

THE MONTH AT CALTECH



Hallett D. Smith will be the new Chairman of the Division of Humanities, succeeding Prof. C. K. Judy who retires July 1.

NEW CHAIRMAN FOR HUMANITIES

DR. HALLETT D. SMITH, '41, Professor of English at Williams College, Williamstown, Mass., has been appointed Chairman of the Division of Humanities and Professor of English at Caltech. He succeeds Professor Clinton K. Judy, Humanities Chairman since 1923, who is to retire on July 1 to become Professor Emeritus of English.

Dr. Smith, a native of Chattanooga, Tenn., received his B.A. degree from the University of Colorado and his Ph.D. from Yale. An authority on Elizabethan literature, he spent a year at the Huntington Library recently (1947) doing research under a Guggenheim Fellowship; on the history of Elizabethan non-dramatic poetry. Dr. Smith, who has been on the faculty of Williams since 1931, will come to Caltech following the 1949 summer school session at Columbia University in New York, where he is to give two courses in the Graduate School.

HUGHES FELLOWSHIPS

HOWARD HUGHES last month established a series of fellowships in creative aeronautics at Caltech, intended to develop engineers capable of dealing with problems of advanced theoretical aeronautics. The primary objective of the fellowships, says President DuBridge, is to "remedy a shortage in a class of engineers upon which the future development of aeronautics depends."

Two or three men will be chosen annually for a program of work which will be divided between Cal-

tech and the Hughes Aircraft Co. in Culver City. Each fellowship will be worth a minimum of \$5,000—\$1,500 to Caltech to cover tuition and research expenses; \$1,500 or more to each fellow (depending on individual qualifications); and a salary of not less than \$2,000 to each fellow for advanced development work at the Hughes plant.

Applications must be submitted before Feb. 15, and announcement of the awards is to be made on April 1. Those selected will begin the program on July 1, with a ten-week advanced development project at Hughes Aircraft.

TWO PROMOTIONS

DR. HERSCHEL K. MITCHELL, one of a group of scientists to first isolate the vitamin folic acid, a curative factor in dietary deficiency, has been promoted from the rank of Senior Research Fellow to Associate Professor of Biology. Dr. Mitchell, who came to Caltech as research fellow in 1946, has also played a major role in the synthesis of pantothenic acid, another vitamin essential to health. And last spring, working with Research Fellow Joseph Nyc, Dr. Mitchell synthesized a new chemical compound, 3-Hydroxyanthranilic Acid. This substance is important in reactions which make it possible for the body to convert tryptophane, an indispensable amino acid, into nicotinic acid—which acts to prevent pellagra. At present, Dr. Mitchell is continuing his research in chemical genetics—the relation of genes to enzymes and chemical reactions.

Dr. Robert B. Leighton, Research Fellow, has been promoted to Assistant Professor of Physics.

Dr. Leighton designed and built the first cloud chamber to operate successfully with free-flying balloons. The chamber made its initial flight from a Colorado peak in 1947, photographing cosmic rays at an altitude of 85,000 feet.

Dr. Leighton, who graduated from Caltech in 1941, received his M.S. in 1944, his Ph.D. in 1947, and has been a research fellow here since that time. During the war he served with the Naval Experimental Station at Inyokern, on the design and development of aircraft rocket launchers. He is now working with Dr. Carl Anderson on meson studies.

SEISMOLOGISTS TO NEW ZEALAND

DR. BENO GUTENBERG, Professor of Geophysics and Director of the Seismological Laboratory, and Dr. Charles F. Richter, Associate Professor of Seismology, are leaving this month to attend the Pacific Science Congress in New Zealand in February. The month-long Congress includes alternate weeks of seminars and trips to different localities of New Zealand for scientific study. About 50 U. S. scientists will be at the Congress, which is meeting for the first time since the war. In peacetime the Congress meets once every three years to discuss various problems related to the Pacific areas. The last session was held at Berkeley, in 1939. This year's Congress in Auckland will include sessions on Geology and Geophysics, Meteorology, Oceanography, Zoology, Forestry, and Public Health.

