

# C. I. T. NEWS

## NUMEROUS ENDOWMENTS NOTED

INCOME FROM \$4,777,000 in endowment gifts to the California Institute of Technology which have been made, or have matured, this past year will enable the Institute to keep its deficit for current operations for this year to a manageable size, Dr. Lee A. DuBridge announced at Commencement exercises. Dr. DuBridge said that in addition to this amount the Institute had also received gifts earmarked for current operating expenses, specific research projects, scholarships and fellowships totaling \$295,712. These gifts were separate from those for endowment.

Endowment gifts were as follows:

Bequest of John H. Eagle who left four-fifths of his residuary estate to the Institute, settlement of which is nearly completed, and which will yield approximately \$3,500,000.

Bequest of Henry M. Robinson of an endowment fund for work in Astrophysics amounting to \$488,000.

Bequest of Mrs. Louise E. Kerckhoff for a William G. and Louise E. Kerckhoff Endowment Fund for work in biology, \$400,000.

Bequest of Mrs. David Lindley Murray to found an educational and scholarship fund in honor of her husband, \$310,000.

Gift of Frederick Roeser to establish a loan scholarship and research fund, \$59,000.

Gift by Industrial Relations Counsellors of a fund collected from various industries to establish a Clarence J. Hicks Memorial Fellowship Fund in Industrial Relations, \$20,000.

Gifts for other than endowment were as follows:

A national Foundation for Infantile Paralysis grant of \$300,000 to be paid at the rate of \$60,000 annually for five years for research in fields of biology and biochemistry.

A Rockefeller Foundation grant for work in chemistry and biology, \$50,000.

Additional miscellaneous gifts for work in biology, \$45,362.

Gifts and grants from 13 different industrial corporations for fellowships and research projects totaling \$50,350.

Subscriptions by a number of industrial corporations and some labor unions for support of teaching and research in industrial relations, \$20,000.

Other gifts during the year, \$70,000.

In addition to these gifts, \$250,000 in additional money was given by the Rockefeller Foundation for completion of the Palomar Mountain 200-inch telescope.

## GEOLOGISTS CHECK ACTIVE FAULT

AN ACTIVE FAULT, discovered in 1913 by Dr. J. P. Buwalda, Chairman of the California Institute of Technology division of Geology, broke the ground on the Mojave Desert when the whole of Southern California was shaken by an earthquake on April 10. The break, the edges of which moved about three inches, has been traced for a total distance of three miles along the face of bluffs and westward over the desert, the Institute seismologists said.

This is in loose material and the motion of the underlying rocks may have been much greater.

The fault, which Dr. Buwalda described in his first published paper while a graduate student at the University of California, is about 30 miles east of Barstow and less than two miles south of the Union Pacific lines and Highway 91. It follows a line of steep bluffs which face south to the Mojave River.

The nearest houses to the fault are at Manix and Field stations, and were seriously damaged by the earthquake. No one was injured, however. Further west near the river two adobe ranch houses were cracked, the exploring party reported.

Investigation of the quake has been under the direction of Dr. C. F. Richter, professor of seismology at the CalTech Seismological Laboratory. The first of three expeditions to the quake center was dispatched by J. M. Nordquist of the Laboratory who first determined the source of the quake during the temporary absence of Dr. Richter.

From records at the Seismological Laboratory and auxiliary stations, it was indicated that the earthquake had originated in this fault, Dr. Richter said. A group of CalTech students, S. T. Martner, M.E. Denson, and B. F. Howell, investigated and found the effects exactly where they were expected. Two later expeditions have been sent out and Dr. Buwalda has also been over the ground and is preparing a report on his findings.

Special scientific credit goes to F. E. Lehner and Ralph Gilman of the Seismological Laboratory, Dr. Richter said, for setting up and operating temporary seismological stations and participating in other field work during the investigation.

## NO STUDENT TOURS THIS SUMMER

STUDENT GUIDED tours at the California Institute will be discontinued for the summer vacation period. It is expected that the service will be available again on October 3. The Optical Shop in which the mirror for the 200" Palomar Mountain telescope is being polished will continue to be open to the public between 9 a.m. and 4 p.m. Monday through Friday.

