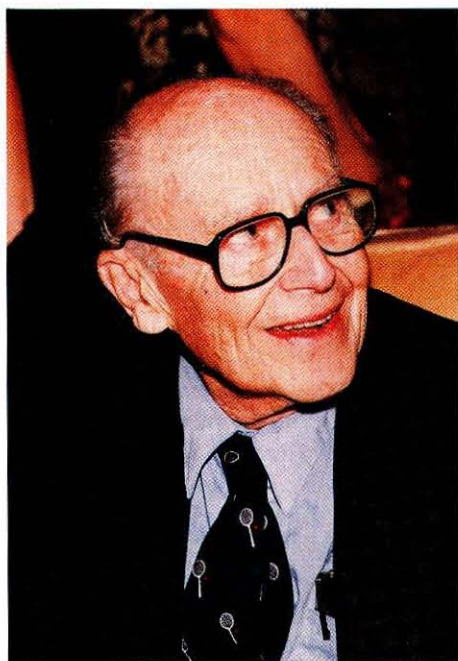


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## *Norman Davidson Wins National Medal of Science*



Norman Davidson, the Norman Chandler Professor of Chemical Biology, Emeritus, is among eight winners of the 1996 National Medal of Science. He will receive the award from President Bill Clinton at a White House ceremony later this summer. Davidson is the 20th member of the Caltech faculty to be honored with this award.

In his research, Davidson created innovative methods to bridge the gap between the physical and biological sciences. He pioneered new methods in physical chemistry, specifically for the study of fast reactions behind shock waves and by flash photolysis. Later, he developed new techniques, including

electron microscopy, for genetic mapping and for exploring the informational properties of DNA and RNA. In his current research, Davidson is working on creating methods for studying electrical signaling in the nervous system and the ways in which it changes during learning and the formation of memories.

Davidson received his PhD from the University of Chicago in 1941. He came to Caltech in 1946 as an instructor in chemistry, became a full professor in 1957, and was appointed the Chandler Professor in 1982.

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## *Honors and Awards*

Yaser Abu-Mostafa, professor of electrical engineering and computer science, has been awarded the 1995–1996 Feynman Prize for Excellence in Teaching. The honor, presented annually to a Caltech professor who has demonstrated “unusual ability, creativity, and innovation in teaching,” consists of a \$3,000 prize, matched by an equivalent increase in the awardee’s salary.

Michael Alvarez, associate professor of political science, has been chosen by the Midwest Political Science Association to receive the Sprague Award for his paper with John Brehm entitled “Are Americans Ambivalent About Affirmative Action?” The paper was considered to

be the best delivered at the 1995 meeting to apply quantitative methods to a substantive problem in political science.

Michael Aschbacher, professor of mathematics, was elected vice president of the American Mathematical Society for the 1996–98 term.

Jacqueline Barton, professor of chemistry, has been awarded the Paul Karrer Gold Medal by the University of Zurich, and delivered the Paul Karrer Memorial Lecture there in June.

Mory Gharib, professor of aeronautics, has been elected a Fellow of the American Society of Mechanical Engineering.

Harry Gray, the Beckman Professor of Chemistry and director of the Beckman Institute, has been awarded the Sierra Nevada Distinguished Chemist Award of the American Chemical Society.

Michael Hoffmann, the Irvine Professor of Environmental Science, has been honored as a Distinguished Lecturer in Environmental Chemistry by the São Paulo State Foundation of the University of São Paulo in Brazil, and by the Hebrew University in Jerusalem.

Jeffrey Hubbell, professor of chemistry and chemical engineering, received the Clemson Award of the Society for Biomaterials at the 5th World Biomaterials Congress in Toronto.

Jonathan Katz, assistant professor of political science, has been awarded a 1996 Haynes Foundation Faculty Fellowship to pursue his research project entitled, “Why Did the Incumbency Advantage Grow in U.S. Congressional Elections?”

Daniel Kevles, the Koepfli Professor of the Humanities, Senior Trustee Ralph Landau, and Nelson Leonard, faculty associate in chemistry, have been elected to the American Philosophical Society, founded by Benjamin Franklin in 1743. America’s oldest learned society recognized the three both for significant contributions within their own fields and for a broader range of interests.

Richard McKelvey, professor of political science, has been awarded the Rochester Distinguished Scholar Medal from the University of Rochester.

Thomas Palfrey, professor of economics and political science, has been selected a Fellow of the Econometric Society.

