THE MONTH AT CALTECH



Eugene M. Shoemaker

INTERNATIONAL HONORS

Max Delbrück, Caltech professor of biology, recently received two European honors—the Gregor Mendel Medal from the German Academy of Natural Scientists, Leopoldina, and membership in the Royal Society of London.

Dr. Delbrück notes that there was quite a contrast in the ceremonies in Halle, East Germany, and in London. "One was marked by an academic procession, classical music, and speeches laden with politics... the other by a tea, a brief formula spoken by a lord, and the signing of a venerable book."

Dr. Delbrück is the first recipient of the German medal. The creation of the award is notable because the Academy's membership represents in part a geographic-political area where, until very recently, genetics and Mendel have been considered "decadent capitalist theory."

The Royal Society, Britain's top scientific body, which dates from the time of Charles II and claims Sir Isaac Newton as one of its early presidents, elects only four foreign members a year. Other Caltech faculty who have been honored by membership include Richard Feynman and the late Theodore von Kármán, who is reported to have especially cherished his Royal Society membership because it was the only honor he had that wasn't also held by Robert Millikan. DIVISION CHAIRMAN-1969

Eugene M. Shoemaker, chief scientist of the United States Geological Survey Center of Astrogeology in Flagstaff, Arizona, and a Caltech research associate in astrogeology, has been named chairman of Caltech's division of geological sciences, effective January 1, 1969. Clarence Allen, professor of geology and geophysics, will continue as acting chairman of the division through 1968.

Dr. Shoemaker began his association with Caltech in 1943. He received his BS here in 1947 and his MS in 1948. His PhD came from Princeton University in 1960.

Early in his career he did geological studies of the Colorado plateau country, and in 1957 he began to specialize in the study of impact structures and the mechanisms of meteorite impact processes. In 1963 he organized the Manned Space Sciences Division of NASA and established the United States Geological Survey Observatory in Flagstaff. Two years later he organized the Astrogeology Center there.

Dr. Shoemaker served as an investigator of the television picture experiment for the Ranger spacecraft series and is now principal investigator of both the Surveyor moon television experiment and the geological field investigations of the Apollo lunar landing program. All in all, a busy man.



Alfred H. Sturtevant

THE NATIONAL MEDAL OF SCIENCE

Alfred H. Sturtevant, Caltech's Thomas Hunt Morgan Professor of Biology, Emeritus, has been named a recipient of the President's National Medal of Science for 1967—the nation's highest government award for distinguished achievement in science and engineering. He will receive the honor in ceremonies at the White House in February, along with 11 other U.S. men outstanding in their various disciplines of science and engineering.

Dr. Sturtevant, whose major contributions have been in the field of genetics, is the second Caltech faculty member to receive the medal. The award was established by an Act of Congress, and Caltech's Theodore von Kármán received the first National Medal of Science from John F. Kennedy in 1963.

Dr. Sturtevant came to Caltech when the biology division was founded in 1928. He became professor emeritus in 1962.

MORE SPACE IN THE LIBRARY

An extensive collection of published material on space technology, astronomy, and science fiction has been presented to Caltech's Millikan Library by the widow of Alvin W. Kunke. The Kunke Space Archives, which comprise one of the most comprehensive collections ever to have been assembled by an individual, include a wide range of material, beginning with very early imaginative works attributed to Cyrano de Bergerac, Bishop Godwin, and Johannes Kepler. The collection also contains original publications by writers who entertained fantasies of space exploration long before there was a profession devoted to rockets or space flight. There are historical treatises on astronomy, ancient astronomical maps, and some scare copies of *Pacific Rockets*, a journal of the Pacific Rocket Society, an early group of experimentalists based in South Pasadena. The collection is in the humanities and social sciences division of the library.

SECRETARY OF THE BOARD

Theodore C. Combs has been named secretary of the Caltech board of trustees, succeeding James N. Ewart who retired January 1 this year. Mr. Combs, who graduated from Caltech in 1927, joined the Institute development staff in 1964 as associate director of corporate relations and has been director of alumni relations in the development division since 1966. Mr. Ewart served as director of personnel at Caltech from 1946 to 1964 and as secretary of the board from 1964 until his retirement.

HONORS AND AWARDS

Frederick C. Lindvall, chairman of Caltech's division of engineering and applied science, has been named a fellow of the American Society of Mechanical Engineers, an honor reserved for members of more than 25 years standing who have made significant contributions in their profession.

Caltech's Beckman Auditorium has received an Esther Award from the weekly newspaper, the *California Jewish Voice*, in recognition of outstanding programming. The award was presented to J. Kent Clark, Caltech professor of English, by Henry Roth, music editor of the paper, acknowledging the concert of soprano Shirley Verrett as the outstanding voice recital in the Los Angeles area last season.

