

## Radioisotope power program moved to ANL-W

The Department of Energy (DOE) will relocate assembly, testing and shipment of special radioisotope power systems used by the National Aeronautics and Space Administration (NASA) and others to the Argonne National Laboratory-West (ANL-W) site in Idaho. These systems, which include radioisotopic heat sources and thermoelectric generators, which have powered all of NASA's deep space probes, are needed when chemical batteries or solar energy are impractical, such as in the exploration of the outer solar system.

"Planning for the transition of the assembly and test mission to ANL-West's Zero Power Physics Reactor complex has begun and the transition is expected to be completed in late Fiscal Year 2004 or early Fiscal Year 2005," said Bill Magwood, Director of DOE's Office of Nuclear Energy, Science, and Technology.

The program had been conducted since the early 1980's at the Department's Mound Site near Miamisburg, Ohio. Following a Departmentwide review of the security and safeguarding of its operations and materials, DOE identified prohibitive costs associated with enhancing security and safeguards at its Mound facility to protect the materials associated with this program and the surrounding community. Relocating the project to the Argonne-West facility will save taxpayers nearly \$34 million over 10 years in related security and transfer costs.

In addition to security reviews undertaken by DOE, the decision to move the manufacturing included completion of cost studies as well as an Environmental Assessment to determine the significance of environmental impacts related to selecting a long-term site for assembly and testing of these power systems.

Additional information on DOE's space and defense power systems is available at <http://www.nuclear.gov>. ❖

## Completed demolition gives Fernald a clear view

For the first time since the early 1950's, workers and visitors at the Department of Energy's Fernald Environmental Management Project have an unobstructed south to north view of the 1,050-acre site. The completed demolition of the Safety and Health Building in August left an open path through the middle of the site where uranium processing plants and support facilities once stood. Health and safety personnel were relocated to other administrative facilities on site.

Since 1994, Fluor Fernald has demolished 107 structures—12 during 2002—and is nearing the halfway point of site demolition projects in support of Fernald's 2006-closure plan. The next major demolition project is the five-story Pilot Plant where Cold War workers developed operating prototypes for all phases of Fernald's production process.

The photo shows demolition of the Safety and Health Building in progress. Workers filled and transported more than 350 roll-off boxes of demolition debris to Fernald's On-Site Disposal Facility for final disposition. ❖



## High-speed network ties top universities to ORNL

On Aug. 14, 2002, Dr. Ray Orbach, Director of the Department of Energy's (DOE) Office of Science, symbolically completed the connection linking the supercomputer Cheetah—a 4.5 teraflop IBM machine—at the Department's Oak Ridge National Laboratory (ORNL) to Southern Crossroads universities and other premier schools around the country. The network of fiber optic cables runs from ORNL through Chattanooga, Tenn., to Georgia Tech in Atlanta.

The link connects DOE's ESnet computer network with Internet2, the network of top-tier universities, at speeds up to 20 times faster than the previous ORNL connection. "This new high-speed network strengthens the partnership between DOE and the academic community, which is critical to our plans to reassert U.S. leadership in computational sciences," said Thomas Zacharia, ORNL Associate Director for the Computing and Computational Sciences Directorate.

In the photo, Zacharia (center) explains ORNL's supercomputing capabilities to Orbach (left) and David Kiefer, Vice President of Product Development and Manufacturing, Cray Corp. ❖

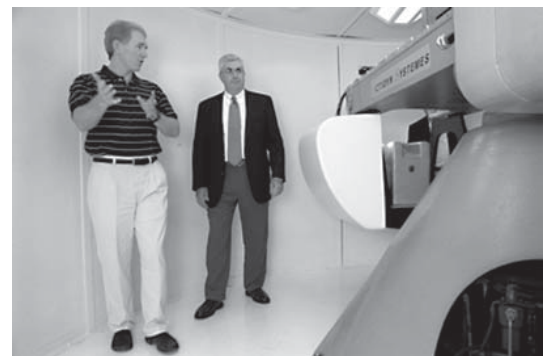


## INEEL opens geocentrifuge research lab

The only geocentrifuge in the Department of Energy (DOE) complex began revolving Aug. 19, 2002, establishing a new user facility at the Department's Idaho National Engineering and Environmental Laboratory (INEEL). The two-meter centrifuge is the heart of the Geocentrifuge Research Laboratory dedicated to environmental and geo-engineering research.

