



PHILOSOPHER IN RESIDENCE

Ninth-century Chinese philosopher Tenjin and his sacred water buffalo recently arrived at Caltech for an indefinite stay. The 800-pound life-size bronze statue was presented to the Institute by art patron Edwin Schneider. The serene pair will reside in Dabney Hall gardens in the lily pond built especially for them.

THE SUMMER AT CALTECH

ADMINISTRATIVE CHANGES

Robert P. Sharp, chairman of Caltech's division of geological sciences for 15 years, has been granted a leave of absence from administrative duties to enable him to spend more time in teaching and research. Replacing him as interim director is Clarence Allen, Caltech professor of geology and geophysics, who has been serving as interim director of the Institute's Seismological Laboratory for the past two years. Don L. Anderson, associate professor of geophysics, will take Dr. Allen's place and becomes the new permanent director of the Seismological Laboratory.

Caltech's division of chemistry and chemical en-

gineering has appointed two new executive officers: Norman R. Davidson, professor of chemistry, and William H. Corcoran, professor of chemical engineering. They will assist division chairman John Roberts in the development of new teaching programs and research projects, as well as in the implementation of existing plans.

HONORS AND AWARDS

Dan H. Campbell, Caltech professor of immunochemistry, has been awarded a certificate in recognition of his services as chairman of the standardization of allergens committee of the National Institute of Allergy and Infectious Diseases. He was also recently appointed representative of the Amer-

ican Association of Immunologists to the Commission on Undergraduate Education in the Biological Sciences, which promotes education in biology among students under college age.

Frederick C. Lindvall, chairman of Caltech's division of engineering and applied science, has been named a Fellow of the American Society of Mechanical Engineers, an honor reserved for members of the Society who have made significant achievements and who have had an active practice in the profession for 25 years or more.

Caltech President Lee A. DuBridge and Frederick C. Lindvall, chairman of Caltech's division of engineering and applied science, have been named to the advisory committee for the newly formed Institute for the Advancement of Engineering, Inc. IAE is an educational corporation formed by a group of Los Angeles engineers to encourage the wider use of engineering in solving educational, industrial, and human welfare problems.

Ernest E. Sechler, executive officer of Caltech's graduate aeronautical laboratory, has been appointed to the Secretary of the Navy's Advisory Board on Educational Requirements. This board, composed of distinguished scholars, scientists, industrialists, and naval officers, provides the Secretary of the Navy with policy guidance regarding Navy and Marine Corps educational programs.

George S. Hammond, Arthur Amos Noyes professor of chemistry at Caltech, is winner of the \$1,000 James Flack Norris Award in physical organic chemistry sponsored by the northeastern section of the American Chemical Society. Dr. Hammond has done extensive research on the chemistry of high-energy compounds and is especially noted for his recent work in photochemistry.

Roger G. Noll, Caltech assistant professor of economics, is on a 1½-year leave-of-absence in Washington, D.C., as a member of the professional staff of the President's Council of Economic Advisors. Dr. Noll graduated from Caltech in 1962, received his PhD in economics from Harvard, and joined the Caltech faculty in 1965.

HIBBS TV HOST

Albert Hibbs, senior staff scientist at Caltech's Jet Propulsion Laboratory, will host the KCET (Channel 28, Los Angeles) television series "R & D Review" during the 1967-68 season. The weekly

program, now entering its second year, reports on new developments in the aerospace industry and is aired Thursdays at 9:30 p.m. and Sundays at 9:00 p.m. After it is shown locally the series will be distributed to 17 other major cities.

