THE MONTH AT CALTECH

National Academy Elections

HUGO BENIOFF, Professor of Seismology, and Jesse W. M. DuMond, Professor of Physics at the Institute, have been elected to membership in the National Academy of Sciences. Their election brings Caltech representation in the Academy to twenty-five.

The Academy was created in 1863 by act of Congress to give scientific advice to governmental departments on request. Membership is by election and in recognition of outstanding achievements in scientific research. It is limited to 350 active members who are American citizens and 50 foreign associates.

Dr. Benioff has been a member of the Caltech staff since 1937, when direction of the Pasadena Seismological Laboratory, with which he had been associated since 1924, was turned over to the Institute by the Carnegie Institution of Washington.

He is recognized as an authority on the design of earthquake-recording instruments, and most recent advances in seismology have been based on records made with his seismographs. He has also made many contributions to a better understanding of the processes leading to earthquakes in a series of papers which correlate the pattern of energy release in quake sequences with the known properties of elastic deformation, plastic creep and recovery.

Professor DuMond has been associated with Caltech since he became a teaching fellow at the Institute in 1921. He is considered a leading authority on the precise values of the physical constants and in the field of X-ray and gamma-ray spectra.

He began his career as an electrical engineer in industry and at the National Bureau of Standards, and soon became interested in fundamental physics. In an early contribution he analyzed and published the theory of powerful X-ray spectrometers. He has built several such instruments and used them to make accurate measurements as well as precision studies of X-rays. More recently he has made precision measurements of high energy radiation with X-ray and beta-ray instruments of his own design and construction. Techniques developed by himself and his colleagues are important tools in the Caltech program of precision nuclear spectroscopy, which is providing data required for a better understanding of the atomic nucleus.

New Registrar

DR. FRANCIS W. MAXSTADT, Associate Professor of Electrical Engineering, has been appointed Registrar of the Institute. He will take over the duties previously handled by L. Winchester Jones, Associate Professor of English, who has been serving as both Registrar and Dean of Admissions since 1947.

The work of the admissions office has been steadily increasing in recent years, because of the establishment of a number of new undergraduate scholarships, and the increasing attention devoted to improved selection of freshmen students. Professor Jones will continue to serve as Dean of Admissions. Professor Maxstadt's appointment is effective July 1.

Professor Maxstadt has been a member of the Institute staff since 1919. He was graduated from Cornell University in 1916, received the M.S. degree from Caltech in 1925 and his Ph.D. in 1931. He has been active in consulting and testing work on illumination, motor

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Dr. Francis W. Maxstadt, Registrar

design and mechanical problems, and has acted as an expert witness in patent suits. He has also made contributions to the technique of electric welding. He is a member of the American Institute of Electrical Engineers and Sigma Xi.

Ford Foundation Grant

THE FORD FOUNDATION has awarded a one-year grant of $10,000 to the California Institute of Technology to support the work of the Committee for Aid to War-Stricken Libraries.

The committee is headed by Dr. Fritz Zwicky, Professor of Astrophysics, who started the project more than 12 years ago. Aided by his friends and colleagues, he has collected and shipped to various foreign countries thousands of scientific journals and books. Through the years approximately 100 persons have helped with the collection, storage, packing and shipping involved in the operation.

With the help of the U.S. Navy, they sent 22,000 pounds of scientific literature to Chiang Kai-shek's headquarters in Formosa and another large shipment to the South Korean Naval Academy. Other recipients have included the Scientific Allocation Committee of the Philippine government and various scientific and educational institutions in France and western Germany.

The Foundation grant will be used primarily for shipping costs, since the literature is all donated.

Cancer Grants

THE INSTITUTE last month received $12,000 from the American Cancer Society for research studies in the Caltech Biology Division. Dr. Henry Borsook, Professor of Biochemistry, was awarded $7500 for work on the use of isotopes, and Dr. Arthur W. Galston, Associate Professor of Biology, received $4500 for studies in the chemistry of plant cell aging.

Dr. Galston has also been awarded a two-year grant of $11,000 by the National Science Foundation in Washington, D. C., for research on the effect of light on the growth of plants. With Glenn Todd, a post-doctoral fellow at Caltech, Dr. Galston will study the chemical reactions produced by light which lead to changes in the rate and nature of plant growth.

Dr. Henry Borsook and Dr. Arthur W. Galston receive grants for cancer study from Mrs. Douglas Donath, local chairman of the American Cancer Society. President DuBridge looks on.

N.S.F. Fellowships

SIXTEEN CALTECH students have been awarded predoctoral fellowships for the 1953-54 academic year by the National Science Foundation.

They are among the 556 students throughout the nation who have received N.S.F. predoctoral and post-doctoral fellowships in science and engineering for the coming academic year. First year graduate students receive $1400, students in intermediate graduate study $1600, terminal-year graduate students $1800, and post-doctoral fellows $3400. Additional allowances are provided for dependents, tuition and other normal expenses.

Caltech Fellows are: Leonard A. Herzenberg, Lionel F. Jaffe and Robert L. Metzenberg, Jr. (biology and biochemistry); Gary Felsenfeld, Martin Karplus, Arthur Miller and William G. Sly (chemistry); George W. Sutton (engineering); Robert J. Stanton, Jr. (geological sciences); and Paul L. Donoho, Marshall P. Ernstene, Roy W. Gould, John D. Sorrels, Edward A. Stern, George H. Trilling and Victor A. Van Lint, Jr. (physics).

Lockheed Scholarship

A MEMBER OF CALTECH'S next freshman class will be awarded a four-year scholarship by the Lockheed Aircraft Corporation under a program announced last month which provides for 20 new scholarships annually at various institutions.

This scholarship and 14 more for other participating colleges and universities are provided by a newly-established Lockheed Leadership Fund. Five additional scholarships will be given annually to sons and daughters of Lockheed employees for any accredited schools.

The fund was established to help expand America's industrial horizons, according to Cyril Chappellet, vice-president of Lockheed. "If we are to remain competitive in the air with the rest of the world," he said, "we must attract more college graduates to careers in aviation — particularly those who have qualities of leadership as well as scholastic talent." He added that Lockeed officials hope award winners will seek positions with the company after graduation, but emphasized that they will be under no obligation to do so.

Each scholarship will provide full tuition plus $500 annually for school expenses and an additional $500 for the college or university. The scholarships will be renewed each year if winners meet leadership, character, and academic standards.