

# Random Walk

**Already aluminized, several segments of the W. M. Keck Telescope's 10-meter mirror await installation at the Mauna Kea, Hawaii, site. With 9 of its 36 mirror segments installed (making it as large as Palomar's 200-inch Hale Telescope), the Keck instrument will see first light this month. The telescope is a joint project of Caltech and the University of California.**



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## Honors and Awards

Allan Acosta has been named the second Richard L. and Dorothy M. Hayman Professor of Mechanical Engineering.

Professor of Chemistry Jacqueline Barton has been given the 1990 Medal of Distinction by Barnard College, her alma mater.

Harry Gray, Beckman Professor of Chemistry and director of the Beckman Institute, has been named the 1991 winner of the American Chemical Society's Priestley Medal, the nation's highest honor in chemistry.

George Housner, Braun Professor of Engineering, Emeritus, has been elected to honorary membership in the American Society of Civil Engineers.

Associate Professor of Astronomy Shrinivas Kulkarni has been awarded a 1990 Packard Fellowship in Science and Engineering by the David and Lucile Packard Foundation, one of 20 young scientists nationwide to be so honored. The fellowship provides funding of \$100,000 per year for five years for research expenses.

Nathan Lewis, associate professor of chemistry, will receive the 1991 American Chemical Society Award in Pure

Chemistry next April at the ACS annual meeting.

Hans Liepmann, Von Kármán Professor of Aeronautics, Emeritus, has received this year's Lord Foundation Award for Systems and Functional Analysis.

Bruce Murray, professor of planetary science and director of Caltech's Jet Propulsion Laboratory from 1976 to 1982, has won two awards for his book, *Journey into Space: The First Thirty Years of Space Exploration*—the American Institute of Physics Science-Writing Award in Physics and Astronomy and the Eugene M. Emme Astronautical Literature Award, presented by the American Astronautical Society. The chapter describing Voyager's birth was excerpted in the Summer 1989 *E&S*.

Institute Professor of Chemistry, Emeritus, John Roberts has been awarded the National Medal of Science in recognition of contributions made in a long and outstanding scientific career. The award was presented in a White House ceremony November 12.

Barry Simon, IBM Professor of Mathematics and Theoretical Physics, has been elected a foreign corresponding member of the Austrian Academy of Sciences.

Roger Sperry, Nobel laureate and Board of Trustees Professor of Psychobiology, Emeritus, has been honored by

his alma mater, Oberlin College, which dedicated a new neuroscience research center to him—the Sperry Wing of the Kettering Hall of Science.

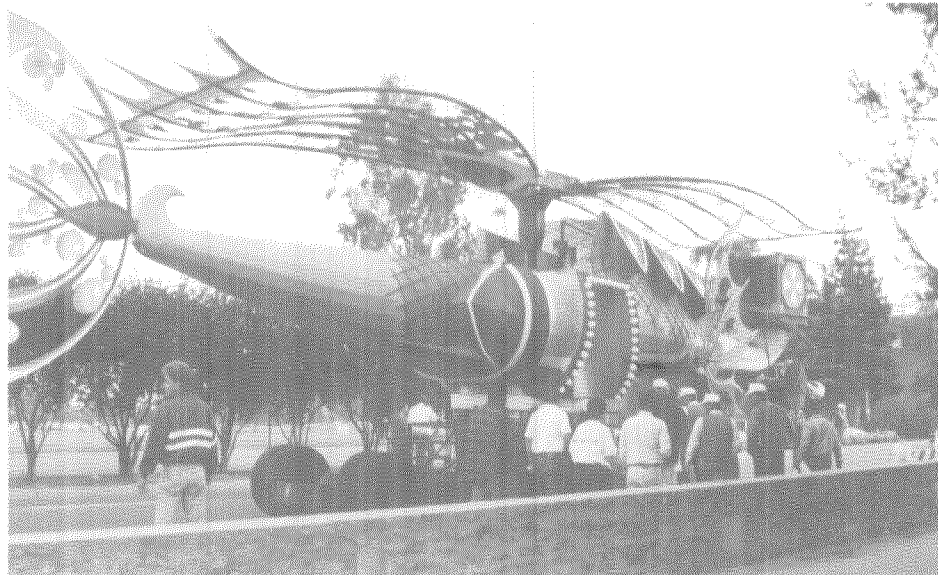
In other Voyager news, Project Scientist Edward Stone, professor of physics and JPL director-designate, has received the Association for Unmanned Vehicle Systems Operations Award for 1990 and *Discover* magazine's 1990 Discover Award for Technological Innovation in Aviation/Aerospace.

