

### HUGO BENIOFF, professor of seismology

When Dr. Benioff becomes professor emeritus in October, he will have completed 40 years with the Seismological Laboratory. After graduating from Pomona College in 1921. Hugo Benioff began his career with the idea of being an astronomer and worked for a time at Mt. Wilson, but when he found that astronomers work at night and sleep in the daytime, he quickly switched to seismology. He joined the Seismological Laboratory in 1924 and received his PhD from Caltech in 1935. Dr. Benioff is considered a genius in the design of earthquake instruments. One of his first instruments, created in 1932, was the Benioff seismometer, which senses the movement of the earth. These instruments are now used in every country in the world. Equally famous is the Benioff strain instrument, which records the stretching of the earth's surface. One of his most recent accomplishments is a refined version of the old Benioff seismometer which has given seismologists more knowledge about the cause of very deep earthquakes. However, finely designed instruments are only a part of Dr. Benioff's research. Even more important is his intuitive and imaginative approach to the information these instruments yield.

# RETIRING THIS YEAR

## WILLIAM R. SMYTHE, professor of physics

Dr./ Smythe, who will be awarded the title of professor emeritus on July 1, has been a member of the Caltech faculty since 1923. His classes in electricity and magnetism at Caltech have been one of the basic standards by which the graduate students in physics have been measured for many years, even though Dr. Smythe never really wanted to become a professional teacher. He preferred to concentrate on research and, in fact, regarded it as a personal weakness when he found teaching almost immediately enjoyable. In the field of research he was the originator of a method of separating isotopes in quantity, electromagnetically. Dr. Smythe has long been the mainstay of the oral candidacy examinations, and has also served for many years on the graduate committee of the physics division for the admittance of new students. He is now concerned with research on the practical applications of magnetic waves. He is the author of Static and Dynamic Electricity, one of the most widely used reference books on electricity and magnetism.



### DON M. YOST, professor of inorganic chemistry

Dr. Yost becomes professor emeritus this month, after 38 years on the Caltech faculty. A graduate of the University of California in 1923, he came to Caltech for graduate study and did his research in physical inorganic chemistry as one of the small group under Arthur A. Noves. He received his PhD from Caltech in 1926 and then joined the faculty as a research fellow. His fields of interest have included inorganic chemistry, physical chemistry, chemical physics, mathematics, rates of chemical reactions, and "the care and feeding of scientists of imagination." A firm believer in individualism, Dr. Yost always allowed his graduate students a great deal of freedom in their choice of research. He has been called by one ex-student, "the foremost anti-stuffedshirt of American science." During World War II he was a section chairman of the OSRD and participated in the Manhattan Project. He was awarded the Presidential Certificate of Merit in 1948.





### IRA S. BOWEN, director of the Mount Wilson and Palomar Observatories

Dr. Bowen retires this month to become a Distinguished Service Staff Member of the Observatories. A graduate of Oberlin College in 1919, he went on to the University of Chicago for graduate studies and there met Robert A. Millikan, who invited him to come to Caltech. He joined the faculty in 1921 as an instructor in physics, and in 1926 received his PhD from the Institute. Dr. Bowen has contributed greatly to the superlative performance of the 200-inch Hale Telescope at Palomar. He took part in the planning of the Palomar project in the early 1930s, and was personally responsible for the final testing and finishing of the 200inch mirror. He supervised the difficult task of devising ingenious optical tests to determine the corrections to be made in the mirror after it was mounted. He also developed improvements for spectrographic cameras used in astronomical work, and devised such instruments as the image-slicer to increase the efficiency of spectrographic observations. Dr. Bowen has been director of the Mt. Wilson and Palomar Observatories since 1946.

### **Retiring This Year**

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### HERBERT G. NASH Secretary of the Board of Trustees of the Institute

Mr. Nash retires as secretary of the Board of Trustees this month, but will continue to serve as assistant secretarytreasurer to the California Institute Associates. A native of London, England, he came to Caltech from Winnipeg, Canada, in 1922 as chief accountant, and was made assistant secretary in 1935. He has been secretary of the Institute since 1952.





### HAROLD Z. MUSSELMAN, Director of Athletics and Physical Education

Mr. Musselman retires as director this month to become administrative advisor to the Athletic and Physical Education Department for two years. A graduate of Cornell College in 1920, he was a member of the U.S. baseball team in the Inter-Allied Games in Paris in 1919. He came to Caltech as coach in 1921. Those were the days when the Institute had to get permission from Pasadena's Park Department for the students to play tennis and football in Tournament Park; and they did their swimming (when invited) at the Athletic Club. Mr. Musselman became director of athletics and physical education in 1943. He is an associate member of the Tournament of Roses Association, and former president of the Pasadena Games Association.

### HENRY I. WEITZEL, Registrar

Dr. Weitzel retires this month after three years as registrar at Caltech. A graduate of the University of North Dakota (BS '19, MS'20), he received his PhD in education and chemistry at USC in 1933. From 1922 to 1924 he taught chemistry and physics at Pasadena High School, then served as an instructor in applied and industrial chemistry at Pasadena City College from 1924 to 1928. Before coming to Caltech, Dr. Weitzel was research director of the Pasadena City Schools. His wife, Ida, shown with him here, also retires this month as assistant to the secretary of the Board of Trustees. She has worked at Caltech since 1938.



ENGINEERING AND SCIENCE