

The Month at Caltech



Gordon A. Alles

Two new buildings

Two of the sixteen buildings which (along with increased faculty salaries) are the goal of Caltech's \$16,100,000 Development Program have now been assured by recent gifts to the Institute.

A gift of \$350,000 from Gordon A. Alles of Pasadena means that a major addition to the facilities of the Biology Division can now be built. And a gift of \$335,000 from P. G. Winnett of Los Angeles will provide the Institute with the first student activities center it has ever had.

Dr. Alles' gift will finance in large part a five-story building that is needed for rapidly expanding research and teaching in virology, biochemistry, biophysics, immunology and psychobiology. The new building, forming a link between the present Kerckhoff and Church laboratories, will be located near the northwest corner

of the campus, and will be known as The Gordon A. Alles Laboratory for Molecular Biology.

The total cost of the building is estimated at \$900,000, of which \$391,500 has been pledged by the U.S. Public Health Service.

Mr. Winnett's gift will finance a two-story building that will contain offices for student publications, meeting rooms for the student governing body, headquarters for the student YMCA and headquarters for Throop Club. The building will also contain a new campus bookstore, a student shop, a game room and a lounge.

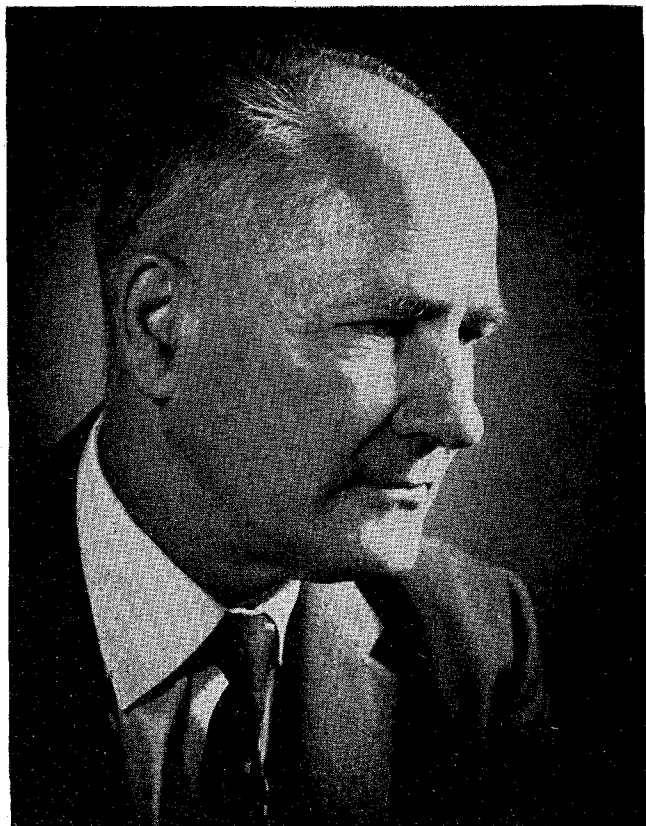
The student union will be located near San Pasqual Street, on the site of the present campus coffee shop, and is to be known as The Winnett Center. Detailed plans are now being worked out by a faculty-student committee, in consultation with architects, but construction cannot begin for about two years—after new student houses and a new cafeteria have been built.

Dr. Gordon A. Alles, chemist and pharmacologist, received his BS (1922), MS (1924), and PhD (1926) degrees from Caltech.

His major interest has been in natural and synthetic drug chemicals, with particular regard to the relations between their molecular structures and their biologic actions. He did early research on the isolation and properties of insulin, and has specialized in the study of the "sympathomimetic" drugs. In 1928, he discovered the physiological properties of benzedrine and contributed to its development as a drug. This drug and dexedrine, which was developed from the discovery, have had world-wide medical use as general brain stimulants.

Dr. Alles has been a research associate in biology at Caltech since 1939. Since 1931 he has been a lecturer in pharmacology at the University of California Medical School in San Francisco, and since 1951 he has been Professor in Residence of pharmacology at UCLA. From 1934 to 1951 he was consultant for Smith, Kline & French Laboratories.

Mr. Winnett, who has been a member of Caltech's board of trustees since 1939, is a native of Winnipeg, Canada, where he was born in 1881. He went directly from school into merchandising and was one of the founders of Bullock's Inc., in 1906. He was president of the corporation from 1933 to 1950 and has since been chairman of the board. He is president of the Bullock Foundation, the Winnett Foundation and the Santa Anita



George W. Beadle, chairman of Caltech's Biology Division and winner of the 1958 Albert Einstein Commemorative Award in the field of science.

Charity Foundation. He is a trustee of the Letts Foundation and an honorary trustee of Claremont Men's College. He holds an honorary LLD from Occidental College.

Mr. Winnett has led an active civic life, having served as chairman of the Los Angeles Area War Chest during the war years and later as chairman of the Community Welfare Federation. He was the organizer and first chairman of the Citizens' Transportation Committee which conducted the original survey for the Los Angeles Freeway System.

In addition to his gift for the student activities center, Mr. Winnett has also recently given Caltech \$75,000 for its expanding program of research in radio astronomy.

Einstein Awards

George W. Beadle, chairman of Caltech's Biology Division has just received the 1958 Albert Einstein Commemorative Award in the field of science. The award was presented to him at the third annual Einstein Commemorative dinner on May 4 at the Waldorf-Astoria Hotel in New York.

These awards, presented by the Albert Einstein College of Medicine of Yeshiva University in New York, were inaugurated on the first anniversary of Einstein's death to lend recognition to outstanding achievement in the fields of Science, Medicine, Citizenship, the Humanities and the Arts. Each award carries a cash prize of \$1,000 and a commemorative medallion.

Other award winners this year include Selman Waksman, director of the Institute of Microbiology at Rutgers University (Medicine); Marion Folsom, secretary of the U.S. Department of Health, Education and Welfare (Citizenship); Archibald MacLeish, Boylston Professor at Harvard University (Humanities); and Marian Anderson, the singer (Arts).

Guggenheim Fellowships

Four staff members from Caltech and its Jet Propulsion Laboratory have been awarded Guggenheim Fellowships for the coming year: Dr. Robert Finn, associate professor of mathematics; Dr. Yuan Cheng Fung, associate professor of aeronautics; Dr. John Laufer, JPL research specialist; and Dr. Guido Munch, associate professor of astronomy and staff member of the Mount Wilson and Palomar Observatories.

Dr. Finn will use the grant to continue his studies of non-linear partial differential equations at the Technical University in Berlin. Starting in November, he will also be a guest lecturer there for six months. A graduate of Rensselaer Polytechnic Institute, he got his PhD from Syracuse University in 1951, and came to Caltech in 1956.

Dr. Fung, an aerodynamicist, will be investigating the thermodynamics of irreversible processes at Gottingen, Germany, and at Delft University in Holland. After receiving his MS degree from National Central University in Chungking, China, in 1943 he came to Caltech

and received his PhD here in 1948. He joined the staff the same year.

Dr. Laufer is interested in measuring characteristics of air turbulence, such as the decay of turbulent shear flow. Though he will travel to many aeronautics laboratories in Italy, his headquarters will be at the Polytechnic Institute of Turin. A mechanical engineering graduate of Louisiana State University, he came to Caltech in 1942, received his MS here in 1943 and his PhD in 1948. He has been at JPL for the past six years.

Dr. Munch plans to study the theoretical aspects of the motion of interstellar matter in our galaxy, the Milky Way, at the Max Planck Institute for Physics in Göttingen. Having been interested in theoretical astrophysics and mathematics for several years, his investigations will be concerned with the origin of interstellar gas and its relation to magnetic fields within the galaxy. After receiving his BS in 1938 and MS in 1944 from the Universidad Nacional Autónoma de México, he came to the United States and got his PhD at the University of Chicago in 1947. He has been a member of the Caltech staff since 1951.

NAS member

Frank Press, professor of geophysics at Caltech and director of the Institute's Seismological Laboratory has just been elected a member of the National Academy of Sciences—one of the highest scientific honors in the nation.

Election to the Academy is in recognition of outstanding achievement in scientific research, and membership is limited to 500 American citizens and 50 foreign associates. The election of Dr. Press brings the number of Caltech staff members in the Academy to 31.

Frank Press's research contributions cover a wide range of subjects in geology, geophysics and seismology—including microseisms (the continuous ground unrest of the earth's surface); the geologic structure of the ocean floor, derived from artificially-produced waves; the behavior of waves in floating Arctic ice sheets; the crustal structure of the earth based on earthquake-wave propagation; and the generation of sound waves in the atmosphere by earthquakes.

A native of New York City, Frank Press was graduated from the College of the City of New York in 1944. He received his MS in 1946 and his PhD in 1949 from Columbia University, where he taught from 1945 to 1955. In addition to teaching, he was employed on research contracts with the U.S. Navy and Air Force, served on the scientific staff of numerous oceanographic expeditions, and, on a tour of duty for UNESCO, set up a system of seismological stations in Israel.

He was an associate professor of geophysics at Columbia and a member of the research staff of the university's Lamont Geological Observatory when he left to come to Caltech in 1955. He has been head of the Seismological Laboratory here since the retirement of Dr. Beno Gutenberg in 1957.

May, 1958



Frank Press, Caltech professor of geophysics and director of the Institute's Seismological Laboratory, is a new member of the National Academy of Sciences.

Dr. Press is currently a member of the Continental Committee of the International Geophysical Year, which is in charge of overall planning of all IGY research projects on this continent. He is also a member of the IGY's Technical Panel on Glaciology, of the Seismology and Gravity Panel and of the Polar Research Committee.

New electrostatic generator

The delivery date is about two years away, but Caltech's Division of Physics, Mathematics and Astronomy is drawing up plans now to house a big new 100,000,000-volt electrostatic generator.

The Office of Naval Research has agreed to supply the \$1,000,000 generator itself, but Caltech will have to build a large room, with thick concrete walls and other heavy shielding, in which to house it.

The machine will be located in the basement of the proposed Mathematics and Physics building on the campus, adjacent to the Kellogg Radiation Laboratory. This building now houses the High-Voltage Laboratory, but, as part of the Caltech Development Program, the interior will be completely altered to provide quarters for mathematics and physics research.

The Institute already has three electrostatic generators housed in the Kellogg Laboratory. They have served to investigate the thermonuclear fusion reaction of light nuclei such as those of hydrogen and helium, which are energy sources in stars. The new 10-mev machine will make it possible to study heavier atomic nuclei and fusion processes.