

WE HEAR THAT

Franklin Institute Presents Awards

In a ceremony last month, the Franklin Institute continued its 175-year tradition of recognizing achievement in science and technology by honoring the 1999 winners of the Bower Awards and Benjamin Franklin Medals. Of the ten laureates, the following five were cited for their work in physics:

Ralph J. Cicerone, chancellor of the University of California, Irvine,



CICERONE

received the Bower Award and Prize for Scientific Achievement. He was recognized, in the words of the citation, "for his fundamental contributions to our understanding of greenhouse

gases and the depletion of the ozone layer." He was also praised for his leadership in advancing public policy to protect the global environment. The prize carries a \$250 000 cash award.

Benjamin Franklin Medals in Physics were awarded to **John C. Mather** and **Akira Tonomura**. Mather was recognized "for his scientific vision, proposal, and management of the Cosmic Background Explorer experiments and its far infra-red astronomical spectrometer. His work helped to confirm the black-body radiation spectrum remnant from the Big Bang." He is a Goddard fellow at NASA's Goddard Space Flight Center. Tonomura, senior chief research scientist at Hitachi Ltd in Hatoyama, Japan, was honored "for developing practical applications for both the high-brightness field-emission electron beam and the high-resolution electron holography interface microscope." In particular, he was recognized for leading the team that first observed magnetic vortices and their motion in superconductors.

Richard W. Shorthill and the late **Victor Vali**, researchers in the mechanical engineering department at the University of Utah, were presented with the Benjamin Franklin Medal in Engineering for the first experimental demonstration of the fiber-optic gyroscope. Their invention, noted the award announcement, "brought airplane and ship navigation into the modern era."

ASA Presents Awards at Meeting in Berlin

At a joint meeting with the European Acoustics Association held in Berlin in March, the Acoustical Society of America recognized five individuals for their contributions both to acoustics and to ASA.

Henning E. von Gierke, a professor emeritus in the human effectiveness directorate at the Air Force Research Laboratory at Wright-Patterson Air Force Base in Ohio, was given the society's Gold Medal for "contributions to bioacoustics, psychoacoustics, vibrations, and for leadership in national and international acoustical standards."

Jens P. Blauert received the Helmholtz-Rayleigh Interdisciplinary Silver Medal. Blauert, head of the Institute of Communication Acoustics at the Ruhr University of Bochum in Germany, was cited for his "contributions to sound localization, concert hall acoustics, signal processing, and acoustics standards."

An honorary fellowship in ASA, given to an individual who has attained eminence in or has rendered outstanding service to acoustics, was bestowed on **Leonid M. Brekhovskikh** for his "pioneering contributions to wave propagation and scattering." Brekhovskikh is head of the department of ocean acoustics at the Shirshov Institute of Oceanology in Moscow.

Paul E. Barbone, an assistant professor of aerospace and mechanical engineering at Boston University, garnered the R. Bruce Lindsay Award for "developing novel theoretical and computational acoustics techniques." The Lindsay Award is given to an ASA member under the age of 35 who has made substantial contributions to the field.

A Distinguished Service Citation was given to **Elaine Moran**, a division manager at ASA, for her "sustained and

dedicated service to the Acoustical Society, its officers and members, over many years."

IN BRIEF

David McQueeney has been appointed director of IBM's Zurich Research Laboratory in Rüschlikon, Switzerland. He succeeds **Karl Kümerle**, who is retiring after more than 25 years of service at IBM.

At the 40th annual Experimental NMR Conference, held earlier this year in Orlando, Florida, the first annual Günther Laukin Prize was awarded to **Konstantin Pervushin**, **Roland Riek**, **Gerhard Wider**, and **Kurt Wüthrich**, of the Institute of Molecular Biology and Biophysics at the Swiss Federal Institute of Technology in Zürich, for their transverse relaxation-optimized spectroscopy (TROSY) technique. According to the prize citation, their technique "has dramatically extended the range of molecular masses of the biomolecular structures which can be analyzed by multidimensional NMR spectroscopy."

Fusion Power Associates presented its 1999 Leadership Awards to **B. Grant Logan** of Lawrence Livermore National Laboratory and **Dale M. Meade** of the Princeton Plasma Physics Laboratory. Logan's citation states, "Your innovative contributions to both magnetic and inertial fusion energy programs, as well as to fusion power and fusion applications in general, have provided researchers a rich array of options to explore." Meade's award states, "Your early leadership of the TFTR [Tokamak Fusion Test Reactor] program and continuing contributions to the field of energy-producing plasmas and fusion applications have challenged the community to move forward expeditiously toward practical fusion power."

OBITUARIES

Ronald Geballe

Ronald Geballe, a well-known atomic physicist, died suddenly of a heart attack on 28 October 1998 in Seattle. The compass of his life included internationally recognized scientific research and leadership, long and wise academic administration, teaching at all levels, and his love of principle, as exemplified by his struggle against state-imposed loyalty oaths.

Born on 7 February 1918 in Redding, California, Ron grew up in San

Francisco and received his undergraduate and graduate education at the University of California, Berkeley. He earned a BS in 1938, an MA in 1949, and a PhD in physics in 1943 under the supervision of Leonard Loeb.

