departments of materials science and engineering, chemistry and bioengineering at the University of Illinois at Urbana-Champaign and a faculty member at the university's Beckman Institute of Advanced Science and Technology

Richard A. Webb, the Alford Ward Chaired Professor of Semiconductor Physics and a distinguished university professor at the University of Maryland, College Park

Rainer Weiss, a professor of physics at MIT

**Carl Wieman**, a fellow of the Joint Institute for Laboratory Astrophysics and a professor of physics at the University of Colorado at Boulder

Miguel Virasoro, director of the Abdus Salam International Centre for Theoretical Physics in Trieste, Italy

**Jacob Ziv**, a distinguished professor of electrical engineering at the Technion—Israel Institute of Technology

## IN BRIEF

Venkatesh Narayanamurti has become the dean of the Division of Engineering and Applied Sciences and Gordon McKay Professor of Engineering and Applied Sciences at Harvard University. Since 1992, Narayanamurti had been dean of the college of engineering and the Richard A. Auhll Professor at the University of California. Santa Barbara. At Harvard, he succeeds Paul C. Martin, the John H. Van Vleck Professor of Pure and Applied Physics, who had headed the engineering division since 1977. Martin will remain at Harvard, pursuing teaching and research.

The 1998 Heinz R. Pagels Human Rights of Scientists Award, given by the New York Academy of Sciences, was presented last month to Boris Altschuler and Morris Pripstein. Altschuler is the director of the human rights program at the Moscow Human Rights Research Center and a physicist at the P. N. Lebedev Physics Institute in Moscow. He was cited for "his long history of leadership and moral and physical courage in the defense of human rights of scientists and otherspreviously in the former Soviet Union and now in the new Russia." Pripstein, a senior physicist at Lawrence Berkeley National Laboratory, was honored for his work as chairman of SOS- Scientists for Sakharov, Orlov and Sharansky-which was founded in According to the academy, "through moral suasion and well-timed publicity, he kept the issue before the world and contributed substantially to the ultimate release of all three."

Next month, Robert L. Byer, a professor of applied physics at Stanford University, will receive the 1998 Arthur L. Schawlow Award at the Laser Institute of America's International Congress on Applications of Lasers and Electro-Optics, to be held in Orlando, Florida. At the meeting, Byer also will be inducted as a fellow of LIA, along with Henry E. Gauthier, chairman of the board and director of Coherent Inc of Santa Clara, California.

The 1998 Körber Prize for European Science, which honors remarkable achievements in technology, science and medicine, was presented in September to researchers from France and Germany for successfully applying a technique for magnetic resonance imaging of the human lungs by use of polarized helium-3; their work built on

demonstrations by Princeton University's William Happer and colleagues (see the news story in PHYSICS TODAY June 1995, page 17). The recipients are Ernst Otten of the physics department and Manfred Thelen of the Hospital for Radiology, both at the University of Mainz, Germany; Werner Heil, of the Institut Laue-Langevin in Grenoble, France; and Michèle Leduc of Ecole Normale Supérieur in Paris.

Philip Lacovara has been named vice president of the optical engineering services department of the Breault Research Organization in Tucson, Arizona, succeeding Robert Pagano, who will remain with the department. Previously, Lacovara was the director of program development at the Electro-Optics Development Center of Kaman Aerospace Corp. also in Tucson.

## **OBITUARIES**

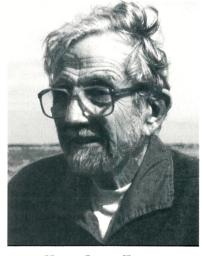
## Henry Cutler Torrey

Henry Cutler Torrey, one of the first to study and apply nuclear magnetic resonance (NMR), died on 5 May 1998 in Bridgewater, New Jersey. He had retired in 1976 from Rutgers University, where he had been a physics professor for 30 years.

Born on 4 April 1911 in Yonkers, New York, Henry earned a BSc in 1932 from the University of Vermont and then entered the physics graduate program at Columbia University. His thesis project, under I. I. Rabi, was to add a third magnet between the deflecting and refocusing magnets of atomic beams. In this scheme—a precursor of the resonance method-atoms traversing the new center magnet experienced nonadiabatic transitions between states that revealed the sign of the atoms' nuclear magnetic moments. Using his apparatus, Henry determined the magnetic moment of potassium-39 to be positive—in conflict with results just published by respected hyperfine spectroscopists. After he put in two more years of effort, his method and result were fully vindicated.

After receiving his PhD from Columbia in 1937, he joined the faculty at Pennsylvania State College, where he indulged his fascination with Rabi's new resonance technique by working out related theoretical problems. Henry proved, for example, that transitions induced between any two levels by a sinusoidal perturbation follow the equation developed by Rabi for the simple case of spin-1/2.

In May 1942, Henry was called to



HENRY CUTLER TORREY

contribute to the war effort at the MIT Radiation Laboratory, where Rabi and several of his other collaborators were already working. At the Rad Lab, he took over the development of semiconductor crystal rectifiers, which were critical to the performance of microwave radar receivers. He supervised not only his own group's research, but also that of outside subcontractors who were also studying semiconductors and rectifiers.

After VJ Day, he stayed on at MIT to write, with his colleague Charles Whitmer, Crystal Rectifiers, the 15th volume of the Radiation Laboratory Series, which records the progress in crystal rectifiers and semiconductor research.

During that book writing period, Henry was asked by Edward Purcell