Acting like a "geological time machine," the geocentrifuge subjects a test specimen to a high-gravity field by spinning it rapidly around a central shaft. Using this technique, researchers can study in a few days or weeks the effects of tens of years of gravity-induced fluid movement.

INEEL researchers will use the geocentrifuge to study engineered caps and barriers designed to keep contamination from spreading, to develop more effective landfill designs, to improve their ability to characterize contaminated sites, and to study basic geophysical and geochemical processes. In the photo, Alan Stadler (left), INEEL geocentrifuge research lead, explains the geocentrifuge operation to Tom Hash, President, Bechtel National Inc. ❖



# Bern, Kansas goes to Washington

Some 250 residents of Bern, Kan.—almost the entire town—were in the nation’s capital on Sept. 17, 2002, as the guests of Maytag Corporation, to celebrate a landmark study showing the energy-saving potential of energy efficient clothes washers. The townspeople met with their Congressmen on Capitol Hill and received a special Department of Energy (DOE) recognition award presented by Assistant Secretary for Energy Efficiency and Renewable Energy David Garman. Bill Beer, President, Maytag Appliances, also participated in the celebration.

Maytag Corporation flew the Bern residents to Washington, D.C., to mark the fifth anniversary of the Bern Clothes Washer Study. In a controlled study in the water-short farming community, DOE found that 103 Maytag-donated Neptune horizontal-axis clothes washers saved,



*Left to right, Maytag “Apprentice” Mark Devine, former Senate Majority Leader Bob Dole, Maytag “Ole Lonely” Gordon Jump, and Representative Jim Ryan (R-Kan) with the citizens of Bern, Kansas, at the U.S. Capitol in Washington, D.C. (Photo: Maytag/Linda Spillers via AP)*

on average, 56 percent of the energy and 38 percent of the water used by the machines they replaced. The success of the study resulted in widespread adoption of clothes washers certified by ENERGY STAR®, a joint DOE-Environmental Protec-

tion Agency program that partners with manufacturers, retailers, and utilities to label and promote the most efficient products available in the marketplace.

“The Bern Washer Study set a precedent by showing that energy efficient appliances—especially those with the ENERGY STAR label—can benefit the nation by significantly conserving energy and water,” Assistant Secretary Garman said. “This private sector/government study exemplifies the way that business and government can work together to promote energy- and dollar-saving technology.”

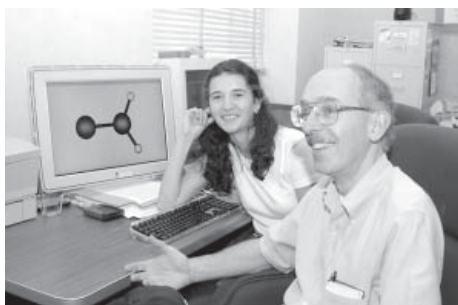
Bern was selected as the site for the study because of its arid climate and water scarcity. In 1997, DOE’s Oak Ridge National Laboratory collected and analyzed over five months of data on more than 20,000 loads and nearly 70 tons of wash done in a wide range of real-world conditions. ❖

## Good questions lead to focused goals

Sanja Pudar grew up in Serbia and immigrated to the United States in 1999. Pudar and her family settled in West Des Moines, Iowa, where she finished her senior year at Valley High School. She entered Iowa State University (ISU) in 2000, declaring a major in chemistry.

Pudar ended up in a section of introductory chemistry that was taught by Mark Gordon, Applied Mathematics and Computational Science program director at the Department of Energy’s Ames Laboratory and an ISU distinguished professor. “I measure how good a class is by how many questions the students ask, and Sanja asked the most and best questions by far,” recalls Gordon.

Pudar returned to Gordon with chemistry questions time and time again, even after he was no longer her instructor. Impressed by her drive and competitive nature,



*Sanja Pudar and her Ames Laboratory mentor Mark Gordon.*

Gordon offered the second-semester freshman the opportunity to work as an undergraduate research assistant in his chemistry group. Although she knew she needed knowledge of quantum chemistry, a course typically reserved for juniors and seniors, Pudar decided to accept Gordon’s offer. Recognizing her potential, Gordon tutored Pudar for

several weeks until she learned the necessary material.

Pudar succeeded in mastering Gordon’s intense tutorials and was rewarded with her own research project sponsored by the U.S. Air Force. “The research involves investigating high-energy materials that may be used to develop a more efficient rocket fuel for spaceships,” Pudar says with enthusiasm.

