

Paul Eaton, Dean of Students



Foster Strong, Dean of Freshmen

# THE MONTH AT CALTECH

### New Deans

**P**<sub>AUL</sub> C. EATON, formerly Associate Dean for Upperclassmen, has been appointed Dean of Students, and Foster Strong, formerly Associate Dean for Freshmen, has been appointed Dean of Freshmen at the Institute.

In these newly appointed offices, Deans Eaton and Strong will retain the duties they had as associate deans, and will share between them, as well, the responsibilities formerly carried by the late Franklin Thomas, as Dean of Students.

#### **Retiring Mathematicians**

**O**N OCTOBER 1, Dr. William N. Birchby, Assistant Professor of Mathematics, and Dr. Luther E. Wear, Associate Professor of Mathematics, retired from the Institute. Both men had been here for 34 years.

Professor Birchby was an expert designer of mathematics examinations, and his programs for testing the knowledge of students were famous throughout the Institute. He has done research and written a number of papers in his field of analysis in mathematics.

Born near Manchester, England, he came to the United States as a small boy. He was graduated from Hope College in Holland, Michigan, and received his M. A. from Colorado College in 1905.

. Before coming to Caltech in 1918 he was an instructor at Colorado College and a summer instructor at the University of Southern California. He was active on campus as Assistant Registrar, and on the Committees on Freshman Registration and Admission to Upper Classes.

Professor Wear devoted his time at the Institute to instruction rather than research. He taught mathematics to many of today's well-known scientists. In one year, 1925, his students included such outstanding men as Edwin B. McMillan, Nobel Laureate and Professor of Physics at the University of California; Nobel Laureate Carl D. Anderson, Caltech Professor of Physics; John G. Kirkwood, Professor of Chemistry and head of the Sterling Laboratory at Yale University; Alfred Foster, Professor of Mathematics at the University of California; and Charles F. Richter, Professor of Seismology at Caltech.

Professor Wear is outstanding in the field of algebraic geometry, and he is probably best known for his work on rational curves invariance under a group of transformations.

He was graduated from Cumberland University in Lebanon, Tennessee, in 1902, and received his doctorate in mathematics from Johns Hopkins in 1913. He was Professor of Mathematics at Trinity University in Texas for four years and Dean of the Faculty there for a year prior to his graduate study at Johns Hopkins. He joined the University of Washington faculty in 1913 and taught mathematics there until he came to Caltech in 1918.

He is a member of the American Association for the Advancement of Science, the American Mathematical

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Society, Mathematical Association of America, American Association of University Professors, Sigma Xi, and Phi Beta Kappa.

### Industrial Associates Director

**R**OBERT V. BARTZ joined the Institute this fall as executive director of the Industrial Associates. The Caltech Industrial Associates, initiated slightly over two years ago, now include 23 member companies representing the oil, aircraft, steel, chemicals, manufacturing, and other industries.

Mr. Bartz came to Caltech from the Massachusetts Institute of Technology, where he had been director of the Industrial Liaison Office for the past four years. An M. I. T. graduate (1947), he was invited by President James R. Killian in 1948 to assist his office with industrial liaison work after serving for a year as executive aide to the director of the M. I. T. Laboratory for Nuclear Science and Engineering.

The Industrial Associates of Caltech comprise a select group of leading business concerns. Each member company supports the overall research program of the Institute and in return is kept informed on key developments and trends in areas of existing or potential importance to its business.

"It is inevitable," said Dr. DuBridge, "that this kind of relationship will grow in its effectiveness as well as in the extent of business participation. I share the conviction of many business leaders that we are witnessing here a most significant evolution of industryuniversity relationships into associations of much broader scope. Moreover, without compromising our role as an institution concerned with only the most basic aspects of science and engineering, I know this greater interplay with industrial research activity will greatly enliven much of our educational effort."

### Gutenberg's Prize

**D**R. BENO GUTENBERG, Professor of Geophysics and director of the Caltech Seismological Laboratory, has been awarded the Charles Legrange Prize by the Academie Royale de Belgique, Classe des Sciences, for his geophysical research.

The prize is given every four years for achievements in geophysics. It is a cash award, given by the scientific division of the government-sponsored Belgian Academy.

Professor Gutenberg has contributed to the geophysical field through research on the structure of the earth and its core, the structural difference between continents and ocean bottoms, and propagation of sound waves in the atmosphere. During World War II, he was technical advisor for the United States Navy on the use of microseisms in the location of hurricanes and typhoons.



Sir John Cockcroft

### Atomic Energy in England

AT CALTECH last month Sir John Cockcroft, Director of the Atomic Energy Research Establishment at Harwell, England, revealed that scientists at Harwell are within ten years of developing a breeder reactor which will produce enough electrical power for all Britain.

The Harwell scientists have already heated blocks of buildings with atomic power, and the breeder is expected to use no more than 100 tons of thorium to produce electric power for the whole country.

"Use of atom energy will never be as cheap as natural resources," Sir John said, but Britain's dwindling supply of coal makes this alternative vital. Because the United States has an abundance of water power, natural gas, and cheap coal to furnish electrical energy, he noted that the use of commercial atomic energy is not nearly as glamorous in this country.

(For news of one proposal for commercial production of electric power from nuclear fuel, however, see the story on page 9 of this issue).

Sir John Cockcroft came to Caltech last month to deliver two special lectures in physics. For three years during World War II he was chief superintendent of the Air Defense Research and Development Establishment in England. In 1944 he went to Canada to direct the Montreal and Chalk River Laboratory. He has been at Harwell since 1946. In 1951 he shared the Nobel prize with Dr. Ernest Walton of Dublin for their work on splitting the lithium atom.