

Bush Gives Bement NSF Nod

Arden Bement, a metallurgical engineer who has been doing double duty as head of NIST and acting director of NSF, has been nominated by President Bush to become NSF's director. Bement, 72, is widely respected in Washington and is expected to easily win confirmation by the Senate early next year.

"The foundation has a rich history of strong and independent directors, and I look forward to continuing with that tradition," Bement said in a memo to the NSF staff following his 15 September nomination. "Although NSF faces significant challenges in the near future due to federal budget issues, I am committed to the policies and operations that have stood the test of time and have helped make NSF an extraordinary agency."

Bement stepped in as acting director after NSF director Rita Colwell left in February, several months before her term was to expire (see *PHYSICS TODAY*, June 2004, page 28). The search for Colwell's replacement was made unusually difficult because of the uncertainty caused by the presidential election. Just three days before the legal deadline for nominating a new director, the White House offered the permanent position to Bement. Once he is confirmed, a new di-



President Bush congratulates Arden Bement.

rector for NIST will have to be found.

Representative Vern Ehlers (R-MI), one of two physicists in Congress, said Bement was an "excellent choice" to head NSF, but added that his "departure from NIST is a great loss for the institute." Before coming to NIST in 2001, Bement was the head of the school of nuclear engineering at Purdue University, and prior to that worked at TRW Inc, the Defense Advanced Research Projects Agency, Battelle Northwest Laboratories, and General Electric. He was also a professor of nuclear materials at MIT.

Jim Dawson

News Notes

Russia to ratify climate protocol. In a move that surprised and dismayed the Bush administration but delighted the European Union, Russian President Vladimir Putin's cabinet has recommended ratification of the Kyoto Protocol. The protocol aims to cut greenhouse gases that cause global warming. More than 55 countries producing 55% of the industrialized world's 1990 greenhouse gas emissions must ratify the protocol before it can go into effect—and Russia's ratification will tip the scale on emissions. Since 1990, only Russia, Sweden, and the UK have cut emissions to the level specified by the protocol.

In 2001, the Bush administration pulled out of the protocol, arguing that complying would be too expensive and that the protocol unfairly allows developing nations to continue to increase their emissions. Since then, the EU has been wooing Russia, the world's second largest greenhouse gas emitter. In return for ratifying the Kyoto protocol, the EU has hinted it will open its doors to visa-free travel for Russians and will support Russia's entry into the World Trade Organization. Barring any surprises, Russia's parliament was to act on the Putin cabinet's recommendation by ratifying the protocol at the end of October.

PKG

New nanocenters. NSF will spend \$69 million over the next five years to create six new university-based research centers for nanoscale science and engineering. The new centers are in addition to eight existing centers established with NSF funding since 2001.

Ten federal agencies currently fund nanoscale research as part of the Bush administration's National Nanotechnology Initiative, with NSF alone spending \$250 million on nanoscale research grants in fiscal year 2004. The administration has proposed nearly \$1 billion in nanoscale research funding for FY 2005.

"Each new center has a bold vision for research and education at the fron-

tiers of science and technology, and with the existing centers, provides a coherent approach to US nanotechnology research and education," said Mihail Roco, senior adviser for nanotechnology at NSF and head of the foundation's nanotechnology initiative.

The new NSF centers will be located at the University of California, Berkeley; Stanford University; the University of Wisconsin-Madison;

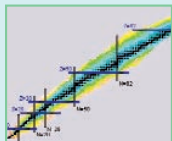
WEB WATCH

<http://cryowwwwebber.gsfc.nasa.gov>

At the **Cryogenics and Fluids Branch** of NASA's Goddard Space Flight Center, in Greenbelt, Maryland, Brent Warner and his colleagues develop astronomical sensors that work at cryogenic temperatures. The branch's Web page is full of information for working cryogenicists, but it also offers tutorials on low-temperature technology for students and teachers.



<http://www.nndc.bnl.gov/nudat2>



Thanks to **NuDat 2.0**, you can do online searches of the databases held at Brookhaven National Laboratory's National Nuclear Data Center. The software's principal interface is an interactive chart of the nuclides. Clicking on a nuclide brings up information about its nuclear levels, half-life, spin-parity, and so on.

<http://www.ieee-virtual-museum.org>

The History Center of the Institute of Electrical and Electronics Engineers created the **IEEE Virtual Museum** to help advance its mission of promoting and preserving the history of information and electrical technologies. The museum holds several online exhibits, including *The Beat Goes On: How Sounds Are Recorded and Played*, and *Powering the Electrical Revolution: Women and Technology*.



To suggest topics or sites for Web Watch, please visit <http://www.physicstoday.org/suggestwebwatch.html>.

Compiled and edited by Charles Day

Ohio State University; the University of Pennsylvania; and Northeastern University in Boston. **JLD**

Science board nominations. Louis Lanzerotti is one of eight scientists nominated by President Bush to serve on the National Science Board, the panel that oversees NSF. Lanzerotti, a physics professor at the New Jersey Institute of Technology and a consultant to Lucent Technologies' Bell Laboratories, has focused his recent research on space weather and the effects of the Sun on Earth's space environment. He also serves on a National Research Council committee that is studying whether to prolong the life of the *Hubble Space Telescope* (see PHYSICS TODAY, October 2004, page 33).

In addition to Lanzerotti, the other nominees are Dan Arvizu, executive director for energy technologies at the University of Chicago; Steven Beering, president emeritus of Purdue University; G. Wayne Clough, president of the Georgia Institute of Technology; Kelvin Kay Droegemeier, director of the Center for Analysis and Prediction of Storms at the University of Oklahoma in Norman; Alan Leshner, CEO of the American Association for the Advancement of Science, Washington, DC; Jon Strauss, president of Harvey

Mudd College in Claremont, California; and retired astronaut Kathryn Sullivan, president of the Center of Science and Industry in Columbus, Ohio.

The eight nominees face confirmation by the Senate, then will begin six-year terms on the 24-member board. In addition to overseeing NSF, the board conducts studies on a wide range of technology issues and biennially publishes *Science and Engineering Indicators*, a detailed analysis of the state of US science and engineering. **JLD**

NAS taps atmospheric scientist. Ralph Cicerone, chancellor of the University of California, Irvine (UCI), has been unanimously nominated to become the next president of the National Academy of Sciences. The nomination by the NAS council means Cicerone will stand unopposed for election in December and is expected to begin a six-year term on 1 July 2005.

Known for his groundbreaking research on ozone depletion and the impact of greenhouse gases on the climate, Cicerone said, "The importance of science and technology to the United States and the world has never been greater and I look forward to serving if I'm elected." He was elected

as a member of the NAS in 1990. UC president Robert Dynes said Cicerone's rise to the NAS presidency "is a richly deserved acknowledgement of his talents as a scientist and leader."

Current NAS president Bruce Alberts, a biochemist, will complete his second six-year term. Alberts said he was "very pleased" that Cicerone had accepted the nomination. He said Cicerone "has been an energetic and thoughtful leader for many of our academy's efforts, as well as for the larger science community."

At UCI, Cicerone served as chair of the department of Earth systems science from 1989 to 1994. He became UCI's fourth chancellor in 1998. In 2001, he led an NAS study of the current state of climate change and its impact on the environment and human health; that study was requested by the Bush administration. Cicerone holds a PhD in electrical engineering from the University of Illinois. **JLD ■**



Cicerone

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