

the Division of Physics, Mathematics and Astronomy. Stone replaces **Rochus E. Vogt**, the R. Stanton Avery Distinguished Service Professor, who was named vice president and provost of Caltech.

James S. Vinson, currently dean of the college of arts and sciences at the University of Hartford, has been appointed vice president for academic affairs of Trinity University in San Antonio.

John Bardeen, professor emeritus of physics and of electrical engineering at the University of Illinois-Urbana, has been chosen by the representatives of seven national and regional engineering societies to receive the 60th Washington Award. This award, named after George Washington, is given annually to honor an engineer for "devoted, unselfish and preeminent service in advancing human progress."

Heinz R. Pagels has been named Executive Director and Chief Executive Officer of the New York Academy of Sciences. Pagels came to the Academy after sixteen years at Rockefeller University, where he continues to hold an adjunct professorship in physics.

obituaries

Henry A. Barton

Henry Barton, the first director of the American Institute of Physics and a key figure in determining its development, died of a heart attack at the age of 85 on 11 October.

Barton, whose father was an industrial engineer, was born in Pittsburgh. He entered the engineering school at the University of Michigan and shortly thereafter transferred to Princeton University, where he took a basic course in mechanical engineering supplemented by many electives in the department of physics.

At graduation he took a position as a planning engineer at American Telephone and Telegraph in New York but soon decided that he needed more basic education in physics if he was to do significant research in the company. As a result, he returned to Princeton for a PhD. He spent the following two years at Harvard as a National Research Council fellow and then decided he would try an academic research career. He joined the Bartol Research Foundation and two years later became an assistant professor of physics at Cornell.

In the meantime, a group of leaders in The American Physical Society including Karl T. Compton, George Pe-

gram, Frank Foote and Floyd Richtmyer noted with some concern that physics, which originally had attracted mainly academic interest in the US, was beginning to receive increasing attention from industrial organizations, with the result that many physics graduates were going into applied work. In the course of this migration, specialized societies were forming and physicists were drifting away from The American Physical Society. As a result, the APS leaders agreed that a new organization, the American Institute of Physics, should be formed. Physics-related societies joining it would benefit from a combination of interconnection and independence. The new Institute, governed by representatives of all its member societies, would foster links between pure and applied physics, take on the responsibility for publishing physics journals and do its best to publicize the work of physicists. Henry Barton was asked to become the first director. His acceptance, in 1931, was encouraged by his opportunity to start a small high-voltage laboratory in Princeton with an experienced graduate student assistant.

At its start, the Institute was provided office space and a small budget by the Chemical Foundation in New York. That support soon dried up; the Institute struggled with its budget during the Depression, moving several times. The collective spirit among members of the physics community was sufficiently high that Barton succeeded in putting the Institute upon a firm foundation. By 1940 it had collected enough contributions (including those of members of its societies) to buy its own home at 57 East 55th Street in New York.

During World War II, Barton founded and was the first director of the Office of Scientific Personnel of the National Research Council, which coordinated information bearing on the nation's scientific manpower, an activity that has continued since.

The tremendous popularity and rapid expansion of physics after World War II considerably changed the role of those who led the Institute. Barton provided splendid leadership during this period. By 1957, when he decided to retire as Director, the Institute had moved into its present, larger, home on East 45th Street, and its staff and activities had become internationally important. During the subsequent years, Barton visited the Institute many times on the call of his successors and served on several national advisory committees. In 1964 he was awarded the Carl Taylor Compton Medal in recognition of his very great contributions to the physics community.

Barton was born just one year before the American Physical Society was founded. In passing, he breaks one of



Resolution of the AIP Governing Board

On this 23rd day of October at the time of its meeting in Palo Alto, California, the Governing Board of the American Institute of Physics memorializes in its minutes its profound sadness and sense of loss at the death of Henry A. Barton.

The first Director of the Institute, he led its work for 26 years. He constantly held before the physics community the sense of statesmanship that led the founders to establish the Institute in 1931. He made a working force out of the vision of the good that can be accomplished for physics and the nation that can come from cooperative and united efforts of the independent societies working together. His foresight in recognizing issues and problems of significance readied the Institute to meet them successfully. His creativity and wisdom in financial matters established the firm base that characterizes the Institute still.

His sparkle and warmth are fondly remembered by all who knew him.

the few remaining links with the very remarkable group of individuals who felt so strongly about the future evolution of the profession in our country that they developed institutions such as the Society and the Institute that strengthened the unity of the profession.

FREDERICK SEITZ
The Rockefeller University

Gordon C. Danielson

Gordon C. Danielson, emeritus professor of physics at Iowa State University, died 30 September 1983.

He was born in Dover, Idaho, on 28 October 1912. His family moved to Canada while he was still young, and he received his BA and MA degrees from the University of British Columbia. After obtaining a PhD degree from Purdue University in 1940, he worked briefly at the US Rubber Company and

the University of Idaho. He moved in 1942 to the Radiation Laboratory at MIT, where he was the associate group leader for radar beacons. In 1946, he became a member of the staff of Bell Telephone Laboratories, where he worked primarily on barium titanate. At this time, he developed an interest in the properties of semiconductors that continued throughout his life. He came to Iowa State University and the Ames Laboratory in 1948 as an associate professor of physics. There he established an experimental solid-state physics program in the department of physics and the Ames Laboratory. Thanks to his enthusiasm and dedication, this activity rapidly flourished.

He made many important contributions to research, including the discovery (with Cornelius Lanczos in 1942) of the fast Fourier transform, the development of transient methods for measurements of thermal diffusivity and heat capacity at high temperatures, studies of the properties of Mg_2Si and related semiconducting compounds, and the preparation and characterization of the sodium tungsten bronzes.

In recognition of his great interest in both undergraduate and graduate teaching, the Gordon C. Danielson Memorial Fund has been established with the primary purpose of endowing prizes and scholarships for physics students. Contributions may be sent to this fund through the Iowa State University Achievement Foundation, Alumni Suite, Memorial Union, Ames, IA 50011.

ERLING JENSEN
ALLAN MACKINTOSH
CLAYTON SWENSON
Iowa State University

Homer Levi Dodge

Homer Levi Dodge, a great statesman of science, died 29 June at his home in Mechanicsville, Maryland, at the age of 95. He was born 21 October 1887 in Odensburg, New York.

Dodge earned a BA degree in physics in 1910 from Colgate University and a PhD degree from the University of Iowa in 1914, working with properties of materials and electrical measurements. He stayed on to become an assistant professor. During the First World War he worked for the war effort—doing research, for example, on sound detectors for the National Research Council. From 1916 to 1924 he wrote for the journal *School Science and Mathematics* the section "Research in Physics." His articles, presenting to teachers of physics the results of recent research, were an early example of his lifelong commitment to convey new discoveries in science to the classroom.

In 1919 he joined the University of Oklahoma as professor (1919–44) and head (1919–42) of the department of physics. He directed the School of Engineering Physics from its establishment, in 1924, to 1942 and served as dean of the Graduate School, from 1926 until 1944. He felt very strongly, on the one hand, that physics curricula were not complete without significant study of the applications of physics and, on the other, that engineering students should study more fundamental

science; he established at Oklahoma pioneer curricular programs in applied physics and geophysics that put his approach to use. Believing also that faculty members of public universities should assist state government and industry, he served as Director of the Oklahoma State Bureau of Standards (1919–44) and in 1941 organized within the University and directed the Research Institute, whose major function was to attract industrial support for research programs of the University.



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