

LED lighting could save the equivalent of 133 power plants of energy by 2025. It could also help reduce global warming by lowering carbon emission."

Researchers have already moved into the UV with LEDs, Nakamura added. UV LEDs with a wavelength of 370 nm have been used for air purification for cars and refrigerators, while 280-nm UV LEDs are used to purify water.

Karen H. Kaplan

news notes

Underground lab ins and outs.

For 10 days in June, it looked like Washington State's Cascade mountains might be back in the running to host the Deep Underground Science and Engineering Laboratory. NSF granted an appeal, which meant the Cascades site, like the Henderson mine in Colorado and Homestake mine in South Dakota, would receive \$500 000 for developing a conceptual design for DUSEL.

But NSF withdrew its support when it learned that in the months since filing the appeal, the Cascades group had shifted its focus from Icicle Creek, an undeveloped site, to Pioneer Tunnel. "We recognized this was a better location," says the University of Washington's Wick Haxton, one the chief backers of building DUSEL in the Cascades. "It had power, drainage, and ventilation in a parallel tunnel that we could piggyback off of."

NSF has left the door open for a Cascades site—and others—to rejoin the DUSEL site competition this fall. But, says Haxton, "we're in a catch-22. Too much time has been lost. It's better for science if we support one of the other sites."

That support comes easy because the Homestake and Henderson sites have "excellent proposals," Haxton adds, and "the problems I felt were insoluble at Homestake—the ownership and the flooding of the mine—have, in fact, been solved."

In other DUSEL news, T. Denny Sanford, a Sioux Falls, South Dakota, banker, donated \$70 million in late June for improving the Homestake mine's infrastructure and creating a science and education center. TF

NSF picks Chan. Tony Chan, a mathematician and dean of physical sciences at UCLA, has been named the new head of mathematics and physical sciences at NSF. Chan, who received his PhD in computer science from Stanford University in 1978, will take over as assis-

tant director for MPS on 1 October. Astronomer Michael Turner, the previous MPS head, left NSF earlier this year to return to the University of Chicago.

Citing Chan's administrative experience as a dean at UCLA, NSF director Arden Bement Jr said the foundation can benefit from "Tony's extraordinary record as a scientist and an administrator, especially at this critical time in the history of mathematics and physical sciences." Chan will begin his job just as NSF begins implementing a new strategic plan intended, according to foundation officials, to redefine the "mission, vision, goals, and objectives" of the foundation. His job may be easier than



Chan

Turner's since the Bush administration has proposed an 8.3% budget increase for NSF funding. UCLA chancellor Albert Carnesale described Chan as an "outstanding scholar and a visionary administrator" who has a "strong commitment to interdisciplinary research, involving units within the physical sciences, engineering, medicine, and the life sciences." Chan describes his research as applying

"linear and non-linear algebraic algorithms to the solution of large systems of equations arising in scientific computing." JLD

Political science? The ranking Democrat on the House Committee on Science subcommittee on environment, technology, and standards has asked the Government Accountability Office (GAO) to formally investigate ongoing complaints that the Bush administration has suppressed science research that doesn't agree with its policy positions. In his request, Oregon Representative David Wu cited attempts by a political appointee at NASA earlier this year to prevent a prominent agency scientist from talking about global warming (see PHYSICS TODAY, May 2006, page 27; also this issue, page 24). Wu also pointed to the suspension of a forest research grant at Oregon State University "because it reflected adversely on commercial forestry interests." Wu complained about the grant suspension to presidential science adviser John Marburger, and the funding was reinstated.

"Despite assurances [by Marburger and other administration officials] to the contrary, it appears that the roles of science and political policy continue to be confused," Wu said in his May GAO request. In addition to investigating allegations by government scientists that

web watch

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<http://www.antikythera-mechanism.gr>

In 1902, an archaeologist noticed that a rocklike block recovered from a wrecked Roman ship had a cog attached to it. By the 1950s, the block had been dated to 80 BC and cleaned enough to reveal the outlines of a sophisticated mechanism of clocklike gears. Its purpose was the calculation of planetary orbits. Research on the remarkable

find continues to this day and is summarized and illustrated on the website of the **Antikythera Mechanism Research Project**.

<http://www.janetsaadcook.com>

Curved metallic reflectors and natural sunlight are the ingredients for what artist Janet Saad-Cook calls her **Sun Drawings**. Photographs and descriptions of the intricate, rainbow-hued illuminations can be found on her website.



<http://hubblesite.org/go/blackholes> **Black Holes: Gravity's Relentless Pull**

offers an extensive and richly illustrated tour of black hole physics. Astronomer Roeland van der Marel created the award-winning site.

their work has been suppressed, delayed, or changed, Wu wants the GAO to look at claims made by Environmental Protection Agency science advisers during recent congressional hearings that environmental reports the administration doesn't agree with—some up to 10 years old and dating back to the Clinton administration—have languished in draft form at the agency. Wu asked that the GAO investigation be completed by February 2008. A spokesperson for Wu said she expected the investigation to go forward. JLD

Surveying women in physics. There can be no doubt that children and childcare take a toll on careers, especially for women. But in a survey of 1350 female physicists from 70 countries, respondents said the main problem is that women in physics continue to face discrimination and negative attitudes from their colleagues and institutions. The survey was conducted by the American Institute of Physics in conjunction with last year's Second International Conference on Women in Physics (see PHYSICS TODAY, August 2005, page 29).

Around the world, women remain underrepresented in physics; in most countries, they earn less than 20% of physics PhDs. The survey found that, compared with their counterparts in developed countries, women physicists in developing countries marry and have children younger; have less access to funding, office space, equipment, and other resources; and get more experience working overseas.

Some 78% of respondents rated their relationships with their graduate advisers as either excellent or good, although 8% reported a poor relationship.

Despite 71% of respondents saying they were discouraged by physics, fully 86% said they would choose the field again if they had it to do over.

The report, *Women Physicists Speak Again*, is available online at <http://www.aip.org/statistics/trends/gendertrends.html>. Single copies may be obtained free of charge from AIP, Statistical Research Center, One Physics Ellipse, College Park, MD 20740; e-mail stats@aip.org. TF ■

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