"Each mission has its own objectives and emphasis," says Pieters. "But there is naturally some overlap, especially in imaging." If scientists can get access to all the lunar mission data sets, then our understanding about the Moon will be stronger, she adds.

Despite having nationalistic lunar goals, nearly all the space agencies are discussing collaboration through organizations such as the International Lunar Exploration Working Group. "There are many bilateral and other negotiations going on," says Garvin. For example, Russia is contributing a neutron detector to *LRO*. In turn, ESA and NASA are working with JAXA, and the US is close to completing discussions about placing up to two instruments on India's *Chandrayaan-1*. Even China is considering international involvement in its lunar program. "I'm guardedly optimistic that by the end of the decade we will be sharing remarkable new data sets about the Moon," adds Garvin.

Paul Guinnessy

Wave Power Wins Siemens Westinghouse Competition

Aaron Goldin, a 17-year-old high-school student from San Diego County, California, has won the individual category of the Siemens Westinghouse Competition in Mathematics, Science, and Technology. Goldin invented a device that generates electricity from ocean waves. "I was playing with a gyroscope when I felt the familiar torque on my wrist . . . and eventually I realized I could build a wave-powered generator from it," he says. A prototype, built in his garage, is about 20% efficient in energy conversion, roughly half that of a power station. Goldin hopes that with further refinements, the energy efficiency could be more than doubled.

SIEMENS FOUNDATION; TONY RODRIGUEZ

Goldin

The main advantage of Goldin's invention over other deep-sea wave-powered generators is that it directly converts the periodic torque of the ocean against the floating device into electrical energy. Other generators require a secondary step. All the moving parts are encased inside a protective shell away from saltwater, which in turn reduces corrosion and hence the maintenance costs of the device.

Goldin's award consists of a $100 000 scholarship to be used toward tuition costs when he starts college later this year. "I hope to continue my studies in physics and engineering," he says, "but at the same time I want to take this opportunity to study some other fields and activities."

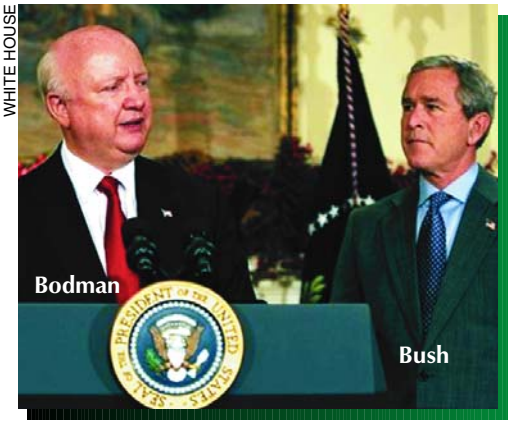
Paul Guinnessy

News Notes

Changes at DOE, NASA. The Bush administration's post-election shuffle has included changes in the top jobs at both NASA and the Department of Energy. Spencer Abraham announced his resignation at DOE in mid-November, saying he wanted to spend more time with his wife and three daughters. NASA Administrator Sean O'Keefe resigned in mid-December and is returning to his home state of Louisiana to become the chancellor of Louisiana State University in Baton Rouge.

Samuel Bodman, a Treasury Department official with a background in chemical engineering, was nominated by President Bush to replace Abraham as the secretary of energy. Bodman, 66, is better known in the financial community than the energy industry, but was recommended for the energy job by outgoing Commerce Secretary Donald L. Evans, a close friend of President Bush.

WHITE HOUSE

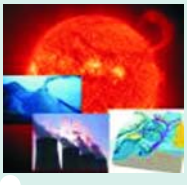


Before moving to the Treasury Department, Bodman was a deputy secretary at the Department of Commerce, where he was responsible for oversight of both the National Oceanic and Atmospheric Administration and NIST. He graduated from MIT in 1965 with an ScD and spent several years at the school as an associate professor of chemical engineering. He left MIT and spent 17 years with Fidelity Investments in Boston, and then became chairman of Cabot Corp, a Boston-based chemical company.

A search is under way for a new administrator at NASA, but it is not clear if anyone will be named before O'Keefe's planned departure date in mid-February. **JLD** ■

Web Watch

http://www.realclimate.org



Mitigating the impact of climate change is fraught with unpalatable tradeoffs—all the more reason, believe the five climatologists who founded **RealClimate**, that the public should receive accurate and balanced information about climate science. Launched in December 2004, the RealClimate website provides expert and timely commentary on how climate change is covered in popular media.

http://nerdling.net/slushpile

Tania Ritchie studies chemical engineering and physics at the University of Newcastle in Australia. But this austral summer, she is visiting David Base in Antarctica. Her mission is to help retrieve, maintain, and calibrate equipment that monitors Earth's magnetic field. You can follow her progress by reading her entertaining weblog **Slush**.

http://virtualsolar.org

The **Virtual Solar Observatory** provides a single portal to more than 50 databases of solar data that are available on the Internet. This site offers several search parameters, including time and spectral region.

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

Compiled and edited by **Charles Day**