

Childs Is AVS President-Elect

This month, **Robert Childs**, vacuum engineer and technical supervisor of the Alcatraz vacuum laboratory in MIT's Plasma Science and Fusion Center, begins his term as president-elect of AVS: The Science & Technology Society. He succeeds **Dawn A. Bonnell** and will become president of the society in 2004.

"I am looking forward to continuing my 20-plus years of service to the AVS," said Childs, "and would like the society to continue its efforts to bring back the involvement of the equipment manufacturers to help shape the future of the AVS. They were the ones that helped start the society almost 50 years ago and need to be better represented in the successes we, as a very diverse society, are enjoying today."

Childs served in the US Air Force before joining MIT, where he has spent the past 33 years. Starting with work as an electronic technician in what is now known as the Draper Laboratory at MIT, he quickly transferred to the university's Center for Space Research, where he worked on an experiment that was carried out during the Apollo 17 mission to the Moon. When a new project started up at MIT's Francis Bitter Magnet Lab, he began his career in vacuum technology by working on the highly successful series of tokamak fusion reactors called Alcatraz. In 1981, he was promoted to technical supervisor of the Alcatraz vacuum lab.

In other AVS election results, **Joseph Greene** (University of Illinois at Urbana-Champaign) has retained his office as clerk and **John Coburn** (University of California, Berkeley) was reelected as treasurer. The three new members of the AVS board of directors are **Chris Palmström** (University of Minnesota, Twin Cities), **John Russell Jr.** (Naval Research Laboratory in Washington, DC), and **Jan-Eric Sundgren** (Chalmers University of Technology in Göteborg, Sweden). Elected as trustees of AVS are **Charles Duke** (Xerox Research and Technology in Webster, New York) and **Roger Stockbauer** (Louisiana State University at Baton Rouge).



Childs

In Brief

Last month, **Paul F. Goldsmith** stepped down as director of the National Astronomy and Ionosphere Center in Ithaca, New York. Goldsmith, who had served in that post for the past 10 years, plans to continue an affiliation with Cornell University, where he is the James Weeks Professor of Physical Science in the astronomy department.

In November, **Steve B. Howell** became a research professor in the Institute for Geophysics and Planetary Physics at the University of California, Riverside. He had headed the astrophysics group at the Planetary Science Institute in Tucson, Arizona.

The Canadian Chancellery of Honours has named **Bill Buyers** as one of the recipients of a Commemorative Medal for the Golden Jubilee of Her Majesty Queen Elizabeth II. Principal research officer with the National Research Council at Chalk River Laboratories, Buyers received the medal last month at a ceremony in Ottawa. The Commemorative Medal, created in 2002 to mark the 50th anniversary of the queen's accession to the throne, honors those who have made a significant contribution to Canada or have made an achievement abroad that brings credit to Canada.

At a gala dinner in November at the Canadian Museum of Civilization in Gatineau, Quebec, **Tito Scaiano** was awarded the 2002 Gerhard Herzberg Canada Gold Medal for Science and Engineering in recognition of his work on the interactions of light and molecules. The prize, the highest honor bestowed by the Natural Sciences and Engineering Research Council of Canada, guarantees that Scaiano will receive, over the next five years, Can\$250 000 (about \$160 000) to supplement his existing research funding of Can\$1 million (about \$640 000) from NSERC. A professor of chemistry at the University of Ottawa, Scaiano became, in 2000, the university's first Distinguished University Professor.

Henry McDonald joined the University of Tennessee at Chattanooga late last fall as a Distinguished Professor of Computational

Engineering and Chair of Excellence in Engineering. He previously served for more than six years as director of NASA's Ames Research Center at Moffett Field, California.

In November, **Thomas Galinski** was named head of space science at the German Aerospace Center (DLR) in Bonn. He previously headed satellite communications at DLR.

Humberto Campins joined the University of Central Florida in Orlando last summer as the Provost Research Professor of Physics and Astronomy. He plans to begin a planetary science group in the physics department. He was previously an adjunct faculty member in the Lunar and Planetary Laboratory at the University of Arizona, Tucson, and a program officer at Research Corp in Tucson.

At its fall meeting in Boston last month, the Materials Research Society presented the 2002 Von Hippel Award, its highest honor, to **Howard Birnbaum**. A director emeritus of the Frederick Seitz Materials Research Laboratory at the University of Illinois at Urbana-Champaign, Birnbaum was cited for his "seminal contributions to our understanding of intrinsic point defects, hydrogen in metals, and grain boundary segregation, especially as these effects relate to mechanical properties." His work, adds the citation, "has also stimulated, directed, and influenced interdisciplinary research throughout the materials community." The award includes a \$10 000 cash prize.

