

Letters to the Editor

I HAVE BEEN very impressed with the high caliber of the Engineering & Science Monthly, particularly as exemplified by two recent articles which caught my eye, one by Mr. Puckett on supersonics and the last by Mr. Anderson of General Motors who wrote a very revealing article on industrial relations. I merely want to tell you that I think you are doing a bang-up job in producing an outstanding magazine which has already proven of distinct value to members of my staff for the information contained on a wide variety of subjects.

Very truly yours,

Robert M. Stanley '35

Chief Engineer
BELL AIRCRAFT CORPORATION

I WAS VERY unhappy with your budget percentage expenses for 1946-47. It seems to me that the amount spent on Alumni Magazine could be certainly cut, and the amounts for administration put to some use in furthering the employment facilities or helping the student body.

I may be speaking alone, but except for my time in the service, when anything from the past was a great pleasure to read, I could do with less of the "slick" in the Alumni Magazine, and have more news. I think that we should not try to "sell" the magazine by its looks, but rather give a little of what our classmates are doing.

Yours truly,
John Small '41

The subject of proper allocation of funds to ENGINEERING AND SCIENCE has consumed many hours of debate in meetings of the Board of Directors. How many alumni prefer that a small news-letter be substituted for ENGINEERING AND SCIENCE MONTHLY?

How many news-items of classmates has member Small submitted? —Ed.

C. I. T. NEWS

PAULING TO TEACH AT CAMBRIDGE

PROFESSOR Linus Pauling, Division of Chemistry and Chemical Engineering chairman, who returned in August from England where he received honorary doctor of science degrees from Cambridge University and the University of London, will return next December as Eastman Professor at Oxford University.

The Eastman professorship is awarded periodically to outstanding American scholars and scientists and has previously been held by such men as Supreme Court Justice Felix Frankfurter and the late Simon Flexner, then director of the Rockefeller Institute for Medical Research.

Dr. Pauling will lecture in the field of chemistry at Oxford from January to June, covering the second and third terms at that school and will return to CalTech upon completion of his work in England. In addition to receiving the two honorary degrees on his recent visit to England, he was inducted as an honorary member of the Chemical Society of London and gave an address at the International Congress of Pure and Applied Chemistry, of which he was president of the section on physical chemistry. He was also made an honorary member of the Royal Institution of Great Britain and of the London Athenaeum.

BIOLOGY GETS \$10,000 GRANT

AN ANNUAL grant of \$10,000, renewable each year for a period of five years, has been made to the Division of Biology by the Herman Frasch Foundation. This money will be used for basic research work in the development and application of methods of enzyme and protein chemistry in the study of plant growth and development.

The grant will enable the Institute to carry on further research in a field in which it has done notable work for the past 16 years. It was such research in this field, under the leadership of Professors F. W. Went, A. J. Haagen-Smit and James Bonner, that was basic to the recent remarkable advances in practical applications of specific chemicals to the control of plant growth and behavior. The present extensive use of hormones in the control of rooting cuttings, regulating flowering, inducing fruit setting and in differential killing of undesirable species of plants (weed killers) is one result of basic research work by CalTech plant physiologists in the past.

The Frasch Foundation grant will enable the Division of Biology to search for new hormones which function in plants and the possibility of their application from the outside as means of further control of plant growth. It is proposed to undertake the separation, isolation and study of particular enzyme systems of higher plants, especially those which appear to have the greatest interest in relation to plant growth.

CALTECH-OXY ALUMNI FOOTBALL RALLY

PASADENA ATHLETIC CLUB
WEDNESDAY, OCTOBER 22, 12 to 1:30 P. M.

\$1.60 per plate (pay at door)

MAKE RESERVATIONS WITH HAL MUSSELMAN
RY. 1-7171 SY. 6-7121

STERLING IS TEACHING AT WAR COLLEGE

DR. J. E. WALLACE STERLING, of the California Institute, has joined the resident faculty of the National War College at Washington, D. C., for the autumn semester.

Dr. Sterling is one of four or five civilian members of the resident faculty whom the government has selected from nationally known instructors in international affairs.

Prior to going to Washington, Dr. Sterling spent two weeks at Dartmouth College attending a seminar on problems of U. S. foreign policy which was organized by The Brookings Institution.

The National War College, which was established last year, will give some 110 carefully chosen students an intensive course on international politics, economics and security. Ten or 12 of these students are from foreign service and the others highly qualified and experienced Army and Navy personnel.

Except for the year 1939-40, when he did research in Canada as a Rockefeller Fellow, Dr. Sterling has been at CalTech since 1937. He came to the Institute from Stanford University where he was a member of the research staff of the Hoover War Library.

BENO GUTENBERG INSPECTS JAPANESE GEOPHYSICAL ORGANIZATION

DR. BENO GUTENBERG, professor of geophysics at the Institute, returned to Washington, D. C., via Guam following a four day inspection and observation tour of Japanese seismological organizations.

While in Tokyo, Dr. Gutenberg conferred with Supreme Command for the Allied Powers and 43rd Weather Wing officials, and inspected the Central Meteorological Observatory and the Earthquake Research Institute.

He declared that the Japanese research organizations inspected were comparable to any in the world today, and, that while no basic discoveries were made during the war, the developments of their continuing research program are being made available to world seismologists through the medium of the 43rd Weather Wing.

Dr. Gutenberg has been professor of geophysics since 1938, and has done extensive research for the armed forces as a member of the National Research Council. Among his many scientific accomplishments is the first exact determination of the radius of the earth's surface.

NEW FACULTY SALARY PLAN INAUGURATED

A NEW FACULTY salary plan based on twelve instead of nine months appointments and providing for substantial salary increases was put into effect July 1 by the California Institute of Technology Board of Trustees. The new plan will provide a month's vacation annually, and for granting of leaves of absence with or without pay, depending on the type of work to be done by faculty members during such periods of leave.

Although some faculty members were already on a twelve month basis, this has not been general practice at the Institute. It is felt that changing to this plan will be beneficial to both the faculty and Cal-

Tech, and the increased annual salaries will aid in keeping Tech's excellent faculty and in obtaining top men in science, engineering, and the humanities in the future.

The new year-round appointment plan will enable faculty members to do research, study, preparation of course material, teaching, student supervision and administration work during the summer months both on and off the campus. Although the Institute does not plan to re-establish summer sessions, there may be times when refresher courses or graduate seminars will be desirable during the summer months.

Vacations will be encouraged whether faculty members remain at CalTech during the summer or go elsewhere on leave.

BIOLOGY'S STURTEVANT RECEIVES PRINCETON DEGREE

DR. ALFRED H. STURTEVANT, professor of genetics at CalTech, received an honorary degree of Doctor of Science from Princeton University this June.

An eminent theorist, biologist, and field naturalist, his researches on genes and chromosomes have laid the foundation upon which much of modern science of genetics is built today, and it was for this outstanding work that Princeton honored him.

He was one of eight scientists, including Walter S. Adams, astronomer and director emeritus of the Mount Wilson Observatory, to receive this honorary degree from Princeton.

NEW GRANT FOR ELECTRICAL CALCULATOR

A \$5,000 FREDERICK Gardner Cottrell grant from the Research Corporation of New York for "Research on Fundamental Methods of Computing by Electrical Circuits," was recently received by the Institute. These funds will be used for basic research on large scale calculators such as CalTech's new Electric Analog computer now nearing completion. Much of this work will be devoted to developing new techniques as related to such computers.

Weighing approximately 33,000 pounds, the completed machine will occupy some 1,000 square feet of the new analysis laboratory which is being built at a cost of approximately \$100,000. The laboratory is under the direction of Dr. Gilbert D. McCann, professor of electrical engineering, who is supervising construction of the Calculator.

PLANT PHYSIOLOGIST WENT HEADS SOCIETY

ELECTED PRESIDENT of the American Society of Plant Physiologists for 1948 is Dr. Frits W. Went, worker with plant hormones, at the Institute. Professor Went is credited with being the first to advance that phase of plant physiology so that it could be dealt with experimentally. His discoveries in the use of plant hormones for rooting cuttings and in inducing fruit to set have led to wide commercial application by growers. He is currently doing extensive work with plants under controlled conditions in CalTech's unique air-conditioned plant physiology laboratory and green house.

GRAY OF INDUSTRIAL RELATIONS HEADS SURVEY

UNDER THE guidance of an advisory committee representing leading industrial organizations and California commerce and business groups in this area, the Industrial Relations Section launched a comprehensive survey of personnel practices in Southern California in August.

The survey is designed to obtain comprehensive information as to work schedules, premium incentive and holiday pay, shift differentials as well as union representation. The questionnaire was sent to 1200 Southern California industries, covering piece-rate and other incentive work on one hand and salaried workers on the other hand.