NEW PUBLIC AFFAIRS SERIES

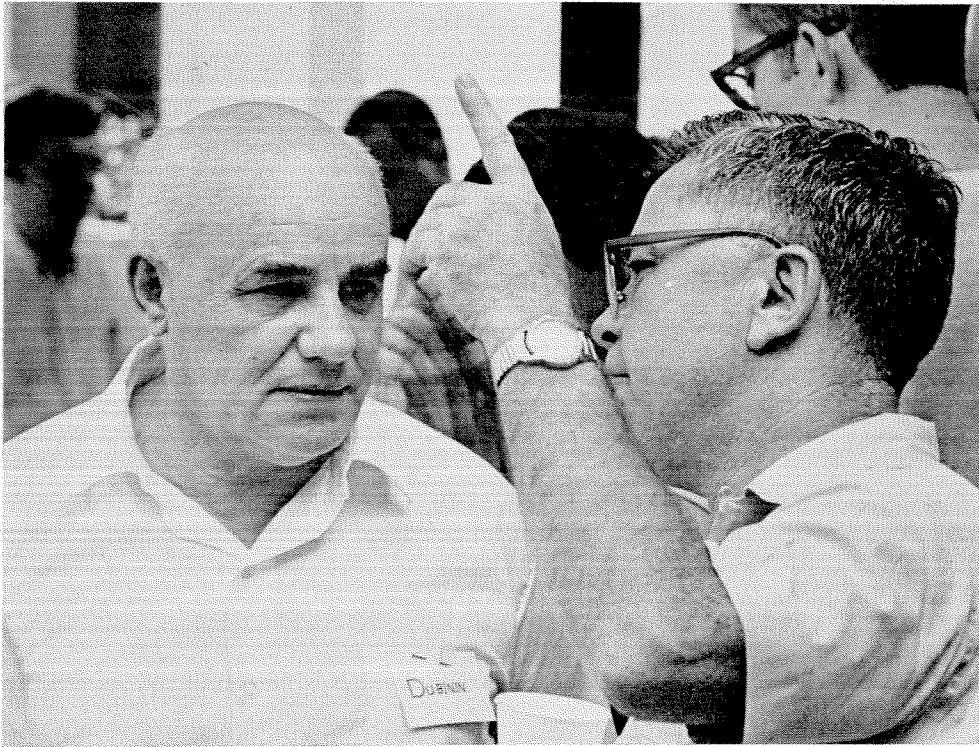
A new public affairs seminar series, sponsored by the Caltech faculty committee on programs, was initiated this month to present current events topics to the community, as well as to Caltech students and faculty. First in the series of speakers was Lord Bessborough, chairman of the board of governors of the British Society of International Understanding. The November speaker will be Philip E. Moseley, director of the European Institute of Columbia University, on "The Soviet Union at Fifty." The seminar series, held in Dabney Hall lounge, is informal and encourages audience participation in the discussions.

FALL LECTURE SERIES

The fall Caltech Lecture Series, presented Monday evenings in Beckman Auditorium, opened on October 16 with a discussion of the Huntington Library art collection by Robert Wark, art curator of the library and lecturer in art at the Institute. The remaining six lectures will cover a wide range of topics: Albert Tyler, Caltech professor of biology, on early development in animals; Harry B. Gray, Caltech professor of chemistry, iron-containing molecules; Milton Plesset, Caltech professor of engineering science, nuclear proliferation and international security; William Pickering, director of JPL, planetary exploration; Rochus E. Vogt, Caltech associate professor of physics, cosmic rays; and Allan R. Sandage of the Mt. Wilson and Palomar Observatories, on cosmic clocks and the creation of the universe.

TRUSTEES

Six new members were elected to the Caltech board of trustees this summer. They are: Robert O. Anderson, chairman of the board of the Atlantic Richfield Company; Roy L. Ash, president of Litton Industries; Stephen D. Bechtel, Jr., president of Bechtel Corporation; Fred L. Hartley, president and chief executive officer of Union Oil Company of California; William A. Hewitt, chairman and chief executive officer of Deere & Company; and Rudolph A. Peterson, president and chief executive officer of Bank of America.



N. P. Dubinin, director of a laboratory of genetics of the Soviet Academy of Sciences, Moscow, considers a point being made by E. B. Lewis, Thomas Hunt Morgan Professor of Biology at Caltech.

For Us, Pasadena Has Meaning

The quiet visit of four distinguished Russian geneticists to Caltech on August 24-27 has a place in history worth noting.

About three decades ago, a growing ideological antagonism to Mendelian genetics in Russia culminated in the elevation of T. D. Lysenko, an agronomist whose work had extended the areas in which wheat could be economically grown in the Soviet Union, to a position of great power in Russian biology. Lysenko was the chief opponent of genetics as it had developed in the western world and in Russia; he promoted a theory utilizing dialectical materialism and Marxist ideology based on a concept of "liquidation of the conservatism of the germ plasm." His doctrine became the official dogma of the Soviet Union; Lysenko was awarded two Stalin Prizes and the Order of Lenin and was made a Hero of the Soviet Union in May 1945.

Over the decades, Russian students of heredity became increasingly isolated from the exciting progress that was being made in molecular biology and genetics in the western world. A few Russians would appear at international congresses of genetics outside Russia; they were all Lysenkoists, uncomfortable, ill-matched, and defensive among their western colleagues. Mendel and Caltech's Thomas Hunt Morgan became the targets of Russian invective, with frequent attacks on "Mendelian,

Morganian, bourgeois, capitalist genetics."