Pudar has completed her second year at ISU. Her research project is a tough one that challenges her, but she likes it that way. “Working with Professor Gordon has helped me focus my goals and given me a clear vision of what interests me,” Pudar says. “I plan to attend graduate school to study quantum chemistry and become a theoretical chemist. I definitely want to be both a teacher and a researcher.” ❖

# Education is a year-round experience

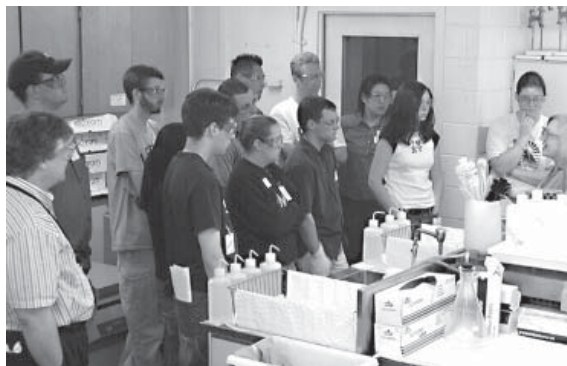
Not too many years ago, students across the country looked forward to summer vacation from school, studying, and homework. Today, many school jurisdictions offer summer sessions or operate year-round. And many students voluntarily attend educational programs, like those offered this past summer at several Department of Energy (DOE) sites, and take advantage of the opportunities available to them. Here are a few of the programs.

The Office of Basic Energy Sciences in DOE's Office of Science funds an annual Summer School Program in Nuclear and Radiochemistry at **Brookhaven National Laboratory** (BNL). The summer schools are operated by the Division of Nuclear Chemistry and Technology of the American Chemical Society. Undergraduate students from across the country, primarily chemistry/physics majors, participated in this year's program and earned college credit upon completion. The program included three one-day courses at the **Environmental Measurements Laboratory**. The 15 training modules included classroom lectures, laboratory observations, and demonstrations related to the measurement and detection of environmental radiation and radioactivity.

Eleven students from seven U.S. colleges and universities participated in summer internships under the Research Alliance for Minorities (RAM) program at **Oak Ridge National Laboratory** (ORNL). The goal of the program is to increase the number of African American, Hispanic American, Native American, and women students who pursue undergraduate and graduate degrees in science, mathematics, engineering, and technology. Students in the program conducted computational sciences-related research projects under the direct supervision of an ORNL scientist or engineer. Institutions represented were Fisk University of Nashville., the City University of New York, the State Uni-



*Stephanie Skidmore (third from left) uses a microscope to take an up-close look at a moon rock at the Bradbury Science Museum's Summer Adventures in Science program. Museum science educator Bettie Bedell (right) led the exercise.*



*Dr. Anna Berne (far right) and Dr. Carl Gogolak (far left) of the Environmental Measurements Laboratory (EML) demonstrate an EML radiochemical procedure to Nuclear and Radiochemistry summer school students.*

versity of New York at Binghamton, Wofford College, the University of Notre Dame, Morehouse College of Atlanta, and Alabama A&M University.

Nikhil Mallick, a senior at Seneca Valley High School, Germantown, Md., served as a summer intern in the Office of Science (SC) at **DOE Headquarters, Germantown**. Mallick worked with mentor Clarence Hickey, Environment, Safety, and Health Division (SC-83). His assignment was to update and revise the Germantown site 1986 "Tree Plan"—a map and record of the site's landscaped trees. The landscaped trees are those that are planted and cared for and contrast with the site's wooded natural areas that are managed less intensively. The site's landscaped trees vary in age and are a mix of native trees and

ornamental flowering fruit trees. Today, there are 1,227 landscaped trees on the Germantown site, in comparison to 491 trees in 1986. The updated plan was presented to the Germantown Facilities Manager at the end of summer.

Honeywell FM&T held its ninth annual Computational Science and Applied Technology program in June. The two-week program used advanced technology and engineers from the **Kansas City Plant**, a National Nuclear Security Administration (NNSA) facility, to give 16 high school students hands-on instruction in scientific concepts. After instruction in math and computer programming, half of the students developed a general-application computer program with the ability to test the durability of truss structures, such as a steel-beam bridge, while the other half worked on a fiber optics project.