# Random Walk continued

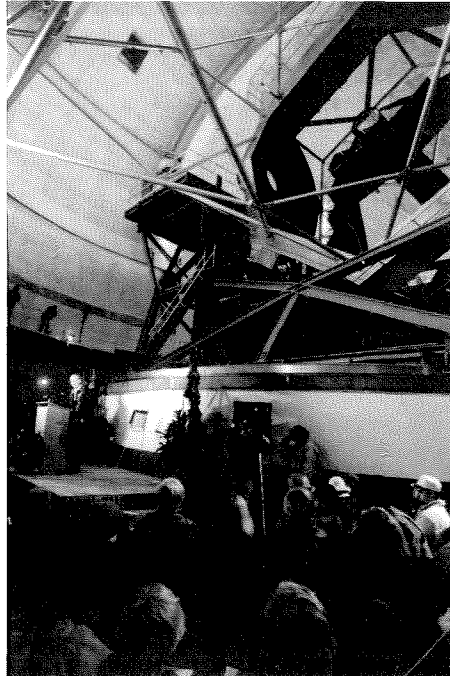
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## *Everhart to Step Down as Caltech President*

Caltech President Thomas E. Everhart has announced his intention to step down from the Institute presidency on or shortly after September 1, 1997. In his letter to Caltech faculty, students, and staff, he noted: "I will have served a decade as president by that time, and I have always thought that institutions, like people, need renewal: new ideas, new vigor, possibly new directions. In that sense, it is time for a change." Everhart said that he was notifying the Caltech community of his plans now to ensure time for a smooth transition and to avoid any ambiguity about the timing of presidential succession.

"I am proud of this institution and all that has been achieved during my time here, both on campus and at JPL," Everhart said in his letter. "Although Caltech, like all research universities, may face uncertain times in the days ahead, we have the traditions, the people, and the facilities to face them with optimism."

In his 10 years in office Everhart has overseen the construction of Beckman Institute, the Keck Observatory in Hawaii, Braun Athletic Center, Moore Laboratory of Engineering, Avery House (which will open this fall), and the Fairchild Library; and the successful completion of the Campaign for Caltech, which raised close to \$400 million. Caltech's Board of Trustees will initiate the search process for a new president in the near future.



**Ed Stone welcomes guests to Keck II's vast dome, where the dedication ceremony was held.**

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## *Keck II Twin Telescope Dedicated in Hawaii*

The second 10-meter Keck Telescope was dedicated May 8 on Mauna Kea in Hawaii. The site of the W. M. Keck Observatory is "as close to space as you can put a telescope without going into orbit," said Edward Stone, Caltech vice president, director of JPL, and chair of CARA (the California Association for Research in Astronomy) as he welcomed the approximately 200 guests, who had ascended the 13,600-foot mountain. It's also surrounded by a thousand miles of ocean, Stone explained, has no mountains or city lights to disturb the atmosphere, and is cloudless for 300 days a year—perhaps the most perfect place on Earth from which to explore the heavens.

A Hawaiian *kahuna* opened the occasion with a chanted blessing. In addition to Stone, who acted as master of ceremonies, brief remarks were offered by the presidents of the three universities involved in the project—Tom Everhart of Caltech, Richard Atkinson of the University of California (joint partner in CARA), and Kenneth Mortimer of the University of Hawaii (which donated the site)—as well as NASA

Chief Scientist France Cordova (PhD '79) and Robert Day, president of the W. M. Keck Foundation.

Howard Keck, the foundation's board chairman, was unable to attend because of illness, but did watch the ceremony via satellite broadcast to his home and was able to witness the naming of an asteroid in his honor. Keck got the telescope project off the ground with a \$70 million pledge to Caltech in 1984, and in 1991 the Keck Foundation made another pledge of up to \$75 million to fund the second instrument. NASA has contributed additional funds, partially for developing optical interferometry technology that will ultimately yoke the two telescopes electronically. Combining their light into one signal will produce the resolution of a single mirror 85 meters in diameter, the distance between the two instruments.

Keck II, which will be optimized for infrared astronomy, was constructed on the same revolutionary segmented design (by Jerry Nelson, BS '65) as Keck I, which has already been making significant discoveries out on the edges of the cosmos in the comparatively short time since it began operation in 1993 (see *E&S*, No. 1, 1996). The two instruments are the world's largest optical and infrared telescopes—a massive project, conceived and constructed over the course of a dozen years. But, as Gordon Moore, chair of the Caltech Board of Trustees, noted at the dedication, the 12 years during which the Keck Foundation had supported the observatory project seems short compared to the 15 billion years that the telescopes will be able to look back in time—almost to the birth of the universe.