Dr. Gutenberg, who has been invited to attend the Congress by the Royal Society of New Zealand, of which he is an honorary member, will deliver a paper on "Geophysical and Geological Observations in the Pacific Area." Dr. Richter's paper is to report on "Seismicity and Structure in the Pacific Region of North America."

PROFESSOR OF PALEONTOLOGY

DR. CHARLES W. MERRIAM has joined the Division of Geology as Associate Professor in Invertebrate Paleontology. The son of John C. Merriam, distinguished paleontologist and president of the Carnegie Institute of Washington, Dr. Charles Merriam received his bachelor's degree from the University of California in 1928, and his Ph.D. from there in 1932. He taught Paleontology and Stratigraphy at Cornell from 1934 to 1944 and has been working since then for the U. S. Geological Survey. He came to Caltech January 3.

FORD FOUNDATION

DR. CHARLES C. LAURITSEN, Professor of Physics, is one of a committee of six distinguished educators requested by Henry Ford II to undertake an intensive study to determine "the areas of human welfare in which the resources of the (\$205,000,000) Ford Foundation can be most effectively expended."

The Ford Foundation, largest public trust in the United States—and probably the world—was created in 1936 by the late Edsel Ford "to receive and administer funds for scientific, educational and charitable purposes, all for the public welfare." Its assets, con-

tributed almost entirely by the late Henry Ford and Edsel Ford, include 81.2 per cent of the stock of the Ford Motor Company. When the late Henry Ford's estate is settled it will own 89.4 per cent.

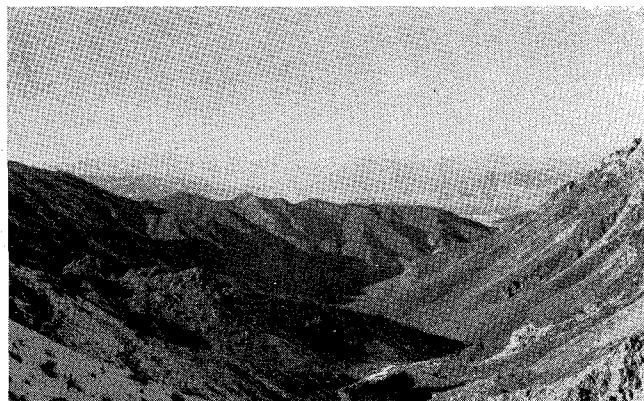
Aside from Dr. Lauritsen, who represents the natural sciences on the committee which will undertake this study for the Ford Foundation, advisers in respective fields include: Peter Odegard, University of California (Political Science); Thomas H. Carroll, Syracuse University (Business); Donald G. Marquis, University of Michigan (Social Sciences); Francis T. Spaulding, Commissioner of Education of New York State (Education); Dr. T. Duckett Jones, Harvard Medical School (Health).

The committee is expected to report its findings and recommendations by midsummer. While the scope of the study is unlimited, special emphasis is to be placed on inquiries into the social sciences, the natural sciences, and education.

HONORS FROM COLUMBIA

DR. THEODORE VON KARMAN, director of the Guggenheim Aeronautical Laboratory, has been made an honorary professor of mechanical engineering at Columbia University—the third person to receive such a distinction in Columbia's history.

GEOLOGISTS EXPLORE WASTELAND



A desolate waste contains the key to a major geologic fault.

DR. RICHARD C. JAHNS, Associate Professor of Geology, and Dr. A. E. J. Engel, Assistant Professor of Geology, spent part of the Christmas vacation in the Avawatz Mountains, in one of the few unexplored areas left in the United States. This was no holiday, though. The desolate area, some 40 miles south of Death Valley, has only one known spring in it, no trees, and very few bushes. According to Jahns, "even a jack-rabbit would have a tough time living there."

Jahns and Engel got a start on what will be the first complete survey to trace the active Garlock fault, sister of the infamous San Andreas fault, which has been responsible for California's worst earthquakes. Because the area has never been mapped except from the air, geologists have had to speculate as to the course of the Garlock fault. In making their survey Jahns and Engel may also discover what geologists have long suspected, that this area contains the key to some of the most important regional geological structures in the southwest.