Then, the US being involved in World War II, Ron went to work at the US Navy-sponsored Applied Physics Laboratory at the University of Washington. In 1946, he joined the university's physics faculty. From 1957 on, he served as department chairman for 16 years, associate and acting dean of the



RONALD GEBALLE

College of Arts and Sciences for 3 years, and vice-provost for research and dean of the graduate school for 5 years.

This listing, however, does not do justice to the range of contributions Ron made to the university throughout his 55 years there. For instance, his broad interests in education led him in the 1960s to chair a university committee that overhauled the general education requirements. After his formal retirement in 1985, Ron continued for the rest of his life to teach physics in a special program for very capable students that enabled them to enter the university at an unusually early age.

In all, Ron trained about 20 PhD students in the general field of electrical discharges in gases and atomic collisions. His early work (1944–64) on detailed measurements of electrical breakdown and on the transport properties of ions in the discharge broadened into atomic and molecular collision processes. He was a pioneer in investigating the formation of excited atoms in ion–neutral collisions and also the production of autodetaching states of negative ions in collisions with atoms and molecules. He was among the early workers (1965–74) to explore quantitatively electron-impact ionization of excited atoms. He also worked on charge transfer and photodetachment of negative ions.

In the late 1960s, he became deeply involved in national efforts to revise physics education at the high school and freshman college levels. He founded the Pacific Northwest Association for College Physics, an organization that included about 100 regional educational institutions. He was elected and served as the organization's first president. As chairman of Washington's physics department, he was the father of the physics education group and convinced the department

of the importance of doing research on the teaching and learning of physics. At the same time, as chairman, he oversaw the postwar growth and development of the department as a first-rate research unit.

Ron was a prominent figure in the national physics world. He served on the Executive Board of the American Association of Physics Teachers and became its president in 1969. He received AAPT's Distinguished Service Citation in 1973. He was chairman of the APS division of electron and atomic physics (now DAMOP) in 1968–69, was a divisional councillor in 1970–74, and served on numerous APS committees and task forces; he was chairman of the committee on education from 1973 to 1975.

Ron also served on the executive committee and governing board of the American Institute of Physics (1967–71), was chairman of AIP's education committee (1969–71) and chairman of its public policy committee (1983–85). He also served on the US national committee of the International Union of Pure and Applied Physics (1974–76). He was associate editor of the Atomic Data and Nuclear Data Tables in 1969–82, served as chairman of the National Science Foundation's Physics Advisory Committee in 1972–73, and on numerous other committees during his career.

This recounting of Ron's service and accomplishments should not hide his human characteristics. He was a charismatic, warm, and friendly person to all. He was a devoted tennis player and an aficionado of classical music, particularly chamber music. He was deeply concerned about civil liberties and was a member of a University of Washington faculty group that successfully challenged a state-imposed loyalty oath in the post-McCarthy era. The favorable judgment on this suit, which went all the way to the US Supreme Court, removed the imposition of such oaths in other states.

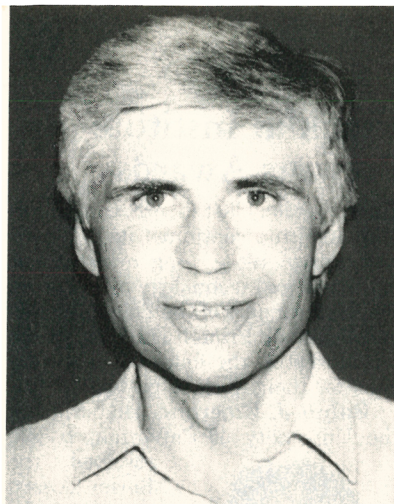
All of us, but especially those at the University of Washington, have suffered a deep loss in the departure of this humanitarian physicist. We mourn his passing.

**KENNETH CLARK
ERNEST HENLEY**

*University of Washington
Seattle, Washington*

GORDON DUNN

University of Colorado at Boulder



OTTO FRIEDRICH HÄUSSER

Vancouver after a long battle with myeloma.

Born in Schwabach, Germany, on 9 December 1937, Häusser attended the University of Erlangen, where he earned a diploma in 1962 and his PhD in physics in 1964, based on experiments he conducted at the University of Heidelberg.

After spending 1964–66 in England as a postdoc at the University of Oxford, Häusser joined the research staff of the Chalk River Nuclear Laboratories, where he remained until 1983. At Chalk River, Häusser seized the opportunity to exploit the labs' new Emperor tandem to investigate magnetic moments and other moments of heavy nuclei. The series of brilliant papers that emerged—which he wrote with David Ward, Ian Towner, Tom Alexander, and others—clarified the limits of the nuclear shell model.

In 1984, Häusser moved to Vancouver to join Simon Fraser University's physics faculty and to work at TRIUMF, where his interests changed to take advantage of the medium-energy proton and neutron beams that were just becoming available. He understood that polarization observables were crucial to understanding nucleon–nucleus interactions in terms of nucleon response functions. With his usual vigor, he developed a focal plane polarimeter for the TRIUMF Medium Resolution Spectrometer, and, by exploiting and extending the latest laser technology, he developed a polarized helium-3 target. Equipped with these innovations and the high-quality proton and neutron beams of TRIUMF, he and his colleagues explored medium-energy charge exchange reactions. Unfortunately, although this work had a substantial impact on the understanding of nuclear spin and isospin response, it did not reveal the hoped-for smoking

Otto Friedrich Häusser

Otto Friedrich Häusser, an outstanding leader in Canadian nuclear physics, died on 5 March 1998 in