Teams of high school teachers and students from New Mexico, Arizona, Colorado, and Texas took part in a week-long summer environmental academy at **Los Alamos National Laboratory** (LANL). The focus of this year's academy was the

Cerro Grande Fire, from pre-fire setting through the long-term environmental consequences and fire recovery. The academy is sponsored by LANL, Waste Management Education and Resource Consortium (WERC), and NNSA. LANL and **Sandia National Laboratories** are members of WERC.

Elementary and middle school students participated in the Summer Adventures in Science Program conducted by LANL's Bradbury Science Museum. Museum science educators led the students in hands-on exercises and activities in several interesting subjects, including "Snakes," "Back to the Moon," "Starlab," "Space Robots," and "Rocket Launch." The programs were conducted from June through August. ♦

# People IN ENERGY

**Dr. Rowland E. Felt**, Nuclear Materials Specialist in the Department of Energy's Office of Environment, Safety and Health, is the 2002 recipient of the Robert E. Wilson Award, presented by the Nuclear Engineering Division of the American Institute of Chemical Engineers. The award recognizes Felt's 40-year contribution to chemical engineering in the nuclear field as a Federal, contractor, and private industry employee. His principal areas of expertise are the safety of nuclear materials operations and the equipment and facilities in which they are processed.



**John H. Kersten** has been named manager of the Department of Energy's (DOE) Golden Field Office, a position he held in an acting capacity since January 2002. Kersten served as Deputy Manager of the office and its predecessor, the NREL Area Office, since 1987. He joined the office staff in 1979 as financial officer, after serving as budget officer for the Strategic Petroleum Reserve Project Office in New Orleans, La.

**Vice Admiral George P. Nanos** has joined the Department of Energy's

Los Alamos National Laboratory (LANL) as Principal Deputy Associate Director for Threat Reduction. Most recently, Nanos was Commander of the Naval Sea Systems Command in the U.S. Navy and previously commanded the Navy's strategic nuclear program.

Four current and former scientists at the Department of Energy's Brookhaven National Laboratory were elected as Fellows of the American Physical Society for their research and contributions in the application of physics to science and technology through the year 2001: **Stephen C. Peggs**, **Amarjit Soni**, **Masaki Suenaga**, and **John H. Marburger III**, currently Director of the Office of Science and Technology Policy at the White House.

**Laura Wilkerson**, a Reindustrialization Specialist in the Assets Utilization Office of the Department of Energy's Oak Ridge Operations Office, recently was selected "Engineer of the Week" on the Hispanic Engineer National Achievement Awards Corporation website. The Corporation was established in 1989 as a means of identifying, honoring, and



documenting the contributions of outstanding Hispanic American science, engineering, and technology professionals.

**David J. Hill** is the new Director of the Nuclear Science and Technology Division at the Department of Energy's (DOE) Oak Ridge National Laboratory. Most recently, Hill was Deputy Associate Laboratory Director for Engineering Research at DOE's Argonne National Laboratory (ANL).



Previously, Hill served at ANL as Director, Reactor Analysis and Engineering Division; Director, Reactor Engineering Division; and Director, International Nuclear Safety Center.

Researchers **Charles Gentile**, **Ronald Hatcher**, and **Hantao Ji** of the Department of Energy's (DOE) Princeton Plasma Physics Laboratory are recipients of DOE Mentoring Awards for their dedication to sharing knowledge and inspiring and instilling confidence in the next generation of scientists and engineers. The awards were presented by Under Secretary for Energy, Science and Environment Robert Card during PPPL's 50th anniversary celebration. ❖

## NEW Publications

Office of Inspector General (IG) reports: **National Nuclear Security Administration's Test Readiness Program** (DOE/IG-0566); **The Department's Unclassified Cyber Security Program 2002** (DOE/IG-0567); **The Federal Energy Regulatory Commission's Unclassified Cyber Security Program 2002** (DOE/IG-0569); **Procurement Administration at Brookhaven National Laboratory** (CR-B-02-02). The reports are available

from the U.S. Department of Energy, IG Reports Request Line, 202-586-2744, or at <http://www.ig.doe.gov/>.