Some work comparable to what was going on in the West could be conducted in Russia over this interval, if it were talked about in Lysenkoist terms and if it could avoid coming into the ideological limelight. But Russian biology dropped further and further behind the progress in the West; men with excellent minds did not choose to go into a field in which the state dictated what they could believe or think, and rigid limitations on what could be



From left: E. B. Lewis, Thomas Hunt Morgan Professor of Biology at Caltech; D. K. Belyayev; N. P. Dubinin; S. I. Alikhanyan; R. S. Edgar, Caltech professor of biology; B. L. Astaurov; and Harrison Brown, Caltech professor of geochemistry, science and government.

thought or done largely sterilized the science.

The dominance of Lysenkoism receded and advanced again, but by the summer of 1961, when at long last there was an international biochemistry congress in Moscow, it became evident to everyone, including the Russians who made up much of the audience for the presentation of papers from the West, that Russian biological science was benighted.

Something, somehow, was done about it. When in 1965 the Mendel Centennial was held in Brno, Czechoslovakia, commemorating one hundred years since the presentation of Mendel's great papers that established genetics, there were rather numerous Russian geneticists in attendance. They gave papers on Mendelian genetic subjects, using Mendelian genetic terms and concepts freely; there was no Lysenkoism at all. Lysenko and his disciples had fallen from power. Now the revision of the power structure appears to be complete.

This summer, four of the most distinguished Russian Mendelian geneticists: B. L. Astaurov, president of the Genetics and Selection Society of the

U.S.S.R.; S. I. Alikhanyan; N. P. Dubinin; and D. J. Belyayev accepted invitations to attend and participate in the annual meeting of the Genetics Society of America at Stanford University in late August and early September. Caltech was on their itinerary.

Driving from the Los Angeles International Airport to the Huntington-Sheraton with Ray Owen, chairman of Caltech's division of biology, and E. B. Lewis, Thomas Hunt Morgan Professor of Biology at Caltech, the visiting Russian geneticists saw the freeway signs that said "Pasadena." One of them asked whether the name had a meaning. Dr. Lewis said that some people thought it had, but it is most likely that "Pasadena" was just a made-up name for a city.

"Made up?" said Astaurov.

"Yes," Lewis said, "it probably has no meaning."

"For us," said Astaurov, "it has meaning."

"Oh," said Lewis, "does Pasadena mean something in Russian?"

"For us it means Morgan and Caltech and Genetics!"

Faculty Changes 1967-1968

PROMOTIONS

CLARENCE R. ALLEN — acting chairman, division of geological sciences.

DON L. ANDERSON — director of the seismological laboratory.

WILLIAM H. CORCORAN — executive officer for chemical engineering.

NORMAN R. DAVIDSON — executive officer for chemistry.

To Professor:

GIUSEPPE ATTARDI — *Biology*

CARVER A. MEAD — *Electrical Engineering*

JEROME PINE — *Physics*

RONALD F. SCOTT — *Civil Engineering*

NICHOLAS W. TSCHOEGL — *Chemical Engineering*

GEORGE ZWEIG — *Theoretical Physics*

To Associate Professor:

JOHN N. BAHCALL — *Theoretical Physics*

DONALD S. COHEN — *Applied Mathematics*

GEORGE R. CAVALAS — *Chemical Engineering*

THOMAS L. GRETTEBERG — *Electrical Engineering*

CLEMENS A. HEUSCH — *Physics*

WILFRED D. IWAN — *Applied Mechanics*

FREDERIC RAICHLIN — *Civil Engineering*

JEROME L. SHAPIRO — *Applied Science*

KIP S. THORNE — *Theoretical Physics*

THOMAS A. TOMBRELLO, JR. — *Physics*

To Senior Research Fellow:

GEORGE A. SEIELSTAD — *Radio Astronomy*

LEWIS G. BISHOP — *Applied Science*

To Assistant Professor:

WILHELM BEHRENS — *Aeronautics*

DAVID L. GOODSTEIN — *Physics*

ROGER G. NOLL — *Economics*

EDWARD C. STONE — *Physics*

JOHN S. ZEIGEL — *English*

NEW FACULTY MEMBERS

Professors:

SEYMOUR BENZER — *Biology* — from Purdue University, where he was Stuart Distinguished Professor of Biology.

HERBERT B. KELLER — *Applied Mathematics* — from New York University, where he was professor of applied mathematics.

BURTON H. KLEIN — *Economics* — from RAND Corporation, where he was head of the economics department.

MAJOR CHARLES J. LARKIN — *Aerospace Studies* — from Wiesbaden, West Germany, where he was stationed with the U.S. Air Force.

HERBERT J. RYSER — *Mathematics* — from Syracuse University, where he was professor of mathematics.

Associate Professors:

THOMAS J. AHRENS — *Geophysics* — from the Poulter Labs at the Stanford Research Institute, where he was chairman of the geophysics department.

JAMES W. MAYER — *Electrical Engineering* — from Hughes Research Laboratories, where he was head of the solid state studies section.