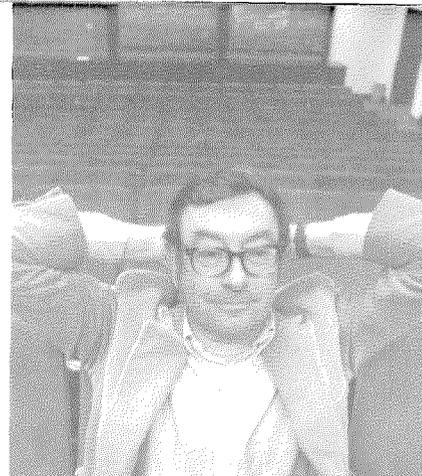


Random Walk

Harry Gray's Chem 1 students commemorated his being named California Scientist of the Year by reversing the seats in 22 Gates. Unfazed, Gray delivered his 9-board lecture from the single chalkboard at the back of the hall. Gray is the Arnold O. Beckman Professor of Chemistry and director of the Beckman Institute.



Honors and Awards

Fred Anson, professor of chemistry and chairman of the Division of Chemistry and Chemical Engineering, has been elected to membership in the National Academy of Sciences in recognition of his work in electrode reactions.

Arnold O. Beckman, a life trustee of Caltech's Board of Trustees, has been named the 1989 recipient of the American Chemical Society's Charles Lathrop Parsons Award for public service.

Professor of Chemistry Peter Dervan was elected a Fellow of the American Academy of Arts and Sciences at their 208th Annual Meeting in May.

John Hopfield, the Roscoe G. Dickinson Professor of Chemistry and Biology, has been elected to the American Philosophical Society. The Society was founded by Benjamin Franklin in 1743 as the American counterpart to the Royal Society of London.

Rudy Marcus, the Arthur Amos Noyes Professor of Chemistry, has won the 1988 Willard Gibbs Medal. The gold medal, awarded annually by the Chicago Section of the American Chemical Society, recognized Marcus's work in many branches of theoretical chemical kinetics.

Philip Saffman, professor of applied mathematics and executive officer for applied mathematics, has been elected a Fellow of the Royal Society of London.

Gerald J. Wasserburg, the MacArthur Professor of Geology and Geophysics and chairman of the Division of Geological and Planetary Sciences, has been elected a member of the Norwegian Academy of Science and Letters.

Professor of Theoretical Astrophysics Roger Blandford and Barry Simon, the IBM Professor of Mathematics and Theoretical Physics, have been named Guggenheim Fellows for 1988.

Three faculty members, Assistant Professor of Biology David Anderson and Assistant Professors of Astronomy George Djorgovski and Shrinivas Kulkarni, have been named Sloan Fellows. The Alfred P. Sloan Foundation, which annually grants research stipends of \$25,000 for two years to young scientists of extraordinary ability and potential, honored 90 young faculty nationwide this year.

The American Association for the Advancement of Science (AAAS) has elevated three of its Caltech members to the rank of Fellow. The election of Professor of Geophysics Don Anderson, President Thomas E. Everhart, and Millikan Professor of Theoretical Physics Murray Gell-Mann recognizes that their "efforts on behalf of the advancement of science or its applications are socially or scientifically distinguished."

The National Science Foundation has named five faculty members Presidential Young Investigators for 1988. Brent Fultz, assistant professor of materials science; Christof Koch, assistant professor of computation and neural systems; Shrinivas Kulkarni, assistant professor of as-

tronomy; Paul Sternberg, assistant professor of biology; and Kerry Vahala, assistant professor of applied physics, will each receive a research stipend of up to \$100,000 annually for five years.

Distinguished Alumni

Four Caltech alumni received Distinguished Alumni Awards this year. Benoit B. Mandelbrot (MS '48, Eng '49), a Fellow at IBM's Thomas J. Watson Research Center, developed the concept of "fractals"—geometric entities found in such complex, irregular forms as branching rivers, turbulent flows, and radio static. William R. Sears (PhD '38) oversaw the development of the P-61 Black Widow fighter and the Flying Wing at Northrop Aircraft Corporation, then went on to found the Graduate School of Aeronautical Engineering at Cornell University, where he served as its director for 28 years. Hung-Chang Yin (PhD '37), director emeritus of the Institute of Plant Physiology, Academia Sinica, People's Republic of China, is one of the chief policymakers for agricultural research in China, and one of a handful of people primarily responsible for a large increase in China's food production over the last 25 years. Robert W. Zwanzig (PhD '52), Distinguished Professor of Physical Science at the University of Maryland, was honored for his contributions to nonequilibrium statistical mechanics.



**On May 25, after a traditional Hawaiian ground blessing, Howard Keck, chairman of the W. M. Keck Foundation, and Gilliard Smart of the Richard Smart Trust used o'o sticks—Hawaiian digging sticks—to break ground for the W. M. Keck Observatory's headquarters in Wai-
mea, Hawaii. From left: Keck; William Frazer, the University of California's senior vice president for academic affairs (partly hidden); Albert Simone, president of the University of Hawaii; Smart; David Gardner, president of the University of California; and Caltech's president, Thomas Everhart, all bedecked in maile-leaf leis. The 10-meter W. M. Keck Telescope, under construction on Mauna Kea, is a joint project of Caltech and the University of California. The Keck Foundation funded the project with a gift of \$70 million, and the Smart Trust contributed the seven-acre headquarters site.**

Chemical Consortium Launched

Three giants in the chemical industry—Du Pont, Eastman Kodak, and the Minnesota Mining and Manufacturing Company (3M)—and a nonprofit foundation, the Shell Oil Company Foundation, have joined the Institute in establishing the Caltech Consortium of Chemistry and Chemical Engineering. Each corporate sponsor has agreed to contribute \$250,000 annually for four years to fund basic research on campus.



So far, faculty members have submitted 23 research proposals to the consortium's board, which includes faculty and corporate members.

Obituaries

Sterling Emerson, professor of genetics, emeritus, died May 2 at his home in Altadena. He was 87. Emerson, a specialist in plant and biochemical genetics, served Caltech for 43 years. His research began with plant genetics, and later moved to the biochemical genetics of the bread mold, *neurospora*, a favorite organism for studying the laws of heredity. He joined the Institute in 1928 as an assistant professor, was promoted to professor in 1946, and retired as professor emeritus in 1971.

James E. Olson, a trustee of Caltech since 1987 and chairman and chief executive officer of AT&T, died April 18 at his home in Short Hills, New Jersey. A former president of both the Illinois Bell Telephone Co. and the Indiana Bell Telephone Co., Olson had held a number of executive posts at AT&T. He was also chairman of the U.S.-Japan Council and a trustee of the American Enterprise Institute and the Conference Board.

On April 11, ground was broken for the Beckman Institute, a facility to be devoted to interdisciplinary research in chemistry and biology. As soon as the last shovelful of earth was turned, the ceremony became an 88th birthday party for Arnold O. Beckman, a life trustee of Caltech. The Arnold and Mabel Beckman Foundation is supporting the new facility. From left: President Thomas Everhart, Arnold Beckman, Mabel Beckman, and Ruben F. Mettler, chairman of the Board of Trustees.