

THE MONTH AT CALTECH

VITAL STATISTICS

A TOTAL OF 1272 students registered for the 1948-49 school year at Caltech on September 27. There are 754 undergraduates, and 518 graduate students. The freshman class numbers 172, about 22 per cent being veterans. Of the 200 new students registering this year, six are from outside the United States—Costa Rica, Hawaii, England, Canada, Dutch East India, and Pakistan. And in the entire student body there are 76 men from 28 foreign countries.

TROUBLE IN THE TUNNEL

THE SOUTHERN CALIFORNIA Cooperative Wind Tunnel, at 950 South Raymond Avenue, is temporarily shut down as the result of an accident on September 13 which caused some \$350,000 worth of damage. The tunnel—which handles an annual \$800,000 worth of aeronautics research experiments for the airplane industry—was in full operation when one of the 16 fan blades in the upstream propeller hub broke out of its socket. The loose blade smashed into the others and debris roared down the tunnel.

Because the entire structure was subjected to a severe racking, it will require careful inspection of critical areas before operation can be resumed—December 1, at the earliest. In the meantime, arrangements have been made for the Cornell Tunnel, identical with that at Caltech, to take over the most urgent tests. Availability of spare blades and other parts from the Cornell Tunnel will also speed up the repair work at Caltech.

ANTI-THOMAS COMMITTEE

ON SEPTEMBER 6, eight leading atomic scientists sent telegrams to President Truman and Governor Dewey, urging an investigation of the "smear tactics" of the House Un-American Activities Committee. The scientists, all of whom had participated in the development of the government's atomic energy program, included Caltech's Professor of Physics Charles C. Lauritsen; Dr. Karl Compton, president of the Massachusetts Institute of Technology; Dr. Harold C. Urey of the University of Chicago; Dr. George B. Pegram, Columbia University; Dr. Philip M. Morse, M. I. T.; Dr. Thorfin R. Hogness, University of Chicago; Dr. John C. Warner, Carnegie Institute of Technology; Prof. Harrison Brown, University of Chicago.

The tactics of the Thomas Committee, said the telegrams, had caused many topnotch scientists to resign from government service because "they found it increasingly difficult to reconcile themselves to government employment on secret projects where they are looked upon by groups such as the Un-American Activities Committee as men not to be trusted, where they must subject themselves to the possibility of irresponsible smears that may ruin them professionally for life. In many cases the men prefer to work else-

where for considerably lower salaries on research programs completely unconnected with our atomic endeavors." Of the 150 senior American scientists mentioned in the wartime Smyth Report, "fewer than 10% are now devoting their full energies to the various government atomic programs."

"No nation with adequate scientific resources can hope for any degree of security in the event of another war," the scientists stated. "In the face of this fact, it is important that the leaders of our nation attempt to understand the conditions under which scientific research can be and cannot be done. In particular, if our nation is to have a vigorous government research program, the unhealthy atmosphere that has been created by the Un-American Activities Committee must be removed."

EYE AND EAR

EARLY IN 1949 is the best estimate that can be made at this time as to when the 200-inch Hale telescope on Palomar Mountain will go into operation, according to Dr. Ira S. Bowen, director of the Mt. Wilson and Palomar Observatories. There is no possibility that it will be in operation on any research program this year, he said.

One auxiliary mirror, the 36-inch Coudé, remains to be completed and installed. A small modification of the 36 support mechanisms which hold the big mirror has been completed. Final adjustment of the support mechanisms—a long, tedious job—is yet to be made, along with periodic test photographs to determine how the telescope is functioning. This work will require at least the remainder of 1948.

In the meantime, the big 48-inch Schmidt camera is also being readied for operation and put through its first tests. First job of the Big Schmidt will be mapping of the skies of the northern hemisphere, a project that will require from two to three years. Much of the work to be done later by the 200-inch will be determined by results obtained with the Schmidt, which places it in the position of serving as a scout for the Hale.

While the scientists on Palomar Mountain are looking into space, others in Ithaca, New York, are listening to it. Cornell University now has a \$30,000 "Ear" which complements Caltech's \$6,000,000 "Eye". Made possible by radar devices developed during the war, the radio telescope is able to tune in on the radio waves which are transmitted from celestial bodies. Its "mirror" is a 204-inch saucer-shaped radio reflector—which means that, by stretching, the ear is just four inches bigger than the eye.

HONORS AND AWARDS

ON OCTOBER 20, Dr. Theodore von Karman, director of the Guggenheim Laboratory of Aeronautics at Caltech and chairman of the Scientific Advisory Board of the U. S. Air Force, received the 1948

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Franklin Gold Medal, highest honor of the Franklin Institute of Pennsylvania.

Dr. von Karman was awarded the medal "in recognition of his outstanding engineering and mathematical achievements, particularly those relating to the development of advanced aerodynamic conceptions which have directly influenced the progress of aeronautical design, and for his unusual leadership whereby some measure of his own genius is constantly instilled in those who work for him."

Dr. von Karman has also received the Presidential Medal for Merit (p. 5) and the 1947 John Fritz Medal, highest engineering honor awarded in this country.

At the traditional Medal Day ceremonies in Philadelphia on October 20, a Franklin Medal was also presented to Dr. Wendell Stanley, biochemist and director of the virus laboratory of the University of California. Previous Franklin medalists include Thomas A. Edison, Guglielmo Marconi, Niels Bohr, Orville Wright, Albert Einstein, Harlow Shapley, Enrico Fermi and Sir Robert Robinson.

Franklin Thomas, Professor of Civil Engineering and Dean of Students at Caltech, was nominated as the 1949 President of the American Society of Civil Engineers by the organization's board of directors at the Society's fall meeting in Boston. Dean Thomas, who was a national director of the Society from 1930 to 1933 and a Vice-President in 1944-45, will take office at the Society's annual meeting in New York next January.

Mr. Hunter Rouse, Assistant Professor of Fluid Mechanics at Caltech from 1933 to 1936, and now director of the Iowa Institute of Hydraulic Research and Professor of Fluid Mechanics at the University of Iowa, was the 1948 recipient of the \$1,000 George Westinghouse Award of the American Society for Engineering Education. Presented annually by the society for distinguished contributions to the teaching of engineering students, Professor Rouse was cited "for his extensive influence upon the teaching of fluid mechanics, for his revealing synthesis of diverse information, and for his inspiring guidance to students and associates."

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