Aron Kuppermann, Caltech professor of chemical physics, has been awarded a National Science Foundation senior postdoctoral fellowship to pursue research on the dynamics of molecular collisions. He will spend a year studying at the Weizmann Institute of Science in Behovoth, Israel, and at the Institute for Atomic and Molecular Physics in Amsterdam, beginning in September 1968.

H. Russell Bintzer, vice president for development at Caltech, has been appointed to a four-year term with the Community Redevelopment Agency by the Board of Directors of the City of Pasadena.

continued on page 30

"Dear Papa,

I will be a good boy. I will save my money and buy food for my dog and give some money to the missionaries.

Your little boy, Robbie."

This note, written by four-year-old Robert A. Millikan in 1873, is among the memorabilia that were placed in the cornerstone of the new Caltech library, named in his honor, at ceremonies on December 6. Other possessions belonging to the Caltech physicist which were placed in the cornerstone cache were a pair of his spectacles, a handwritten report card from Macquoketa High School in Iowa, two poems written to him on his 85th birthday by his wife and son, and some of his most significant writings and publishings.

Lee A. DuBridge, president of Caltech, and -Arnold O. Beckman, chairman of the board of trustees, officiated at the ceremonies attended by the library donor Seeley Mudd and community leaders and guests of the Institute. The occasion was the latest in a long line of library "occasions," which began in May 1965 with an interhouse tree-chopping contest run by Caltech undergraduates to clear the site for the then prospective library. Other occasions included the ground-breaking ceremonies that same month, and another cornerstone-laying a year ago this month. That pseudo-ceremony was conducted by pranksters who, in the dark of the night, put the cornerstone in upside down.

SAVE STAR TREK

Although the hallmark of today's college campus is protest, Caltech students have been distinguished by their indifference to the causes that convulse other campuses into rallies and marches. This month, however, this dispassion came to an end.

A CAUSE emerged with which Teckers could identify, and they marched—200-strong and armed with torches and banners—on the NBC television studios in Burbank to present a petition signed by 600 students who decry the rumored cancellation of the program "Star Trek."

Now the ball is rolling, and students are considering another protest—this one against bad reporting. The *Los Angeles Times* reported that the Caltech demonstrators carried signs for "Dr. Benjamin Spock." As any "Star Trek" fan knows, it is *Mr*. Spock, who is chief science engineer of the United Space Ship Enterprise.



Caltech students and sympathizers rally at NBC studios to save Star Trek.



Psychology professor John Weir meets with students in the experimental classroom.

ROOM FOR IMPROVEMENT

Human subjects are rarely used in experiments at Caltech. Yet there is definitely human involvement in a special study being conducted by John Weir, Caltech professor of psychology, for which he has established what he calls an *experimental classroom*. His purpose is to experiment with different physical settings for a classroom and discover any direct relationships between a student's classroom environment and his attitudes, opinions, and learning ability. This information, with some interpretation by Dr. Weir, will then be handed over to Caltech's consulting architects, Robert E. Alexander & Associates, with the hope that some improvements can be incorporated into the classrooms of new buildings.

Dr. Weir started with a standard classroom in Mudd Laboratory and, through the use of vibrant colors, draped windows, and special floor coverings, has turned it into a totally new environment for learning. He is not the only professor who uses the room, however. There are currently classes in logic, math, English, and biology, also.

The most obvious difference in this room is felt with the first step onto the lush gold carpeting that not only flows underfoot but creeps 36 inches up the walls. The walls are painted with several colors, which will be changed periodically according to student response. Adjustable lighting, a lowered ceiling of alternating orange and yellow panels, and *optional* chairs complete the feeling of informality; and the hope is that students will pick up more in this room than lint off the carpet.

Dr. Weir's project is in the infant stage, and he is still distributing questionnaires about the new room to his students. But when all the results are in, this study may help students eventually to escape the clinical, traditional classroom.

AUFS RETURNS

The first of four American Universities Field Staff lecturers scheduled to visit the campus during the winter quarter arrived on campus January 9. James Rowe, who is returning from a study period in Brazil, will spend 10 days in lectures and discussions with Caltech students. Roy Lockheimer, a specialist in Japanese politics and history, will be on campus from January 23 to February 1; Charles Gallagher, authority on North Africa and Islam, from February 13 to February 22; and Edward A. Bayne, who has been to Israel since his visit to Caltech in October, from February 27 to March 7. The AUFS, sponsored by Caltech and 11 other colleges and universities, sends representatives to specific areas to study and report on current conditions.