## STOCK TO HEAD GEOLOGY

DR. JOHN P. BUWALDA, professor of geology, will retire as chairman of the division of geology at the Institute July 1, and Dr. Chester Stock, professor of paleontology, will assume the duties of head of that division. Dr. Buwalda asked to be allowed to retire in order to complete a number of research projects in structural geology upon which he has been working for some time. He will continue in his capacity as professor of geology.

President DuBridge in announcing Dr. Buwalda's retirement said, "The California Institute owes a great debt of gratitude to Professor Buwalda for his long years of important service with the Institute. He is primarily responsible for building the Division of Geological Sciences from nothing up to one of the finest geological centers in the country. For twenty-one years he has been leader of this division, and though the Institute will sorely miss him in this post, we feel that he deserves a respite from administrative duties in order that he may give more time to the completion of several important research studies."



Dr. Linus Pauling, chairman of the Division of Chemistry, received a Doctor of Science degree from Cambridge University, Cambridge, England, June 12. Dr. Pauling, shown above enroute to England with his wife, is attending a number of scientific meetings while in Europe. Before returning to this country late in July, the Paulings will visit Norway and Sweden.

### ASSOCIATES HEAR ATOMIC ENERGY TALKS

THREE DINNER meetings in May presented to Institute Associates a symposium on atomic energy. Held in the Athenaeum, these meetings gave members of the California Institute Associates, an organization which has as its object the aid and advancement of the welfare of CalTech, an opportunity to hear first-hand information from six men who can be considered authoritative in this field.

The first meeting featured "Nuclear Physics, the Basis of Atomic Energy." Dr. W. A. Fowler, professor of physics, and Dr. R. F. Christie, associate professor of theoretical physics discussed this theoretical phase of the problem.

"The Control of Atomic Energy: United States' Problem" was presented at the second meeting by President Lee A. DuBridge and Dr. J. Robert Oppenheimer, professor of theoretical physics. Dr. DuBridge, who directed the Government's huge Radiation Laboratory project at M.I.T. during the war, is a member of the General Advisory Committee of the United States Atomic Energy Committee. Dr. Oppenheimer was director of the Laboratory at Los Alamos, New Mexico, where the atomic bomb was developed, was a member of the Lilienthal Committee which prepared the Acheson Report, and is now chairman of the committee appointed by the President to advise the United States Atomic Energy Commission.

Dr. R. C. Tolman, CalTech professor of physical chemistry and mathematical physics, and Dr. H. S. Kramers, Nobel Laureate and professor of physics at the University of Leiden, Holland, spoke on the problems of atomic energy control from an international standpoint at the third meeting for Associates. Dr. Tolman is scientific advisor to Bernard Baruch, United States representative on the United Nations Atomic Energy Commission, and Dr. Kramers was the Dutch representative on the Commission and its first representative.

### WATSON NAMED DIVISION CHAIRMAN

E. C. WATSON, professor of physics, was appointed Chairman of the Division of Physics, Mathematics, and Electrical Engineering at the California Institute in May. Professor Watson, who joined the physics faculty in 1919, has been acting chairman of the division which he will now head permanently, since the resignation of Dr. William V. Houston, now president of Rice Institute, Houston, Texas.

Professor Watson served as administrative head of the CalTech rocket project during the war which included not only the design and development of most of the major rockets used by the U. S. armed forces, but also production of over a million rounds of rockets. He was a member of Division 3, National Development and Research Committee from 1941 to 1945.

He is chairman of the Faculty Board and Dean of the Faculty, and a member of numerous campus committees. He is also a member of Phi Beta Kappa, Sigma Xi, and Tau Beta Pi, a fellow of the American Physical Society, American Association for the Advancement of Science, and a member of the American Association of Physics Teachers and History of Science Society.

Professor Watson was an assistant in physics at the University of Chicago before coming to the Institute, and during the first World War did research at the U. S. Submarine Base, New London, Connecticut.

For many years he has supervised the Friday Evening Demonstration Lectures and Teachers Institute Lectures at CalTech.

### Our Alumni Fund

(Continued from page 4)

basic sciences and the humanities to fit them for leadership in the complex world of today and tomorrow. Tech alumni recognize the great advantages of small classes, intimate association with outstanding faculty men, and the academic freedom possibly only in a small school independent of government support and political pressures.

