

McTague

rary disappearance of computer disks containing nuclear secrets, McTague led a National Research Council report on security at the weapons labs. After the report came out, staff education on security procedures improved, says McTague. But

more effort is needed to focus security measures on the areas where they are strictly necessary, he adds. "And morale at the labs is better, but not good enough."

Also in 1999, Livermore admitted massive cost overruns in the construction of its National Ignition Facility, a key component of DOE's program to study and maintain nuclear weapons in the absence of nuclear testing. The ensuing task force on NIF, chaired by McTague, recommended that management should be overhauled, but construction could continue (see Physics TODAY, January 2001, page 21). Now, says McTague, "All indications I've seen are that project management out there is robust. The communications issue that existed between the university and the DOE has been overcome."

And even more important than focusing on facilities, says McTague, is "continued attention to making the labs a place of choice for talented scientists and engineers to work and develop their careers."

LYNLEY HARGREAVES

NEWS NOTES

Quantum computing journal. The journal Quantum Information and Computation (QIC) made its debut last month. Most papers published in this field currently appear in the Los Alamos electronic preprint archives, and in a handful of journals in the physics, mathematics, and computer sciences arenas, says Hoi-Kwong Lo, one of the new journal's managing editors and the chief scientist at MagiQ Technologies Inc in New York City. "It is getting difficult to keep track of all those papers and distinguish the good ones from the bad ones. We hope to bring a diverse community together and broaden the perspectives of researchers." The first issue of QIC, which will appear every two months, focuses on quantum entanglement. The electronic version of the journal

will be free until the end of the year and can be accessed online at http://www.rinton.com/journals/qiconline.html.

Math research prizes. Sergei Gukov, a 24-year-old postdoc studying string theory, just won his salary for the next five years. Gukov is one of four prize fellows named this year by the Clay Math Institute—a three-year-old private foundation in Cambridge, Massachusetts, that is perhaps best known for its ongoing offer of \$1 million to the first person to solve any of seven historically troubling math problems. Through the fellowships, first offered last year, the institute sponsors scientists for up to five years of research at any location. So far, one winner a year has worked in physics. "Most postdocs have to teach," says Gukov, who will instead focus on research at Harvard University. The winners, who must be under the age of 30, need to have already achieved significant research results, says Arthur Jaffe, the institute's president. "We first and foremost want to encourage the most original researchers."

NAE reelects Wulf. The National Academy of Engineering has reelected William A. Wulf to head the organization for six more years. He took over as interim president in 1997, and has since been on leave from the Uni-

versity of Virginia. Wulf believes that the increasing global population—most of which will end up in new giant cities—will lead to unique engineering challenges in energy, water, waste management, and transportation. "By the time I leave office, I want engineering to do a better job of supplying information on which public policy can be based," he says.

DOD funds space materials center.

The University of Chicago has won a \$5 million grant over five years from the US Department of Defense to lead the creation of a Center for Materials Chemistry in the Space Environment. The center will search for materials that can survive bombardment by stray oxygen atoms—which make up much of the lower atmosphere and react strongly with many materialsas well as electrons, orbital debris, ions, and ultraviolet radiation. "The current materials being used are still what I would call first-generation space materials that just happen to work at some level," says Chicago physical chemist Steven Sibener, the new center's leader. "We intend to go beyond such fortuitous situations." The center brings together researchers from six universities and is part of the DOD's Multidisciplinary University Research Initiative, which funds basic research to the tune of \$125 million a year.

Web Watch

http://es.rice.edu/ES/humsoc/Galileo

With the aim of preparing students to read the works of Galileo Galilei, Albert van Helden, a historian at Rice University, and Elizabeth Burr, the university's electronic text and images librarian, collaborated to produce the Galileo Project. The illustrated Web site offers information on the life and work of Galileo (1564–1642) and the science of his time.



http://www.foodsci.uoguelph.ca/dairyedu/icecream.html

In great and extensive detail, Doug Goff of the University of Guelph in Ontario, Canada, describes the history and science of Ice Cream. This much-loved food product, points out Goff on one of the site's pages, is both an emulsion and a foam whose melting properties are influenced in part by the stability of colloidal particles known as casein micelles.



The Web abounds with sites that contain brief physics-related quotations. But in **Garth's Eclectic Collection of Physics-Related Quotations** you'll find a collection of long extracts from several science fiction novels, each related to an aspect of physics. The collection's compiler, Garth Huber, is a particle physicist at the University of Regina in Saskatchewan, Canada.



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