

Random Walk

Richter Dies

CHARLES F. RICHTER, professor emeritus of seismology, died of coronary artery disease on September 30. He was 85.

Richter was born on a farm outside of Hamilton, Ohio. His family moved to Los Angeles in 1909 where he went to elementary and preparatory school. He earned his AB degree at Stanford University in 1920.

He entered Caltech that year to work on a PhD in theoretical physics (his special field was atomic theory). But a year before he was to get his degree, Robert A. Millikan, then head of Caltech, asked Richter if he would be interested in an opening for a physicist at the newly established Seismological Laboratory.

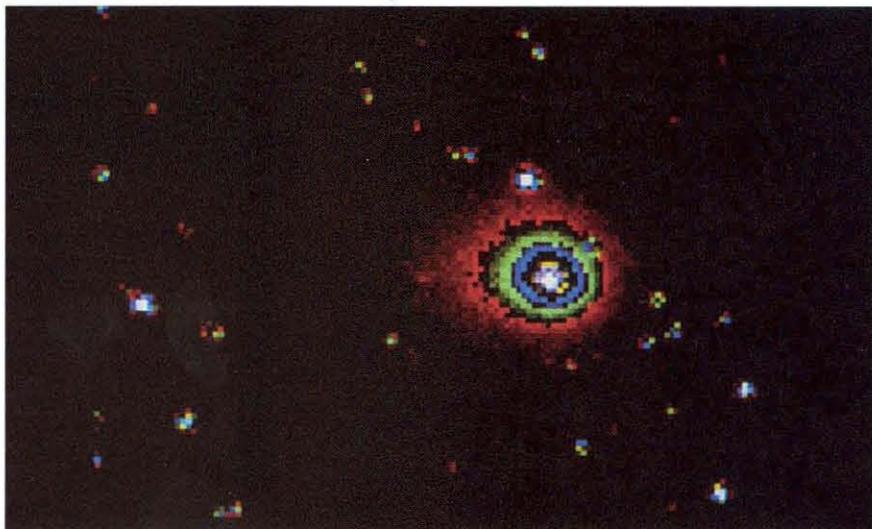
Richter accepted the job, and soon became fascinated with seismology. His work in co-creating the original instrumental scale for determining the amount of energy released by an earthquake (done in collaboration with Beno Gutenberg) eventually made his name a household word.

Richter may have been the only person to keep a seismograph in his living room. He maintained that his wife, Lillian, whom he married in 1928, considered the device a good conversation piece, and that she wouldn't remove it if she could.

Richter was well known for his book *Elementary Seismology*, used as a text in many countries. He also wrote, with Gutenberg, *The Seismicity of the Earth*.



Richter remained with Caltech until his retirement in 1970. He was a research assistant with the Seismological Laboratory from 1927 to 1936, and thereafter a faculty member. He was named professor of seismology in 1952. After retirement he remained active with his consulting firm, Lindvall, Richter, and Associates.



This false-color photograph shows Halley's comet as it appeared on September 25. JPL's James Gibson used the 60-inch telescope at Palomar Observatory in making this computer-enhanced image. A red filter revealed primarily the comet's dust coma. The concentric rings of color indicate the increasing brightness of the image toward the comet's nucleus. The bright spot above the nucleus is a background star. Halley's tail, which was just beginning to form, is at left in the photo. The comet is now located in the constellation Orion and can still be observed only with large telescopes.



