Random Walk



John Seinfeld



Lew Allen

E&AS Chairman

John H. Seinfeld has been designated chairman of the Division of Engineering and Applied Science, subject to approval by the board of trustees. He succeeds Paul C. Jennings, who was named provost last November.

Seinfeld, the Louis E. Nohl Professor and professor of chemical engineering, has been a member of the Caltech faculty since 1967, when he came here as an assistant professor. He has also been executive officer for chemical engineering since 1974. His research has focused on the physics and chemistry of air pollution and on formation and dynamics of atmospheric aerosols.

JPL Director to Retire

Lew Allen, who has been Caltech vice president and director of the Jet Propulsion Laboratory since 1982, plans to retire on September 30, 1990.

The board of trustees has established a search committee for a new JPL director, which will be chaired by Caltech trustee Robert Anderson, chairman emeritus of Rockwell International Corporation. Also serving on the committee are Richard M. Ferry, president of Korn/Ferry International and a Caltech trustee; Albert D. Wheelon, retired chairman and chief executive officer of Hughes Aircraft Company and a Caltech trustee; David W. Morrisroe, vice president for business and finance and Caltech treasurer; Arden L. Albee, professor of geology and dean of graduate studies; Fred E. C. Culick, professor of mechanical engineering and jet propulsion; and Duane F. Dipprey, assistant laboratory director at JPL.

Allen's tenure at JPL saw the successful completion of the Infrared Astronomical Satellite and the Voyager 2 encounters with Uranus (1986) and Neptune (1989). Under his directorship two new missions have been launched recently-the Magellan spacecraft to Venus and the Galileo mission to Jupiter. Another significant development has been the establishment of the Center for Space Microelectronics Technology. "The last eight years at JPL have been marked by a spirit of resiliency, and the last year has been hugely successful," said Caltech President Thomas E. Everhart. "We are indebted to Lew Allen for his leadership."

Watson Lectures

Still to come in the Earnest C. Watson Lecture Series for the remainder of this term are: *April 18:* Micromotors and Micromachines: A Small World— Yu-Chong Tai, assistant professor of electrical engineering; *May 9:* Travels Along the DNA Helix—Jacqueline K. Barton, professor of chemistry; *May 23:* Forecasting Large Earthquakes and Their Effects in Southern California—Kerry E. Sieh, professor of geology.



Beckman Institute recently emerged from behind a mountain of earth (excavated for the building's two-story depth) partially blocking the view from the west. Some work remains to be done-the sidewalk is being poured here at the end of March—and researchers plan to move in this summer. The institute will house several resource centers devoted to breaking new ground in fundamental research in chemistry, biology, and related sciences.

Honors and Awards

Lew Allen, Caltech vice president and JPL director, received the Robert H. Goddard Memorial Trophy, the premier award of the National Space Club for "great achievement in advancing space flight programs contributing to US leadership in astronautics."

Caltech President Thomas E. Everhart was awarded an honorary doctor of law degree by Illinois Wesleyan University and was also named the 1990 recipient of the Presidential Science Award, presented annually by the Microbeam Analysis Society in recognition of significant contributions to microanalysis and microscopy.

Three faculty members have been elected fellows of the American Association for the Advancement of Science: William A. Goddard, the Charles and Mary Ferkel Professor of Chemistry and Applied Physics; Howard Lipshitz, assistant professor of biology; and Elliot M. Meyerowitz, professor of biology.

Harry B. Gray, the Arnold O. Beckman Professor of Chemistry and director of the Beckman Institute, has been selected to receive the 1990 Gold Medal of the American Institute of Chemists.

Five assistant professors (the most of

any institution this year) are among 90 outstanding young scientists named Sloan Fellows for 1990 by the Sloan Foundation for "exceptional promise to contribute to the advancement of knowledge." Each will receive \$50,000 over the next two years in nonrestricted research support. They are Ursula Hamenstadt (mathematics), Andrew G. Myers (chemistry), E. Sterl Phinney (theoretical astrophysics), Nai-Chang Yeh (physics), and Kai Zinn (biology).

John J. Hopfield, the Roscoe G. Dickinson Professor of Chemistry and Biology, was the 1989 winner of Harvey Mudd College's \$20,000 Wright Prize for interdisciplinary studies in science and engineering.

