

Caltech's Harry G. Steele Laboratory of Electrical Sciences was dedicated on April 4. The five-floor building, to be used primarily for physical and systems research, was made possible by a gift from the Harry G. Steele Foundation of Pasadena, and was named in honor of the late president of U.S. Electrical Motors.

# The Month at Caltech

Honors and Awards

Jesse W. M. DuMond, Caltech professor of physics, emeritus, has been awarded the degree of doctor of honor by the University of Uppsala, Sweden—an award which has been given to only one other man in the past 10 years.

In announcing the selection of Dr. DuMond, the university wrote him "... we hope that we, in this way, may show something of our deep appreciation of your distinguished scientific contributions within such wide domains in physics."

Dr. DuMond is internationally known as one of the guardians of the universal constants—the natural yardsticks of science, including the pull of gravity, the quantity of electricity an electron carries, a formula for measuring units of angular momentum, and the speed of light. These foundations for the mathematical frameworks of science and engineering are continually re-evaluated by Dr. DuMond as new scientific discoveries are made.

Murray Gell-Mann, Caltech professor of theoretical physics, has been awarded the Ernest Orlando Lawrence Memorial Award for 1966, given by the Atomic Energy Commission for recent contributions in the field of atomic energy. One of five scientists who will be honored at ceremonies in Washington, D.C., on April 27, Dr. Gell-Mann is cited for his "contributions of the highest significance to the theory of elementary particles and for the exceptional stimulus he has provided to experimental and theoretical work in the field of physics."

The Lawrence Award was established by the AEC in 1959 in honor of the late E. O. Lawrence, inventor of the cyclotron and director of the radiation laboratory at the University of California at Berkeley. Five scientists are named each year to re-

ceive the award. In 1962 it was given to Richard P. Feynman, Richard Chace Tolman Professor of Theoretical Physics at Caltech.

Ray D. Owen, Caltech professor of biology and chairman of the division of biology, and William E. Zisch, president of the Aerojet-General Corporation and a member of the Caltech board of trustees, received honorary degrees from the University of the Pacific in Stockton, California, last month.

Dr. Owen was honored for his excellence as a teacher and administrator, and for his pioneering work in biology; Mr. Zisch was cited for his examples of hard work, application of talents, and the wise use of creative abilities in helping meet the challenge of space exploration.

Fritz Zwicky, Caltech professor of astrophysics and staff member of the Mount Wilson and Palomar Observatories, has been elected to serve on the Scientific-Legal Liaison Committee of the International Academy of Astronautics—a group of 15 scientists from Europe and the United States organized to study the scientific, technological, and human problems involved in space exploration and to prepare recommendations for the establishment of an international code of procedures.

# Feynman Fellowship

A new graduate student award, to be called the Richard P. Feynman Fellowship in honor of Caltech's 1965 Nobel prizewinner, has been made possible by a gift of \$175,000 to the Institute from H. Dudley Wright, former chairman of the board of Endevco in Pasadena. The fellowship will be awarded to students, preferably in theoretical physics, "who best represent the standards exemplified by the man whose name it bears."

Mr. Wright, a close friend of Dr. Feynman, now lives in Switzerland, where he has begun publication of an electronics magazine, *Orbit*.

### New Trustees

Two new members were elected to the Caltech board of trustees at the March 7 meeting: Chester F. Carlson, a patent lawyer, inventor of xerography, and consultant to the Xerox Corporation of Rochester, New York; and Louis E. Nohl, owner of the Rancho Santiago de Santa Ana near Olive, California, and a retired business executive.

Chester Carlson was born in Seattle, Washington, in 1906. He attended Riverside Junior College in California and received his BS in physics from Caltech in 1930. Moving to New York City, he worked during the day in the patent office of an electronics firm, attended evening law classes, and at night began experimenting on a new method of duplicating. Although he completed the basic work on the xerox process in 1938, it took him until 1944 to convince an organization of its potential, until 1947 to sell the commercial rights, and until 1960 to see his invention become a widely recognized success.