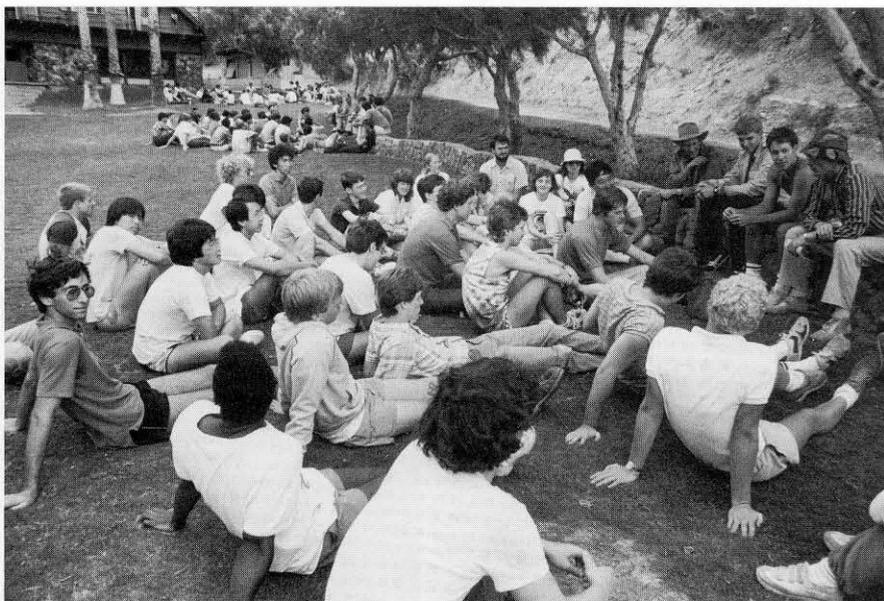
Breaking ground at the site of the Keck Telescope are (left to right) Albert Simone, president of the University of Hawaii; George Ariyoshi, governor of Hawaii; Howard B. Keck, president of the W.M. Keck Foundation; Caltech President Marvin Goldberger; David Gardner, president of the University of California; and William Frazer, chairman of the California Association for Research in Astronomy (CARA) and vice-president for academic affairs at the University of California. The site is at the 13,600 foot level on Hawaii's Mauna Kea. With its ten meter diameter mirror, the telescope will be the largest in the world when it is completed in 1991. It will be operated jointly by Caltech and the University of California. The grant of \$70 million from the W.M. Keck Foundation for the telescope's construction is the largest private donation ever for a scientific enterprise.

The Associates Hold Annual Dinner

A CAPACITY CROWD of The Associates of Caltech and their guests gathered October 15 at the Athenaeum for the annual dinner. Richard L. Hayman, president of The Associates, welcomed the group to the festive, black-tie evening, which also included a reception for the President's Circle, dancing to the music of the Caltech Jazz Band, and an address by Roger B. Smith, chief executive officer and chairman of the board of General Motors Corporation.

Caltech President Marvin L. Goldberger introduced Smith, who became a Caltech Trustee last year. Smith, who spoke on "The Future of the Automobile Industry," expressed optimism about the evolution that innovations in technology and management will bring.

Freshman Camp

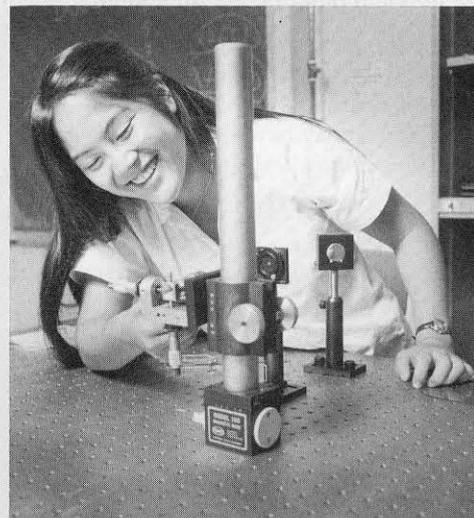


Once again Caltech's new freshman class (plus 22 transfer students) convened on Catalina Island before the fall term for three days of fun, fellowship, and finding out what's ahead of them. Here a group listens to Chris Brennen (right), master of student houses, explain the house system; other small group sessions dealt with health and counseling services, career planning, financial aid, etc. The class also was introduced to quarks, acid fog, marine biology, Catalina's geology — and Catalina's rain. Numbering 200 men and 31 women, the class is the largest in the past decade.

Share in the Achievement

Joy Watanabe is a teaching assistant for a freshman holography lab as part of her studies in applied physics. A senior, she plans to continue similar work in graduate school, where she will pursue research in electro-optics. During her busy undergraduate career, Joy has also been active in the Model United Nations and in women's tennis, has conducted campus tours for visitors, and, after a term as student body secretary, is now serving as ASCIT president.

A combination of funds — including a Caltech Grant endowed by private donors, a California State Grant, and a National Direct Student Loan — helped Joy to attend the Institute. She supplemented this aid with College Work-Study.



A contribution for scholarship support will enable you to share in the accomplishments of students like Joy. If you would like more information about how you can help Caltech students achieve their goals, please contact: