



Theodore von Karman, Caltech professor of aeronautics, emeritus, receives America's top science honor from President Kennedy — with the full approval of General Bernard A. Schriever, Commander of the Air Force Systems Command; New York State Supreme Court Judge Victor Anfusio; General Curtis LeMay, Air Force Chief of Staff; and Caltech President DuBridge.

The Month at Caltech

National Medal of Science

Theodore von Karman, Caltech professor of aeronautics, emeritus, was awarded the first National Medal of Science on February 18 by President Kennedy "for leadership in the science and engineering basic to aeronautics, for distinguished counsel to armed services, and for promoting international cooperation in science and engineering."

Dr. von Karman, who served as director of the Guggenheim Aeronautical Laboratories at Cal-

tech from 1930 to 1949, is chairman of the technical advisory board of Aerojet-General Corporation, which he helped to found in 1942, and chairman of the NATO advisory group for aeronautical research and development. He is a 1902 graduate of the Royal Technical University in Budapest and received his PhD from the University of Goettingen in Germany in 1908. He became an American citizen in 1936.

At a lunch honoring Dr. von Karman held at the National Academy of Sciences after the presentation, President DuBridge said: "Dr. von

Karman would be eminently eligible for either a medal of pure science or a medal of engineering, for he is one of those rare individuals who has made basic and important and numerous contributions to both of these areas of knowledge.

“ . . . Dr. von Karman’s choice for this honor is on the basis of the *brilliance* of his many achievements, and not on their *massiveness*. Nevertheless, their massiveness alone is profoundly impressive.

“Take, for example, the description of his career. The list of the actual positions and appointments he has held contains 42 items. The list of his honorary degrees numbers 28. Of his decorations, orders and awards, there are 38. And he is a fellow, honorary fellow, honorary member, life member, charter member, or member of no less than 55 professional organizations throughout the world. His collected works, published in 1956, fill four sizable bound volumes. The first paper in Volume I is dated 1902, the year in which von Karman was 21 years of age . . . Surely, it would be hard to find anyone else in the history of science or technology who, after 61 years of continuous scientific productivity, is still going strong.”

Satellite Corporation President

Joseph V. Charyk, Under Secretary of the Air Force, has resigned to accept the post of president and principal operating officer of the new Communications Satellite Corporation in Washington, D.C. The corporation is the first private enterprise corporation to be chartered to operate in space, and the first profit-making corporation ever set up by the United States for private financing.

Dr. Charyk received his MS in 1943 and his PhD in 1946 from Caltech. Canadian-born, he was graduated from the University of Alberta in 1942. In 1945-6 he served as a section chief at Caltech’s Jet Propulsion Laboratory and instructor in aeronautics at Caltech. From 1946 to 1955 he taught aeronautics at Princeton University. In 1955, during the Eisenhower Administration, he went to Washington to be chief scientist of the Air Force. In June 1959 he was named Assistant Secretary of the Air Force for Research and Development, and less than a year later was appointed Under Secretary of the Air Force.

The Communications Satellite Corporation will probably be ready for business in about a year. The first job Mr. Charyk faces is the preparation of the public sales of stock in the new venture.

Plans call for the transmission of messages, telephone calls, and inter-continental television and radio programs through such satellites as Telstar.

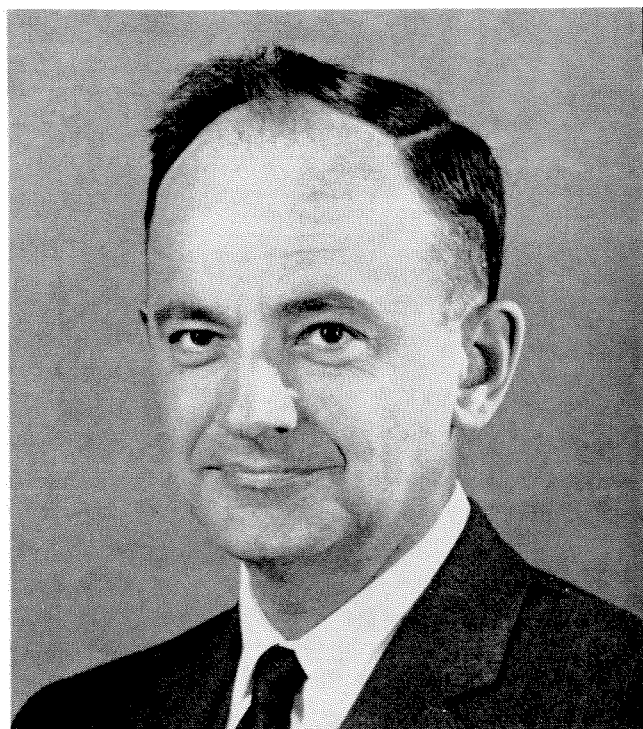
Honors and Awards

Dr. Lee A. DuBridge has been named by President Kennedy to serve on the Distinguished Civilian Service Awards Board which recommends outstanding persons to receive the Presidential Medal of Freedom.

The original Medal of Freedom was established during World War II and was given to those who “aided the U.S. in the prosecution of a war against an enemy.” The award will now be conferred annually by President Kennedy. It will be given to “any person who has made an especially meritorious contribution to (1) the security or national interests of the United States, or (2) world peace, or (3) cultural or other significant public or private endeavors.”

Richard P. Feynman, Richard Chace Tolman Professor of Theoretical Physics, was appointed this month to the State Curriculum Commission by the State Board of Education in Sacramento. The appointment is for a term of four years. Dr. Feynman succeeds C. C. Trillingham, Los Angeles County superintendent of schools.

William H. Pickering, director of Caltech’s Jet Propulsion Laboratory, was named Engineer of



Joseph V. Charyk



William H. Pickering, Engineer of the Year and Time's March 8 cover man.

the Year and given the annual George Washington Award at a banquet meeting at the Beverly Hilton in observance of National Engineers' Week on February 20.

New Chemistry Chairman

John D. Roberts, professor of organic chemistry, has been named chairman of the division of chemistry and chemical engineering, succeeding Ernest H. Swift, who has been chairman since 1958.

Dr. Roberts received his BA in 1941 and his PhD in 1944 from UCLA. He taught and did research there, and at Pennsylvania State College, Harvard University, and the Massachusetts Institute of Technology. He came to Caltech in 1952 as a Guggenheim Foundation Fellow. The following year he went abroad to study the extent of organic and physical chemical research in European universities and laboratories. On his return he joined the Caltech faculty as professor of organic chemistry.

Dr. Roberts is known for his contributions to theoretical organic chemistry. His major research interests are in carbon-containing molecules, their synthesis, structures, and reactions, particularly

rearrangement reactions. He has contributed to the understanding of the behavior of carbon atoms in many types of molecules.

Dr. Swift interrupted his outstanding investigations in the field of analytical chemistry to assume the chairmanship of the division on an interim basis in 1958. A member of the Caltech faculty for 44 years, he is the author of four standard books on analytical chemistry.

"The Institute is very fortunate in securing as the new leader of its chemistry and chemical engineering division so eminent a chemist as Professor Roberts," said President DuBridge. "He will carry on a distinguished tradition which began with the arrival of A. A. Noyes in 1917.

"We pay tribute also to the retiring chairman, Ernest Swift, whose leadership has been so outstanding in recent years. We accepted his resignation with reluctance, but appreciated his strong desire to devote full time again to his teaching and research."

Sloan Foundation Grants

Three Caltech scientists received unrestricted basic research grants from the Alfred P. Sloan Foundation this month: W. Barclay Kamb, professor of geology; Alan T. Moffet, research fellow in radio astronomy; and G. Wilse Robinson, professor of physical chemistry.

Dr. Kamb received a two-year grant in geochemistry and geophysics, and will do research into the nature of recrystallization phenomena in solids under stress, such as glacial ice and metals. He is interested in the flow of glaciers, the study of rock structure, and the atomic structure of rocks and crystals.

