

The Month at Caltech

National Academy of Sciences

Renato Dulbecco, professor of biology at Caltech, was elected a member of the National Academy of Sciences this month. Election to the Academy, one of the highest scientific honors in the nation, is in recognition of outstanding achievement in scientific research, and membership is limited to 500 American citizens and 50 foreign associates. There are now 36 Caltech staff members in the Academy.

Dr. Dulbecco was born in Catanzaro, Italy, and received his MD from the University of Torino in 1936, at the age of 22. After graduation he was obliged to serve a year and a half in the Army, and in 1938 he returned to the University as an assistant professor in the department of pathology. During the war he served as a medical officer in the Italian Army, and



Renato Dulbecco, professor of biology

in 1945 he again returned to the University, where he spent two years in the study of physics.

Dulbecco came to the U.S. in 1947 to work with S. E. Luria in the department of bacteriology at Indiana University, on studies of the action of radiation on bacteriophage, the viruses found in the human body that attack bacteria. He came to Caltech in 1949 to continue his work on bacteriophage under Max Delbruck, professor of biology. In 1951 he decided to apply his combined training in medicine, histology, physics, and bacteriophage to the field of animal virology, hoping to make this hitherto purely medical subject available for the study of fundamental questions in biology.

For many years viruses had been studied chemically and medically, but never very much biologically until E. L. Ellis and Max Delbruck began working with bacterial viruses at Caltech in about 1937. Dulbecco carried over this biological viewpoint to the study of animal viruses and developed techniques which made it possible, for the first time, to make quantitative studies of them. Starting with the development, in 1952, of an accurate and highly sensitive bio-assay method, he was able to study the life cycle of viruses in single cells, to isolate mutants, to analyze the consequences of simultaneously infecting single cells with different viruses, and to make some progress in our understanding of the first steps in tumor production by viruses. Dulbecco is today a leader in animal virus research, and his laboratory is recognized around the world as an outstanding center of such research.

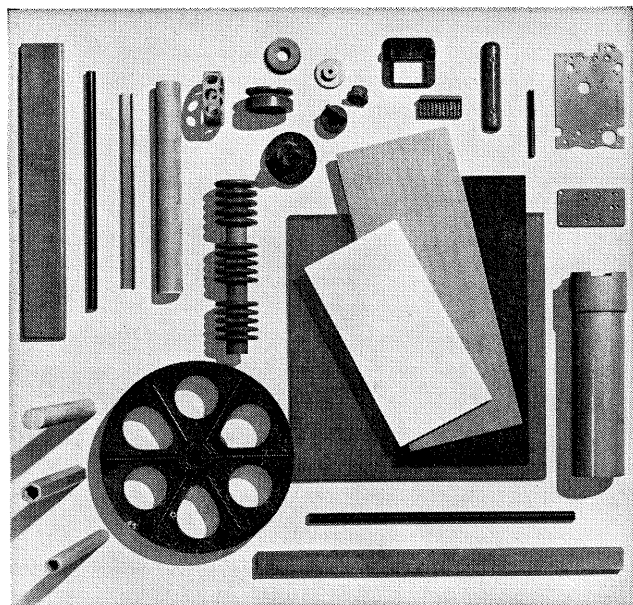
Max Mason

Max Mason, former chairman of the Observatory Council which supervised construction of the Palomar Observatory, died in a Claremont, Calif., sanitarium on March 22, of a cerebral hemorrhage. He was 83 years old.

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Engineering and Science

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The Month . . . continued

Dr. Mason was a member of the Caltech executive council, which operated the Institute, from 1936 to 1945, and was a Caltech trustee from 1945 to 1951.

Born in Madison, Wisconsin, Mason was graduated from the University of Wisconsin, and received his PhD in mathematics from the University of Gottingen, Germany, in 1903. After teaching at MIT and Yale, he returned to the University of Wisconsin, where he eventually took the chair of mathematical physics.

As a member of the National Research Council during the first World War, he invented several submarine detection devices, including the hydrophone, which was used to hunt submarines and also for navigation.

Dr. Mason became president of the University of Chicago in 1925, and in 1928 joined the Rockefeller Foundation as its director of natural sciences. He was president of the foundation from 1929 to 1936, when he came to Caltech as vice chairman of the Observatory Council. He became chairman in 1940 and remained as head of the council until it was disbanded in 1948 upon completion of the 200-inch telescope at Palomar. From 1948 to 1950 he was a research associate in astrophysics at Caltech and retired in 1950.

Tuition — Going Up

Annual tuition charges for undergraduate and graduate students at the Institute will be increased from \$1275 to \$1575 for the academic year beginning in September 1962. The last adjustment was made in 1959 when tuition rose from \$900 to \$1275.

The increase was voted by the Board of Trustees in order to meet steadily rising costs of education at the Institute. The deferred payment plan now in operation will be adjusted to the new tuition charge and an effort will be made to increase the number of scholarships available. Said President DuBridges: "It continues to be our aim to see that no qualified undergraduate student shall be excluded from Caltech for financial reasons alone."

California Institute Associates

Simon Ramo PhD '36, executive vice president and secretary of Thompson Ramo Wooldridge, Inc., has been elected vice president of the California Institute Associates. Preston Hotchkis, Los Angeles attorney, who has served previously as secretary and member of the board of directors, was elected treasurer. William Clayton continues to serve as president.

The California Institute Associates are a group of public spirited citizens interested in the advancement of learning, who were incorporated in 1926 as a non-profit organization for the purpose of promoting interests of the California Institute of Technology.