Professor of Physics H. Jeff Kimble was a co-winner of the 1989 Einstein Prize for Laser Science, for his "pioneering contributions to the physics of light squeezing."

Rudolph A. Marcus, the Arthur Amos Noyes Professor of Chemistry, has been awarded the Theodore William Richards Medal for Conspicuous Achievement in Chemistry by the Northeastern Section of the American Chemical Society.

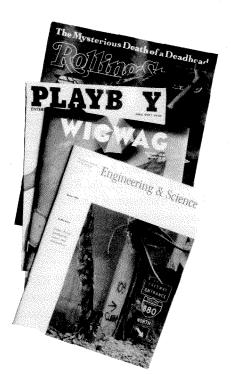
Dimitri A. Papanastassiou, senior research associate in geochemistry, has been elected a fellow of the American Geophysical Union, an honor limited to less than one percent of the total membership.

John H. Schwarz, the Harold Brown Professor of Theoretical Physics, is one of 13 distinguished scholars to be named a Phi Beta Kappa Visiting Scholar for 1990-91.

Along with the entire Voyager team, Edward C. Stone, professor of physics and vice president for astronomical facilities, is the 1989 recipient of the Aerospace Laurels Trophy, awarded by *Aviation Week and Space Technology* magazine. Stone was also co-recipient of the 1990 National Space Club Science Award.^{*}

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Random Walk continued



Hey, That's Us!

E&S hanging out with the likes of Rolling Stone, Playboy, and Wigwag? An article about current issues of magazines, including the above, in the March 8 Los Angeles Times (under a subhead entitled "Read Them or Weep"), advised: "Before you shake off the last earthquake, pick up Caltech's Engineering and Science quarterly. The winter issue features an excellent scientific overview. in full color, of Northern California's Loma Prieta quake and other earthquake features, including a sobering look at liquefaction." (In case anyone is offended by the company we've been keeping, we would like to note that the article the LA Times highlighted in Playboy was an interview with theoretical physicist Stephen Hawking.

Four New Chairs Filled

Four new professorships have been established and designated. Don L. Anderson has been named the first Eleanor and John R. McMillan Professor. McMillan, BS '31, recipient of a Distinguished Alumni Award and former president of The Caltech Associates, established the professorship in memory of his wife. Anderson, professor of geophysics, is also an alumnus (MS '58, PhD '62) and has been a member of the Caltech faculty since 1962 and director of the Seismological Laboratory from 1967 to 1989. His research focuses on studies of the deep interior of the earth.

Robert H. Grubbs is the first Victor and Elizabeth Atkins Professor of Chemistry. The chair was established through a gift by Caltech trustee Victor Atkins and his wife, who are also contributing life members of The Associates and members of the President's Circle. Grubbs has been a professor at Caltech since 1978. His work is in the field of synthetic polymers—a class of materials that includes plastics and many other A party of 72 from the Caltech Alumni Association (including Barclay Kamb as guest lecturer) participated in a travel-study trip to Antarctica in February 1989. Here a group of them cruises in for a closer look at the ice off the Antarctic Peninsula.

widely used synthetic substances.

Barclay Kamb will hold the first Barbara and Stanley R. Rawn, Jr., Professorship. Rawn is also a Caltech trustee, and he and his wife are life members of The Associates and members of the President's Circle. Rawn and Kamb were classmates at Caltech (BS '52). Kamb (PhD '56) joined the faculty in that year and became professor of geology and geophysics in 1963. He was chairman of the Division of Geological and Planetary Sciences from 1972 to 1983 and served as vice president and provost from 1987 to 1989. His current research focuses the dynamics and physical properties of glaciers and of Antarctica's ice streams; an article on the latter starts on page 4 of this issue.

The first Linus Pauling Professor of Chemical Physics is Ahmed H. Zewail. Zewail, who joined the Caltech faculty in 1976, has pioneered the development of ultra-fast laser techniques for recording the behavior of molecules during chemical reactions, a process that occurs in femtoseconds. His work has enabled scientists to witness for the first time the instant of a molecule's creation. Caltech established the chair to honor Pauling (PhD '25), two-time Nobel laureate and a member of the Caltech faculty from 1926 to 1971. He has been professor emeritus since that time.