Professor of Literature John Sutherland has been elected a Fellow of the Royal Society of Literature of the United Kingdom. The honor is conferred upon writers who have published books of a high literary standard. (Note book review on page 36.)

The Indian National Science Academy has elected Professor of Geology Peter Wyllie a Foreign Fellow.

The Associated Students of Caltech (ASCIT) 1990 awards for teaching excellence went to Joel Burdick, assistant professor of mechanical engineering; Peter Fay, professor of history; John Feiler, graduate student in physics; Valentina Lindholm, lecturer in Russian; Robert McEliece, professor of electrical engineering; Jane Raymond, member of the professional staff in chemistry; Robert Ripperdan, PhD '90 in geology; and Kerry Vahala, associate professor of applied physics.

# Random Walk continued



Caltech will kick off its Centennial celebration with a float in the Tournament of Roses parade on New Year's Day 1991. Entitled "For Every Action . . . A Reaction," the Time Traveler float features a complicated chain reaction that ends by dropping an apple on Isaac Newton's head. It's the first time that a Rube Goldberg device of this magnitude has ever been attempted in a Rose Parade float. Accompanied by a contingent of beavers, the float will appear sixth (the third float) in the line of march. The float is shown here on its first trial run, sans beavers, animation, and flowers.

## Research Directors Conference

The Office for Industrial Associates is sponsoring its annual Research Directors Conference January 29–30, 1991 under the theme "Caltech: The Next 100 Years." A number of faculty members will discuss their research, and the keynote address will be given by Paul MacCready (MS '48, PhD '52), president of AeroVironment, Inc., and creator of the muscle-powered *Gossamer Condor*, the solar-powered *Sunraycer*, and other imaginative alternative vehicles. The registration fee of \$450 is waived for Industrial Associates companies, the Caltech-JPL community, Caltech alumni, and faculty and staff of other universities. For more information call (818) 356-6599.

## Sayonara, Japan; Hello, Caltech

Introductory Japanese was offered at Caltech for the first time this fall, attracting more than 80 prospective students. Two classes were formed, but many students will have to wait until next quarter.

The classes are being taught by Kayoko Hirata, lecturer in Japanese and an expert in computer-assisted language instruction. A native of Japan, Hirata earned her master's at the University of Oregon and her PhD at the University of Arizona, and taught Japanese at both places. She will be using a word-processing program from Japan to produce lessons on her Macintosh.

"The curriculum will be very intensive," says Hirata. "The classes meet five hours a week. Japanese is so different from English that it takes this much effort to become proficient."

The classes are being funded by The Japan Foundation in a three-year pilot program that will also include intermediate and technical Japanese as student fluency rises. Caltech will continue funding the program if student interest remains strong. The Japan Foundation was established by Japan's Ministry of Foreign Affairs in 1972 to promote cultural exchange.

## Watson Lectures

The Earnest C. Watson Lecture Series for this fall includes: *November 14: A New Era of Superconductivity—Nai-Chang Yeh*, assistant professor of physics; *November 28: Destructive Earthquakes in California: October 17, 1989 and Beyond—George Housner*, Braun Professor of Engineering, Emeritus; and *December 5: Exploring the Structure of Proteins—Douglas Rees*, professor of chemistry. All lectures are at 8:00 pm in the Beckman Auditorium. Admission is free.