Dr. Moffet was awarded a two-year Sloan fellowship in radio astronomy to continue, with other astronomers, the mapping of brightness patterns of radio sources in space.

Dr. Robinson, recipient of a one-year grant, is doing research on the study of the transport and multiplication of energy quanta in molecular aggregates, with special reference to crystalline solids and photosynthetic systems such as plants and green algae. One purpose of the research is to try to determine the effectiveness of purely physical processes by which two low-energy quanta can be converted into a single quantum of high-energy excitation. Such a process might eventually prove to be one of the important steps in the conversion of sunlight into chemical energy in green plants.

Scientists do not apply for the Sloan Founda-

tion grants but are nominated by those familiar with their work and potential.

Two other Caltech scientists are already doing research under Sloan grants: Drs. John H. Richards, associate professor of organic chemistry, and Fredrik Zachariassen, associate professor of theoretical physics.

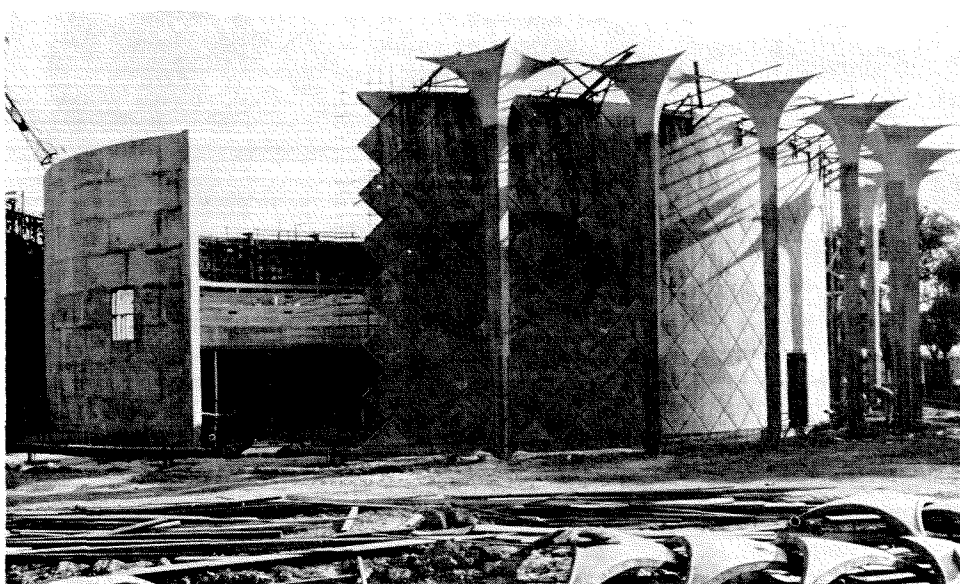
Putnam Winners

Caltech undergraduates came away with both team and individual honors in the 23rd annual William Lowell Putnam Mathematical Competition. There were 1,187 individual contestants and 157 teams from 187 colleges and universities in the United States and Canada in the contest, which consists of a six-hour written examination

on problems covering general college mathematics.

Caltech won the first prize of \$500 in team competition. Members of the team are seniors Edward A. Bender and John H. Lindsey, and sophomore Kenneth Kunen. Bender and Lindsey also ranked among the five highest in individual scoring for the second consecutive year. They each received \$75. Seniors Roger C. Hill and Kenneth B. Stolarsky ranked among the second five in individual scoring and received \$35 each. Honorable mentions went to junior Alan Hindmarsh, senior Charles A. Ryavec, and Kenneth Kunen.

The \$500 won by the prize-winning team goes toward a Caltech mathematics prize which is awarded at Commencement.



UNDER CONSTRUCTION

The circular Arnold O. Beckman Auditorium, located north of San Pasqual Street on South Michigan Avenue, is scheduled to be completed by the end of the year. It will seat 1200 people.

UNDER CONSTRUCTION

The Willis H. Booth Computing Center, on the northeast corner of Chester Avenue and San Pasqual Street, will house the IBM 7090 computer. The Center should be completed and occupied by late fall.