Copies of the final tabulations will be made available to all companies participating as soon as such tabulations have been completed. Copies of the final report will not be made generally available to others until four months after participating companies have received their reports.

NOYES PROFESSORSHIP GIVEN TO CORNELL CHEMIST

THE APPOINTMENT of Dr. John Kirkwood, professor of chemistry at Cornell University, to the Arthur Amos Noyes Professorship of Chemistry at the California Institute of Technology has been announced by President Lee A. DuBridge.

Dr. Kirkwood is the first to be appointed to this professorship which was recently created by the Board of Trustees in honor of Dr. Noyes, first chairman of the CalTech division of chemistry.

An outstanding theoretical chemist, Dr. Kirkwood obtained his Bachelor of Science degree from Chicago University in 1926 and his doctorate from Massachusetts Institute of Technology in 1929. He also spent two years as a student at CalTech. A National Research Fellow in 1929-30 and research associate in Physical Chemistry in 1930-31, he later studied at Leipzig and Munich in 1931-32 as an International Research Fellow. From 1932 to 1935 he was a research associate at M.I.T. and in 1934 was appointed assistant professor of Chemistry at Cornell. In 1937 he became associate professor of Chemistry at Chicago University and in 1938 returned to Cornell as a full professor.

He received the International Academy Chemical Society Award in 1936, was associate editor of the Journal of Chemical Physics in 1941 and is chairman of the Division of Physical and Inorganic Chemistry of the Chemical Society.

He will come to Pasadena this fall to assume the Noyes Professorship.

HUMANITIES ADDS TWO

NEW MEMBERS of the California Institute of Technology Humanities Division faculty this year are history professors Dr. Henry McCreery and Dr. Rodman Paul. Dr. McCreery, who joined the faculty as assistant professor of history, comes here from Stanford where he obtained his doctorate degree and was a Rockefeller Fellow. He is a graduate of Prince-

ton University and was on the staff of Robert College in Turkey. He also studied in Munich and Paris.

Dr. Paul, who is here as associate professor of history, has been an instructor in history at Yale for the past year. A graduate of Harvard, where he also obtained his doctorate, he was an instructor and tutor at that school from 1938 to 1940. In 1940-41 he had a Sheldon Traveling Fellowship from Harvard. He was also assistant dean of Harvard College in 1937-38 and 1942-43. From 1943 to 1946 he served with the U. S. Navy.

Dr. Paul's special field is American history, particularly California history and he has just published a book "California Gold" dealing with that subject.

"STATURE OF A MAN" MCKINNEY CONTEST SUBJECT

CHARLES SUSSKIND and Alfred E. Waters, both juniors at Tech, won first and second prize respectively, in the McKinney Prize Contest in English, an annual event at CalTech established last year by Dr. Samuel P. McKinney of Los Angeles to cultivate proficiency in English.

First prize consisted of \$75 and a copy of Webster's Biographical Dictionary; second prize \$50 and a copy of Bartlett's Familiar Quotations. Prizes were awarded on the composition and reading of an original essay under the general title of "The Stature of a Man" based on the reading of 4 novels, Lewis' *Arrowsmith*, Santayana's *The Last Puritan*, Wells' *Research Magnificent* and Maugham's *Of Human Bondage*.

The contest was held under the supervision of Professor C. K. Judy, Chairman of the Division of Humanities.

PROFESSOR OF MATH PHYSICS NAMED

DR. H. P. ROBERTSON, nationally known mathematical physicist who since 1928 has been on the faculty of Princeton University, became a member of the Institute faculty as professor of mathematical physics July 1. In his capacity of professor of mathematical physics, Dr. Robertson will also have an opportunity to continue his interest in astrophysics and theoretical astronomy in which he has done a great deal of original research. He will add new strength to the CalTech astrophysics department which in addition to supervising the construction and installation of the huge 200-inch Palomar Mountain telescope will, in conjunction with the Carnegie Institution in Washington, operate both it and the Mt. Wilson Observatory. The Palomar telescope is expected to be in operation early in 1948.

Dr. Robertson is no newcomer to the Institute. He obtained his doctorate here in 1925 and was an assistant professor at the Institute prior to going to Princeton in 1928. As a National Research Fellow he studied at Gottingen, Munich, and Princeton. He obtained his bachelor of science and master degrees at the University of Washington.

A member of the Office of Scientific Research and Development and the National Defense Research Committee, he also served in Europe during the war in Scientific Intelligence with the U. S. Army.