Such schools as CalTech can exist only if those who recognize their worth support them generously. Alumni who support the California Institute of Technology Alumni Association Fund by assisting in the solicitation of funds and by giving what time, effort, and money they themselves can afford to give will benefit the Institute and the social order it serves, the Alumni Association, which will grow in stature as it serves its Alma Mater, and themselves as they become more closely identified with a great and growing institution and a great and growing body of alumni.

## DUBRIDGE SPEAKS AT TECH COMMENCEMENT

THE LARGEST NUMBER of students ever to receive degrees from the California Institute of Technology were graduated at commencement exercises on the CalTech campus Friday, June 13. More than 450 undergraduate and graduate students received degrees.

The commencement address was given by Dr. Lee A. DuBridge, CalTech president, who spoke on "The Responsibility of the Scientist."

As a part of commencement week activities a garden party honoring members of the class of 1947 was held Thursday afternoon from 4 to 6 p.m. at the Athenaeum with the president and board of trustees as hosts. Attending the reception in addition to graduating seniors, their families and friends, were associates of the institute, faculty members and special guests.

## M.E.'S CLARK REPORTS TESTING PROGRAM

DR. D. S. CLARK, associate professor of mechanical engineering, spoke at a meeting of the American Society for Testing Materials at Atlantic City, N. J. He presented a paper on "An Experimental Study of the Propagation of Plastic Deformation Under Conditions of Longitudinal Impact" of which he and Dr. P. E. Duwez of the Jet Propulsion Laboratory were co-authors.

The papers presented the results of a portion of the work done at CalTech in the field of impact studies during the war under governmental research contracts.

## ACADEMY OF SCIENCE PICKS DR. WENT

DR. FRITS W. WENT, professor of plant physiology at the California Institute of Technology, was elected to membership in the National Academy of Sciences, it was announced in May. Election to the National Academy of Sciences, in which membership is limited to outstanding men in that field, is one of the highest honors a scientist can attain.

Dr. Went is particularly well known for his work on plant growth hormones and he is accredited with being the first to advance that phase of plant physiology to the place where it could be dealt with experimentally. His discoveries in the use of plant hormones for rooting of cuttings and in inducing fruit to set have led to wide use by growers. More recently he has been doing extensive work with plants under controlled conditions in CalTech's unique air-conditioned greenhouse in which temperatures, humidity, and light can be accurately regulated.

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## Alumni Help the Admissions Committee

(Continued from page 5)



Foster Strong

rice T. Jones '26 presiding, the chapter agreed to organize an informal speakers' bureau to provide speakers to address high school students and instructors on CalTech. The chapter also voted to set up machinery to take over supervision of freshmen entrance examinations to replace the present system of having such examinations given by high school instructors.

"I enjoyed the visit immensely," Professor Strong reported. "I found the San Francisco alumni most interested in CalTech and actively ready to do things with and for the school. They were very eager to find out ways in which they could help C.I.T. develop. I would strongly recommend that more staff members going north stop in on the San Francisco alumni. The alumni will appreciate the contact and the staff members will gain in their own enthusiasm and pride in CalTech from the contact."

These are examples of projects that are now underway or will be started during the coming year. It should also be pointed out that during the past six months more than 400 students from 14 different secondary schools visited CalTech and were taken for a tour of the campus and its facilities.

Special attention was given to such visiting groups and every effort was made not only to show them as much of the campus, its laboratories and other facilities as possible, but when possible they were addressed by some member of the Admissions Committee or other faculty member as well. Dates for visits were arranged as far in advance as possible and, when requested, it was also arranged for such groups to obtain meals at the cafeteria.

These are examples of what has been done during the past year. Both alumni and the Institute have initiated them. They have all been instrumental in getting the "CalTech story" to prospective students and their instructors. It is a good beginning and close cooperation between the school and alumni can well result in an outstanding job being done in the future.

## ARMY STUDENTS TAKE REFRESHER THIS SUMMER

A GROUP of 15 U. S. Army Corps of Engineers officers will take special refresher and graduate courses in Civil Engineering at the California Institute of Technology this summer. Study will include work in mathematics, mechanics, and hydraulics.

At the present time Army and Navy personnel totalling 81 officers are taking both undergraduate and graduate work in civil, mechanical, and aeronautical engineering at CalTech.

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