At the same meeting, the Materials Research Society handed out other awards, including the 2002 MRS Medal to **Uzi Landman** and **Charles M. Lieber**. Landman was recognized for his "molecular dynamics simulations elucidating the microscopic behavior of solid and liquid interfacial junctions and atomistic processes of tribology." Landman is director of Georgia Tech's Center for Computational Materials Science and is the Regents' and Institute Professor in the School of Physics. The society acknowledged Lieber for his "controlled synthesis of nanowire and nanotube materials." Lieber is the Mark Hyman Professor of Chemistry at Harvard University. The 2002

Turnbull Lecturer Award went to **Robert Wolfgang Cahn**, honorary distinguished research fellow in the department of materials science and metallurgy at the University of Cambridge, UK. He was honored for his “service to the materials science community through writing, editing, mentoring, and fostering of international understanding, as well as for outstanding contributions to the development of physical metallurgy through research on recovery and recrystallization, rapid solidification, and intermetallic compounds.”

Michael Woolfson, emeritus professor of physics at the University of York in the UK, received the sixth

Ewald Prize, which was presented during the International Union of Crystallography Congress held this past August in Geneva, Switzerland. He was honored for his “exceptional contributions in developing the conceptual and theoretical framework of direct methods along with the algorithm design and computer programs for automatic solutions that changed the face of structural science,” according to the award citation. He also was recognized for his “contributions to crystallographic education and international collaboration, which have strengthened the intellectual development of crystallographers worldwide.” The prize included a medal, a certificate, and \$30 000.

clear research had been banned in Germany following World War II, the university was eager to catch up with developments in fundamental physics. Jentschke was intrigued by the prospect of a new beginning in Germany, but he found the state of the physics institute was abominable. In two years of negotiating with Hamburg authorities, he alternatively displayed toughness and charm. Eventually, he was granted nearly 10 million Deutschmarks—an amount unprecedented in Germany—to create a modern nuclear research facility, so he accepted the offer.

Jentschke set out to convince his colleagues at German universities to combine efforts and build a frontier facility. Influential physicists such as Werner Heisenberg supported the idea, and Jentschke mustered support for a machine that was to become, with 7.5-GeV beam energy, the largest electron synchrotron at the time. A national laboratory, DESY, was founded in 1959 to host the project, and Jentschke became the laboratory's first director.

Designing and constructing a world-class research facility was no small endeavor; experience with accelerator techniques and experiments was largely absent in Germany. Jentschke hired young physicists fresh out of university and had them trained in various US labs. He persuaded a number of young German and Swiss researchers who were working in the US or at CERN to join him in Hamburg and recruited many of his physicist friends from the US to help him temporarily. In that way, strongly helped by his enthusiasm and charm, he got the laboratory moving. He created a friendly and open atmosphere that was both encouraging and challenging to young physicists, and made the laboratory attractive for international collaborations, which he highly valued. To further broaden the scientific scope, Jentschke founded a synchrotron radiation research facility in which solid-state physicists and biologists soon became active participants in research at DESY.

Before the accelerator was completed in 1964, Jentschke opened discussion, both with the physicists in the DESY lab and with friends and colleagues worldwide, about the laboratory's future. Many opted for a larger electron synchrotron. In Europe, protons were traditionally the domain of CERN and other national laboratories, whereas storage rings were considered a niche activity with questionable physics prospects. But Jentschke, after wide international

Obituaries

Willibald Jentschke

Willibald Jentschke, founder and the first director of the German Electron Synchrotron (DESY) laboratory and a former director general of CERN, died peacefully on 11 March 2002 in Göttingen, Germany.

Born in Vienna, Austria, on 6 December 1911, Jentschke completed his studies in mathematics and physics at Vienna University in 1935. His PhD thesis, under the guidance of Georg Stetter, was on the ionization curve of α particles. Through this work, he entered the emerging field of nuclear physics.

A fellowship and, later, the position of *hochschul assistant* (university assistant) enabled Jentschke to continue nuclear research at Vienna University until the end of World War II. He conducted scattering experiments of α and γ particles on nuclei, discovered short-range fragments from heavy nuclei, and made an early determination of the neutron mass. When uranium fission was discovered in 1938, he turned to this exciting topic and subsequently published a series of papers on fission, notably about the range and masses of fission fragments.

At the end of the war, the institute was moved to Zell am See, Austria—Vienna was occupied by the Soviets—but the opportunities for research were very limited. So, in 1947, Jentschke accepted an offer to join the US Air Force's Biophysics Laboratory at Wright Field, Ohio, where he worked on infrared spectroscopy. But he was eager to return to a university and, in 1948, took a position as an assistant professor in the electrical engineering department at the Univer-



Willibald Jentschke

sity of Illinois at Urbana-Champaign, where he worked a few years on semiconductors before returning to his original field of nuclear physics.

In 1950, he was entrusted, by the Illinois physics department, with the directorship of the cyclotron division. There, he closely studied accelerator and beam techniques in addition to doing research on nuclear reactions and capitalizing on his knowledge of solid-state physics to pioneer novel methods in nuclear counter technology. In pioneering work, he discovered the ultrafast scintillation signal in thallium-doped alkali halogenides, a discovery that has found many applications.

Jentschke was a full professor at Illinois when, to his great surprise, he received an offer in 1955 to become a professor of physics and to direct the physics institute at the University of Hamburg in Germany. Because nu-