

WE HEAR THAT

Dealy to Receive SOR's Bingham Medal

At its annual meeting this month in Monterey, California, the Society of Rheology will present the 1998 Bingham Medal to **John Dealy**, dean of engineering and a professor of chemical engineering at McGill University. The medal goes to Dealy for



JOHN DEALY

his many contributions to the science of rheology, including "the invention of new experimental techniques by building innovative equipment to advance knowledge in the science, his clear and instructive papers and his two excellent books on rheology."

The society will also present the 1998 *Journal of Rheology* Publication Award to **Michael MacDonald**, a research staff member at IBM's Thomas J. Watson Research Center in Yorktown Heights, New York, and to **Susan Muller**, an associate professor of chemical engineering at the University of California, Berkeley. They are being cited for their paper, "Experimental Study of Shear-Induced Migration of Polymers in Dilute Solutions."

AAPT Presents Five Awards at Summer Meeting

The American Association of Physics Teachers presented the following

awards at its summer meeting, held in Lincoln, Nebraska, in August.

The Robert A. Millikan Award, which recognizes notable and creative contributions to physics teaching, went to **Edward Redish**, a professor of physics at the University of Maryland, College Park.

The Melba Newell Phillips Award, which honors AAPT members who display creative leadership, dedicated service and exceptional contributions, was given to **John Layman**, a professor emeritus of physics and science education at the University of Maryland, College Park.

At the meeting, the Klopsteg Memorial Lecture was delivered by **Sidney Nagel**, the Louis Block Professor in the Physical Sciences at the University of Chicago. The subject of his talk was "Physics at the Breakfast Table—or Waking Up to Physics".

The Excellence in Pre-College Physics Teaching Award went to **Robert Morse**, chairman of the science department at St. Albans School in Washington, DC.

John Jewett, a professor of physics at California State Polytechnic University in Pomona accepted the Excellence in Undergraduate Physics Teaching Award.

OSA Awards Land Medal

Paul Forman, **Carl Zanon** and **Sol Laufer**, cofounders of Zygo Corp in Middletown, Connecticut, are the recipients of the 1998 Edwin H. Land Medal, a joint award of the Optical Society of America and the Society for Imaging Science and Technology. The award announcement notes that the three of them, "working in collaboration to apply their technical expertise, insight and managerial skills, have made an invaluable contribution to the technical optics community."

American Academy Elects New Fellows

The list of 147 new fellows and 22 foreign honorary members elected to the American Academy of Arts and Sciences in May includes individuals from the physics community. They are

Eric G. Adelberger, a professor of physics at the University of Washington

Roy Adler, a research staff member at IBM's T. J. Watson Research Center

William A. Bardeen, a member of the theoretical physics staff at Fermilab

Louis E. Brus, a professor in both the chemistry and chemical engineering departments at Columbia University

Federico Capasso, the head of the quantum phenomena and device research department at Bell Laboratories, Lucent Technologies, in Murray Hill, New Jersey

Albert Castleman Jr., a professor of chemistry at Pennsylvania State University

F. Fleming Crim, the John E. Willard Professor of Chemistry at the University of Wisconsin—Madison

Robert F. Curl, a professor of physical chemistry at Rice University

Frances Dahlen, a professor of geosciences at Princeton University

Robert W. Field, a professor of chemistry at MIT

William Fulton, a professor of mathematics at the University of Chicago

John M. Hayes, a senior scientist at the Woods Hole Oceanographic Institution

Darleane Hoffman, director of the Glenn T. Seaborg Institute for Transactinium Science at Lawrence Berkeley National Laboratory

Margaret Gallard Kivelson, a professor of space physics at UCLA

The late **Robert Laudise**, adjunct chemical director at Bell Laboratories, Lucent Technologies (he died on 20 August 1998)

John C. Mather, a senior astrophysicist at NASA's Goddard Space Flight Center

Robert Nerem, a professor of mechanical engineering at Georgia Institute of Technology

Neil D. Opdyke, a professor of geology at the University of Florida

Helen R. Quinn, a senior staff scientist at the Stanford Linear Accelerator Center

Pierre Ramond, a professor of physics at the University of Florida

John Schiffer, the associate director of the physics division at Argonne National Laboratory

Edward I. Solomon, the Monroe E. Spaight Professor of Chemistry at Stanford University

Samuel Stupp, a professor in the

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. Ahl 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 others—previously 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 1978. 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 Supérieure 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

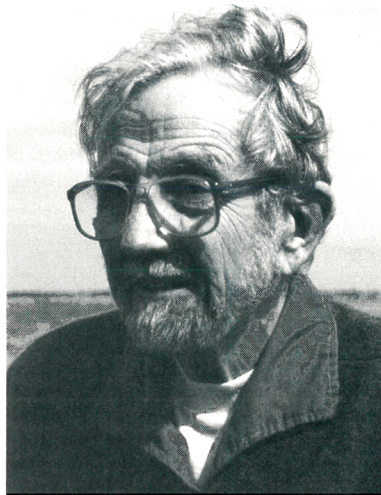
Henry Cutler Torrey

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