

FRITZ ZWICKY, professor of astrophysics; staff member, Mount Wilson and Palomar Observatories

Fritz Zwicky retires this month to become professor of astrophysics, emeritus. A pioneering astronomer, Zwicky was born in 1898 in Varna, Bulgaria, and received his BS and PhD degrees from the Federal Institute of Technology in Zurich. A Swiss citizen, Zwicky came to Caltech in 1925 as an International Research Fellow in physics for the Rockefeller Foundation, after five years as a research assistant at Zurich. He still speaks of his early years here as some of the happiest of his life.

The faculty in the late 1920s was a close-knit group which shared social activities as well as working relationships in classrooms and laboratories. Physics department dinners were almost weekly events, and on weekends the physicists were often mountain climbing or skiing together.

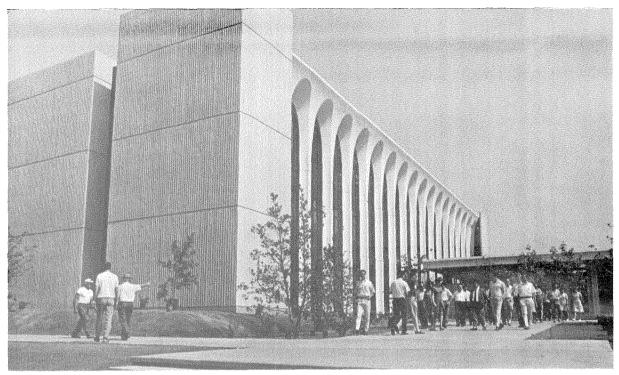
Dr. Zwicky has gained worldwide recognition for his discovery of 45 supernovae. He has published more than 300 articles on physics, jet propulsion, astronomy, and the philosophy of science, and he has written seven books. After 30 years of work, he and four collaborators have completed a six-volume catalog of galaxies and clusters of galaxies. He has been a professor of astrophysics since 1942 and a staff member of the Mount Wilson and Palomar Observatories since 1948. He was awarded the U.S. Medal of Freedom by President Truman in 1949, the U.S. Army Air Forces Commendation for Meritorious Civilian Service for his work with rocket propulsion during World War II, and the Gold Medal awarded by the Pestalozzi Foundation, which supports about 60 villages for war orphans and destitute children on all continents. He is the founder of the International Society for Morphological Research and vice president of the International Academy of Astronautics.

# A New Chemical Physics Laboratory

The completion of Caltech's new \$4 million Arthur Amos Noyes Laboratory of Chemical Physics was celebrated on May 6 and 7 with a two-day symposium and dedication ceremony. More than 200 distinguished scientists and educators attended, some of them former students and colleagues of the man for whom the building is named—A. A. Noyes, director of chemistry at Caltech from 1919 to 1936. Noteworthy among these were Linus Pauling, Earnest Watson, and Ernest Swift.

Dr. Pauling, now professor of chemistry at the University of California at San Diego, came to Caltech in 1922 to do graduate work under Noyes and eventually succeeded him as chairman of the chemistry division when Noyes died in 1936. Dr. Watson, professor of physics, emeritus, came to Caltech at the same time as Dr. Noyes and was a close personal friend for many years. Dr. Swift, professor of analytical chemistry, emeritus, joined Dr. Noyes' chemistry department in the early twenties and, in 1958, succeeded Dr. Pauling as division chairman.

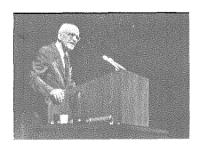
The symposium featured lectures by five scholars in the field of chemical physics from four western universities and by Donald F. Hornig, special assistant to President Johnson and director of the office of science and technology.



The new Noyes Laboratory—five stories, 90,000 square feet of offices, laboratories, and workrooms—was made possible by a gift from an anonymous alumnus and matching funds from the National Science Foundation.

# Speaking of Noyes . . . .





### LINUS PAULING

"The California Institute of Technology is based upon physical chemistry. This was the first field of work in which there was any significant activity above the level of training engineers . . . A. A. Noyes was acting president of the Massachusetts Institute of Technology in 1913, but he also took three months off to come to Pasadena as a visiting professor . . . In about three years he came here full time. Along about that time physics began to build up too. It had a late start and has never quite caught up."

## EARNEST C. WATSON

"It was Noyes more than anyone else who, after strong research in biology had been started at Caltech under Thomas Hunt Morgan, persuaded the Rockefeller Foundation that they should support work in the interdisciplinary fields between biology and chemistry and between biology and physics. All this was relatively easy and natural at Caltech because the divisional rather than a departmental administration system had been set up. It was also facilitated because of Noyes' high principles, idealism, and unselfish devotion to science and to the Institute."

### ERNEST H. SWIFT

"Because of his reserve, it is remarkable that he was so successful in establishing such warm personal relationships with undergraduate students . . . He was continually searching for promising students and devising some means of expediting their progress. In 1925 . . . he arranged for 10 selected freshmen to take their sophomore analytical chemistry course by a period of intensive summer work . . . to enable them to take advanced courses or do research in their junior and senior years. He asked me to teach the course, but only later did I learn that he also paid my salary."

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