**History of the Plutonium Production Facilities at the Hanford Site Historic District, 1943-1990** (DOE/RL-97-1047), from the Department of Energy's (DOE) Richland Operations Office, contains the history of 190 significant structures built on the Hanford Site during the Manhattan Project and the

Cold War. The publication describes the events that led to the creation of the Manhattan Project, the resulting plutonium production facilities, the workers, and the role of secrecy and security during the production era. A multi-contractor team coordinated by DOE's Pacific Northwest National Laboratory and Bechtel Hanford Inc. prepared the document. Available at <http://www.hanford.gov/docs/rl-97-1047/index.pdf>. ❖

# Milestones

## YEARS OF SERVICE

### October 2002

#### Headquarters

**EIA** - Neil Gamson (30 years), Douglas R. Hale (30). **Energy Efficiency & Renewable Energy** - Jean J. Boulon (30), Allan J. Jelacic (30), Beverly J. Johnston (30), Maxine E. Robinson (30). **Envir. Management** - Sharon I. Rudy (35), Brian F. McCully (30), Moira M. Shea (25), W. Alexander Williams (25). **Envir., Safety & Health** - Billy T. Lee (35), Richard S. Green (30).

**FERC** - Rachel R. Hecht (35), Joel M. Cockrell (30), James C. Newman (30), Tamara E. Young-Allen (30), William R. Atlas (25), Annette D. Avent (25), Donna M. Brent (25), Jon K. Miyashiro (25), Janet L. Oakley (25), Peter R. Valeri (25), Audrey C. Wong (25). **Fossil Energy** - David F. Johnson (35). **Inspector General** - Rolando Dela-Cruz (35), David A. Franklin (30), Timothy H. Wilson (30).

**Management, Budget & Evaluation** - Lee M. Morris (35), Howard G. Borgstrom (30), Gary S. Davis (30), William E. Gillison (25), Cynthia G. Yee (25). **NNSA** - James C. Landers (35), Sherry L. McLaughlin (30), Vondelia M. Parker (30). **Nuclear Energy** - Gail H. Marcus (25). **Policy & International Affairs** - Charles E. Washington (30). **Science** - Matthew B. Cole (25).

#### Field

**Albuquerque** - Harold E. Johnson (25). **Albuquerque/NNSA** - Kathy R. Carrillo (30), Gary L. Freeman (30), Steve Lopez (30), Elaine C. Randall (30), Laverne E. Scott (30), Roberto A. Archuleta (25). **Idaho** - Michael G. Judd (25), Michael J. Schultz (25). **NETL** - Robert H. Elstrodt (35), John C. Winslow (30).

**Bonneville Power** - G. Michael Muller (35), Kathleen A. Bleth (30), Earl L. Brown (30), Linda A. Dinan (30), Thomas J. Moore (30), Bryan C. Bearss (25), Randy B. Borjesson (25), Robert J. Edmondson (25), Thomas J. Gavin (25), Rodger B. Gomez (25), Eugene R. Griffiths (25), William B. Leonard (25), Lois J. Lugg (25), Paul J. Oneal (25), Patricia A. Spray (25).

**Nevada/NNSA** - Jean E. Chatterton (30), Deborah D. Monette (30). **Oak Ridge** - Linda B. Jennings (35), Thomas L. Townsend (35), Charles F. Champ (25), Mary H. Kohntopp (25).

**Oakland/NNSA** - James H. Solomon (40), Constance L. Thome (35), Onesima N. Casco (30), Tommy D. Chang (30). **Richland** - Judy L. Tokarz-Hames (30), Wayne M. Glines (25), James P. Jarrett, Jr. (25), Brenda M. Pangborn (25).

**Schenectady Naval Reactors/NNSA** - Andrew R. Seepo (30). **Strategic Petroleum Reserve** - Julio L. Maldonado (25). **Western Area Power** - Curtis L. Ginn (30), John J. Harris (30), Gary G. Hoffmann (30), Colleen G. Voet (30), Lane A. Cope (25), Lyle G. Johnson (25), David R. Tiede (25). **Y-12 Site/NNSA** - Patrick J. Belland (30).

## RETIREMENTS

### August 2002

#### Headquarters

**Nuclear Energy** - Lyn M. Alperstein (34 years).

#### Field

**Albuquerque/NNSA** - David L. Katz (33).

### September 2002

#### Headquarters

**Envir. Management** - Kenneth T. Lang (32). **FERC** - Lawrence R. Anderson (34), Frances M. Bullock (29), Timothy P. Campbell (30), Robert E. Hammack, Jr. (21), Mary M. Hertling (26), Roberson N. Humble, Jr. (22), Cynthia J. Klenk (26), Jacob Leventhal (33), Arve L. Milner (28), Frederick G. Minnis, Jr. (28), Natalie L. Moore (25), Teresa E. Moore (33), James Whitfield, Jr. (26). **Inspector General** - Caroline S. Nielsen (35). **Science** - Kenneth R. Hohenbrink (32), Wanda H. Parks (28), R. Fred Shassere (28).

