variety of topics in statistical optics, optical information processing, and automatic pattern recognition.

Three new directors of OSA also took office in January, for two-year terms. They were **Rod C. Alferness**, the chief technical officer of the optical networking group at Lucent Technologies; **Keren Bergman**, an assistant professor of electrical engineering at Princeton University; and **James G. Fujimoto**, a professor of optics at MIT.

In Brief

In November, the Carnegie Foundation for the Advancement of Teaching and the Council for Advancement and Support of Education named the four winners of the US Professors of the Year for 2000, one of whom works in physics. **Robert Garvey**, an associate professor of physics at the College of the Holy Cross in Worcester, Massachusetts, received the award in the outstanding baccalaureate college professor category in part because he "takes every opportunity to break the mold. Whether it's challenging first-year students at the [college] to think critically, teaching sixth-graders to monitor weather conditions from real-time computer information, or reforming undergraduate physics education, he's been a catalyst for change," according to the citation. The other three categories are outstanding community college professor, outstanding master's university and college professor, and outstanding research and doctoral university professor. Each of the four winners receives a $5000 cash prize.

Harold P. Smith Jr, who served in the Clinton administration as assistant to the Secretary of Defense for nuclear, chemical, and biological defense programs, has been named a Distinguished Visiting Scholar of the Richard & Rhoda Goldman School of Public Policy at the University of California, Berkeley. In this capacity, Smith will "focus on issues of defense and foreign policy, with an emphasis on the control and dismantlement of strategic arsenals," according to the citation.

The **Chandra X-Ray Observatory team** has won the Smithsonian Institution's National Air and Space Museum's Trophy for Current Achievement. In a November awards ceremony at the museum in Washington, DC,

Art Stephenson, director of NASA's Marshall Space Flight Center, accepted the award on behalf of the team, which was recognized for "its efforts in building, placing in orbit, and operating the most sophisticated x-ray astronomical observatory ever built," according to the citation.

In Brussels, Belgium, the European Commission last November awarded the first René Descartes Prize. The prize went to three international teams, two of which work in physics-related fields. The prize "recognizes successful cross-border teamwork and European networking, which is often a determining factor of outstanding quality of science in Europe, but not normally a selection criterion in scientific prizes," says Research Commissioner Philippe Busquin. One team, made up of researchers from the Netherlands, Denmark, United Kingdom, and Germany, and led by **Dago de Leeuw**, a scientist with Philips Research Laboratories in Eindhoven, the Netherlands, was recognized for "the synthesis and application of a new family of polymeric self-oriented transistors for electronic circuits," a kind of "new disposable electronics." This team's partners together received 300 000 euros (about $266 000). The other team, which comprised researchers from England and France, was led by **Ian Smith**, Mason Professor and professor of physical chemistry at the University of Birmingham in England. This group was acknowledged "for the development and use of new methods for studying chemical reaction kinetics at very low temperature," according to the citation. "This work is proving to be of great importance for the understanding of processes taking place in the giant clouds of gas and dust that are formed in our galaxy." The partners in this team received a combined cash award of 120 000 euros.

Wendell Weart retired in October after 26 years as project manager of the Waste Isolation Pilot Plant (WIPP) Project at Sandia National Laboratories in Albuquerque, New Mexico. His retirement caps more than 41 years of continuous service at Sandia. He will continue to work as a consultant, providing scientific and programmatic advice to Sandia's nuclear waste management center. He also will remain a member of an international expert group that offers advice to GSF, the German Nuclear Industry Consortium.

At its annual meeting in Warsaw, Poland, last July, the Committee on Space Research (COSPAR) of the International Council for Science handed out the COSPAR Space Science Award—the organization's top prize—to **Roger-Maurice Bonnet**, scientific program director at the European Space Agency in Paris, and **Donald M. Hunten**, Regents Professor of Planetary Sciences at the University of Arizona at Tucson. According to the citation, Bonnet was honored for "his distinguished career as a solar physicist. He was [principal investigator] for a high-resolution [ultraviolet] spectrometer . . . and made extensive studies of chromospheric UV line profiles, obtaining new information on the propagation of waves in the chromosphere." Hunten was recognized for "his long and illustrious career in pioneering studies of the Earth's upper atmosphere and for path-breaking investigations of the atmospheres and properties of the planets and major satellites in the solar system."

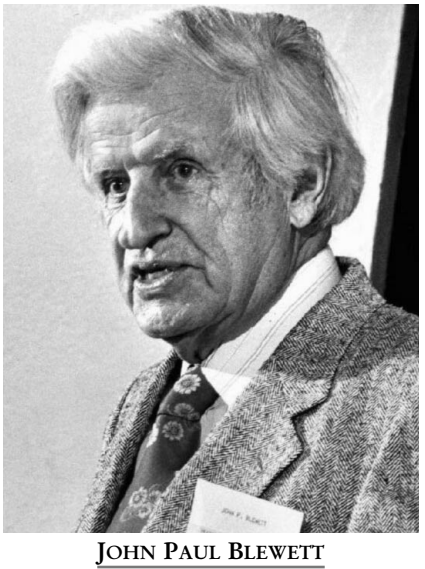
OBITUARIES

John Paul Blewett

John Paul Blewett, a key figure in the development of particle accelerators, died of acute pancreatitis in Chapel Hill, North Carolina, on 7 April 2000.

Blewett was born in Toronto on 12 April 1910. He earned his bachelor's (1932) and master's (1933) degrees in physics at the University of Toronto and his PhD in physics from Princeton University in 1936. After receiving his doctorate, he spent a year at the Cavendish Laboratory in Cambridge, England, working under Ernest Rutherford, Mark Oliphant, and others on range–energy relations for alpha particles, among other projects.

From 1937 to 1946, Blewett worked in the research laboratory of the General Electric Co in Schenectady, New York. During that period, Donald Kerst built a 20-MeV betatron at GE in 1941, and, in 1945, Ernest Charlton and William Westendorp built a record-breaking 100-MeV betatron at GE, achieving by far the highest particle energy in the world. About the same time, Blewett came across a paper by Russian physicists Dimitri Iwanenko and Isaak Ya. Pomeranchuk, in which they pointed out that high-energy electron beams circulating in a betatron would lose some energy by radiation. After performing some calculations, Blewett concluded that the radiation would indeed be significant and would make it difficult to build machines for higher energy. He predicted that the radiation would cause the orbit of the new betatron to shrink—and indeed it was found to shrink by precisely the amount Blewett had calculated. This was the first observation of what is now known as synchrotron radiation.



JOHN PAUL BLEWETT

Next, following a visit by Edwin McMillan from the Radiation Laboratory at the University of California, Berkeley, in 1945, Blewett and colleagues decided to use McMillan's new synchrotron idea to build what they hoped would be the first operating synchrotron—a 70-MeV machine—before McMillan himself could finish his 300-MeV synchrotron. Blewett and colleagues' synchrotron was finished by 1947; however, the honor of being the first to demonstrate the principle had gone to Frank Goward and D. E. Barnes in England, who had converted a small betatron to synchrotron operation. The new machine, unlike the 100-MeV betatron, had a transparent vacuum chamber, and the radiation turned out to be visible.

Blewett missed the first visual observation of the synchrotron in 1947 because he had left GE. He and Hildred Blewett, an accelerator