tissue restoration that have led to the widespread use of numerous clinical devices." He is the Showalter Distinguished Professor Emeritus of Bioengineering at Purdue University.

A medal went to **Paul G. Kaminski**, chairman and CEO of Technovation Inc in Fairfax Station, Virginia, "for contributions to the national security through the development of advanced, unconventional imaging from space, and for developing and fielding advanced systems with greatly enhanced survivability."

Herwig Kogelnik, adjunct photonics systems research vice president at Bell Labs, was recognized "for pioneering contributions and leadership in the development of the technology of lasers, optoelectronics, integrated optics, and lightwave communication systems that have been instrumental in driving the tremendous capacity growth of fiber optic transmission systems for our national communications infrastructure."

National Academy of Engineering president **Charles M. Vest** received the medal "for his visionary leadership in advancing America's technological workforce and capacity for innovation through revitalizing the national partnership among academia, government, and industry."

James Edward West was selected "for co-inventing the electret microphone while working with Gerhard Sessler at Bell Labs in 1962. Ninety percent of the two billion microphones produced annually and used in everyday items such as telephones, hearing aids, camcorders, and multimedia computers employ electret technology." West is a professor in the Johns Hopkins University department of electrical and computer engineering.

The Semiconductor Research Corp of Durham, North Carolina, received the medal "for building the world's largest and most successful university research force to support the rapid growth and advance of the semiconductor industry; for proving the concept of collaborative research as the first high-tech research consortium; and for creating the concept and methodology that evolved into the International Technology Roadmap for Semiconductors."

Xerox Corp of Stamford, Connecticut, was honored "for over 50 years of innovation in marking, materials, electronics, communications, and software that created the modern reprographics, digital printing, and print-on-demand industries."

## AVS to present awards

At its annual symposium next month in Seattle (see page 61), four researchers will be honored for their achievements by AVS: Science and Technology of Materials, Interfaces, and Processing.

Jerry Tersoff, a research staff member at the IBM Thomas J. Watson Research Center, will receive the Medard W. Welch Award "for seminal theoretical contributions to the understanding of surfaces, interfaces, thin films and nanostructures of electronic materials."

The Albert Nerken Award is going to Richard J. Colton "for seminal scientific insights that accelerated the development of vastly improved surface and nanoscale analytical techniques, and of innovative biomolecular sensors." Colton is director of the Institute for Nanoscience at the US Naval Research Laboratory and is acting superintendent of NRL's chemistry division.

Stephen J. Pearton has garnered the biennial John A. Thornton Memorial Award and Lecture "for pioneering the science and application of advanced device fabrication techniques, including plasma etching, ion implantation for doping and electrical isolation, and formation of Ohmic and Schottky contacts for compound semiconductors." He is a

Distinguished Professor and Alumni Professor in the department of materials science and engineering at the University of Florida.

"For pioneering work in the application and development of in situ plasma and surface diagnostics to achieve a molecular understanding of thin film growth," W. M. M. Kessels will receive the Peter Mark Memorial Award. He is an assistant professor in the department of applied physics at Eindhoven University of Technology in the Netherlands.

in brief Peidong Yang has received the 2007 Alan T. Waterman Award, NSF's highest honor. The foundation praised Yang for

his research into nanowires, which show promise for devices ranging from lasers and computer circuits to solar panels and biological sensors. An associate professor of chemistry at the University of California, Berkeley, Yang will receive a medal and a grant of \$500 000 over three years.

This fall, condensed-matter physicist and materials scientist **Jinke Tang** will be leaving the University of New Orleans to join the faculty of the physics and astronomy department at the University of Wyoming.

## obituaries

To notify the community about a colleague's death, subscribers can visit http://www.physicstoday.org/obits, where they can submit obituaries (up to 750 words), comments, and reminiscences. Each month recently posted material will be summarized here, in print. Select online obituaries will later appear in print.

## James Hillier

James Hillier, who initiated or helped initiate some of the major electronic advances of the past 75 years, died of a stroke on 15 January 2007 in Princeton, New Jersey. His first and perhaps most important contribution was his role in creating the first commercially successful electron microscope in North America.

Born 22 August 1915 in Brantford, Ontario, Canada, Hillier went to the University of Toronto, where he earned his BA in 1937, MA in 1938, and PhD in 1941, all in physics. The physics department had been working to produce a high-resolution microscope under the direction of Eli Burton. Hillier and Albert Prebus were assigned to the effort in December 1937. They asked permission to



www.physicstoday.org September 2007 Physics Today