#### Field

**Albany Research Center** - James H. Russell (43). **Albuquerque/NNSA** - Richard D. Keck (33), Richard F. Lucero (31). **Bonneville Power** - Raymond Frank (23), Richard A. Patterson (25), James A. Vinson (35), Donald F. Williams (19). **Idaho** - Larry B. Arnold (25), Margaret W. Fisher (25), Jerry L. Lyle (26), Susan M. Prestwich (23), Glenn S. Waugh (31). **NETL** - James U. Watts (33). **Nevada/NNSA** - James D. Barrett III (26). **Oak Ridge** - Marvin E. Bennett (24), George H. Thoeming (27).

**Richland** - Garry L. Amidan (34), Erik A. Erichsen (34), Robert M. Hiegel (35), Norman D. Moorer (26), June E. Ollero (27), Verneice Skinner (25), George E. Wickersham (23), Joe W. Wiley (28), Arnie D. Dee Willis III (22). **Rocky Flats** - Terrel J. Agy (35), Jonathan A. Dion (32), Jerry A. Stansberry (27). **Savannah River** - Caroline L. Bennett (34), Bobbie Carter (20), John D. Lybrand (31), Guy E. Miller (32), Michael G. O'Rear (28). ❖

(September retirees will continue next month.)

## ORNL, USEC to develop enrichment technology

The Department of Energy's Oak Ridge National Laboratory (ORNL) and USEC Inc. have signed a \$121 million Cooperative Research and Development Agreement to develop and demonstrate the Department's highly efficient gas centrifuge technology for enriched uranium production. The agreement, the largest ever for ORNL, extends through 2007 and will be funded entirely by USEC Inc., which supplies enriched uranium fuel for commercial nuclear power plants.

ORNL technical personnel and USEC employees will work to deploy USEC's lead cascade test facility, which will showcase improvements to the Department's proven centrifuge technology. The gas centrifuge process produces a uranium stream concentrated in uranium-235, a radioisotope suitable for making fuel for nuclear power plants.

Over the next few years, ORNL will receive \$28.5 million for specific design, testing, and analysis work. When operations begin in 2005, the test facility will have up to 240 full-scale centrifuge machines enriching uranium in a closed cycle. Operation of the full-scale centrifuge test facility will provide the cost, schedule, and performance data necessary to plan the future construction of a \$1 billion to \$1.5 billion commercial centrifuge uranium enrichment plant.

October 2002

# AROUND DOE

## Construction workers set safety record at Fernald

The Greater Cincinnati Building and Construction Trades Council has provided craft services to support environmental remediation and construction projects at the Department of Energy's Fernald Environmental Management Project since 1992. The services are provided through a labor agreement with cleanup contractor Fluor Fernald.

The 400 construction craft workers at the Fernald Site recently reached five million safe work hours without a lost-time accident or injury. "There isn't another project within the two-state jurisdiction of the Building Trades that has a 10-year, five million man-hour record without a lost-time day from work," said Joe Zimmer, Executive Secretary of the Council.

The Building Trades Council and its local unions have provided maintenance and construction support to the Fernald Site for over 50 years and will continue to do so until site closure.

## Bio-based energy focus of new research institute

An agreement recently was signed among the Department of Energy's Idaho National Engineering and Environmental Laboratory and Pacific Northwest National Laboratory (PNNL), the University of Idaho, and Washington State University to establish the Northwest Bioproducts Research Institute. Each party will bring its own unique capabilities, staff, and facilities to the institute.

The aim of the collaboration is to form a nationally renowned, multidisciplinary research and development program focused on converting agricultural and food-processing wastes into "bio-based" fuels, power, and industrial products. Industry, processors, and growers will be able to use the institute's products and technologies and, in some cases, will profit from the discoveries through licenses. A Bioproducts Advisory Committee will set research priorities and help ensure the rapid transfer of technology to commercial products and processes.

"The institute will make the Northwest a leader in bio-based technology, but the technology created and demonstrated in this institute will go beyond regional interest," said PNNL Director Lura Powell. "It will contribute to the nation's desire to increase markets for agriculture and help reduce its dependence on imported oil." ❖

---

**United States  
Department of Energy (PA-40)  
Washington, DC 20585**

---

Official Business