Louis Nohl was born in 1897 in Santa Fe, New Mexico. After attending the University of New Mexico and serving with the U.S. Army in France during World War I, he completed his education at Columbia University, where he received a BS degree in business administration in 1921. He became associated with the Bankers Trust Company of New York and was executive vice president when he left, 21 years later, to become executive vice president and director of the Elliott Company in Pittsburgh, Pennsylvania, manufacturers of electrical equipment for submarines. In 1944, after two years with Elliott, he moved to California.

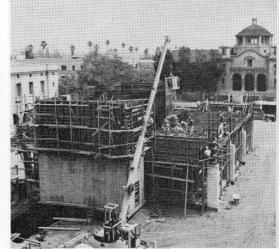
## Dedication in Israel

Paco A. Lagerstrom, Caltech professor of aeronautics, recently took part in the dedication of a continued on page 26

Progress on Caltech's R. A. Millikan Memorial Library as it stood . . . in November . . . January . . . and April.







building, at Tel Aviv University in Israel, named for the late Saul Kaplun, a Caltech alumnus known for his research in aeronautics, fluid dynamics, and applied mathematics. Dr. Lagerstrom, who was Dr. Kaplun's teacher and colleague, gave the dedicatory address.

When Dr. Kaplun died of a heart attack in 1964, he was a senior research fellow in aeronautics at Caltech and had earned his BS, MS, AE, and PhD degrees at the Institute. Through gifts from his father, Morris Kaplun of New York, the Saul Kaplun Institute for Applied Mathematics and Space Physics at Tel Aviv University was made possible.

### It's a Plane

The Aero Association of Caltech is now official and airborne. The signing of incorporation papers and the purchase, this month, of a two-passenger 1965 Cessna 150 Trainer are the culmination of many months of groundwork—including the drawing up of by-laws and procedures, making legal arrangements, raising money, and negotiating for a suitable aircraft.

While not part of the academic program of the Institute, the new flying club is a recognized student activity and has the support of the administration, particularly of the department of aeronautics. Peter Lissaman, assistant professor of aeronautics, is faculty advisor. With the help of alumni, trustees, friends, and industry, the association succeeded in obtaining funds to pay more than half the cost of the Cessna.

The flying group is open to students, faculty, and employees of Caltech for a \$100 membership fee,



The Aero Association's Cessna gets a checkover.

to be refunded on termination of membership.

"Assuming the certainty that some Caltech students are going to fly, someplace, somehow," says Dave Cartwright, graduate student in chemical physics and president of the AACIT, "our purpose is to provide the opportunity to fly more safely, to use better equipment, to give serious and detailed flight training, and to provide more available flying time for less money."

The plane is based at Brackett Field in LaVerne, where flight training and other technical cooperation will be supervised by Howard and Iris Critchell, administrators of the Harvey Mudd Flying Club.

But the association isn't planning to stop at flying or training, or with the acquisition of a single plane. Already there are plans to build an experimental glider designed by Dr. Lissaman. His design is not aimed at contest flying, but uses advanced and unconventional techniques to produce an extremely simple, cheap, and lightweight craft for fun flying.

### Leader of America

Saul Alinsky, nationally known organizer of self-help programs for ghetto communities and a self-styled professional radical, will be on campus May 11-13, as a Y-sponsored Leader of America. Mr. Alinsky, who has worked in slum areas for more than 27 years and who is an outspoken critic of the federal anti-poverty program, operates on the conviction that the only way to fight povetry is with leadership from within the stricken neighborhood itself. In California alone he has founded more than 30 community projects, mostly for Mexican-Americans. At Caltech he will meet informally with groups of students and faculty and will give a major address in Beckman Auditorium on Wednesday evening, May 11.

# Seeing Stars

An educational and demonstration planetarium was presented to Caltech this month as a gift from the Hughes Aircraft Company. The Musser Copernican Planetarium, installed in the Robinson Laboratory of Astrophysics, is a compact, 7½-foottall, 700-pound machine which projects onto a screen planets and star fields that can be made to rotate at controlled rates. The location of these images in relation to each other at any given time or season can be simulated, and the rotations of the planets and their satellites can be observed on an accelerated time scale.