the Kalinga Prize for popularization of science.

His contributions to science were recognized in his election to many national academies, including those of the US, the Soviet Union and Denmark. Plans are under way at the University of Colorado to honor his memory through a memorial fund to further his interests in theoretical physics. Contributions may be sent to the department of physics and astrophysics.

It was a privilege and an inspiration to have known and worked with George Gamow and to have experienced his intuitive thinking. The world of physics will not be the same without this free spirit,

RALPH A. ALPHER
General Electric Research
Development Center
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General Motors Research Labs

### Former Rice President William V. Houston

William V. Houston died in Edinburgh, Scotland on 22 Aug. while attending the 11th International Conference on low-temperature physics at St. Andrews. He was 68 and had been ill a short time.

At his death, Houston was honorary chancellor and distinguished professor of physics at Rice University where he had served as president from 1946 until his retirement in 1960.

Houston was born in Mt. Gilead, Ohio on 19 Jan. 1900. He received his BA and BS degrees in education in 1920 from Ohio State University, his MS from the University of Chicago in 1922 and his PhD from Ohio State in 1925. The University of California and Ohio State granted him honorary degrees of doctor of laws and doctor of science, respectively.

After being a National Research Fellow at the California Institute of Technology from 1925 to 1927, he taught there until he became president of Rice University, then Rice Institute, in 1946. His California career was interspersed in 1927 with a Guggenheim fellowship for study and travel in Europe and with defense-oriented research during the second world war.

The Navy awarded him its Medal of Merit for directing development of the first homing torpedo and for supervising scientific studies that helped improve US weapon effectiveness, especially in the area of undersea warfare. A modest man, Houston never wore the Medal of Merit ribbon.

He was perhaps best known for his pioneering efforts in the fields of atomic spectroscopy and solid-state theory. His many publications include *Principles of Mathematical Physics* (1934) and *Principles of Quantum Mechanics* (1951) as well as numerous scientific articles. With the assistance of Gerald C. Phillips, Rice professor of physics and director of Bonner Nuclear Laboratories, he recently completed an updated version of *Principles of Quantum Mechanics*; the manuscript is being readied for publication.

On his arrival at Rice in 1946, Houston greatly expanded graduate study and research; the number of PhD degrees awarded annually increased from



WILLIAM V. HOUSTON

four in 1948 to 35 in 1960. During his presidency other important advances included the initiation of a five-year engineering program with a greater emphasis on the humanities and the introduction of a residential college system.

A fellow of the American Physical Society for many years, Houston was elected president in 1962. He also served on the society council.

A member of the National Academy of Sciences, he served on its council and on several important committees and was also a member of the American Philosophical Society and many other scientific and educational associations. He served on the National Science Board and as a trustee of the Carnegie Foundation for the advancement of teaching.

KENNETH S. PITZER President, Rice University

Richard M. Goody has been made Mallinckrodt Professor of Planetary Physics at Harvard University. Also elected to Mallinckrodt professorships were Robert V. Pound and J. C. Street.

The University of Massachusetts has appointed Fraser Price professor of polymer science and engineering. He was formerly with General Electric in Schenectady.

At the State University of New York at Albany James W. Corbett, of the GE Research and Development Center, has been appointed professor. Promoted to associate professor were Chih-Ree Sun and Richard I. Brown. Jerry Modisette, chief of space physics at NASA's Manned Spacecraft Center, has been named to the staff of the director of science and applications at the Houston center. Modisette's successor is Stanley C. Freden, formerly with Aerospace Corp in El Segundo, Calif.

Ronald F. Stebbings of University College London has been appointed professor of space science and physics at Rice University. Appointed an associate professor of space science was Henry C. Goldwire Jr of Cal Tech.

Thomas B. Clegg has joined the faculty of the University of North Carolina at Chapel Hill as an assistant professor.

Bernard Hamermesh of TRW Systems has been named professor and chairman of the physics department at Cleveland State University. He will succeed Harold E. Morgan who has decided to return to full-time teaching. Herbert C. Corben, also of TRW Systems, has been appointed professor of physics and dean of graduate studies at Cleveland State.

Harald H. Nielsen, professor and past chairman of physics at Ohio State, is spending the academic year at the

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WE HEAR THAT . . .

University of Copenhagen as a guest professor.

Indiana University has promoted Martin E. Rickey to full professor. Appointed to assistant professor were Bennet B. Brabson, Donald M. Esterling, Jack E. Mott and Joseph A. Munarin. F. Barry Mailk was appointed associate professor. John L. Challifour and Andrew Lenerd were given joint appointments in the mathphysics program as associate and full professor, respectively.



HANDLER

The 119th meeting of the National Science Board reelected as chairman Philip Handler of Duke University, a biochemist. Elected vice chairman was E. R. Piore of International Busi-

ness Machines Corp. Harvey Brooks of Harvard's Division of Engineering and Applied Physics was elected to the committee.

Shelby A. Miller, University of Rochester, has accepted an Argonne National Laboratory appointment as an associate director with responsibility for educational affairs.

The National Bureau of Standards has recently consolidated all of its radiation facilities and staff into a new Center for Radiation Research. The work of the center ranges all the way from the analysis of the structure and dynamics of ordinary matter (liquids, crystals, magnetic materials, molecular solids) using millivolt neutron beams, to nuclear structure research using 100-MeV electron and gamma radiation.

Carl O. Muehlhause is the Center's director with Randall S. Caswell as deputy director. The Center consists of four NBS divisions as follows: Reactor Radiation, Robert S. Carter, chief; Linac Radiation, James E. Leiss, chief; Nuclear Radiation, Harry H. Landon, chief; and Applied Radiation, Joseph W. Motz, chief.

Joseph L. Wiza has become a senior physicist at the Lowell Technological Institute Research Foundation. He will work with the company's radiation-physics group.

Loren C. Schmid has been promoted to manager of the reactor-physics department of Battelle-Northwest.

Philip LaFleur has been promoted to chief of activation analysis at the National Bureau of Standards. Roger E. Beehler, former chief of the Atomic Frequency and Time Standard Section, has been appointed assistant chief of the Time Frequency Division at the National Bureau of Standards. He replaces Robert Harrington who was named to the staff of the deputy director of the Institute for Basic Standards at NBS Boulder. Robert I. Corruccini, former chief of Properties of Cryogenic Fluids at Boulder, has been appointed deputy director of the Institute for Basic Standards.

Henry V. Bohm, professor at Wayne State University, was appointed vicepresident of graduate studies and research.

The Institute of Electrical and Electronics Engineers has nominated Karl Willenbrock for president for 1969. He is provost of the faculty of engineering and applied science at the State University of New York at Buf-

Don E. Harrison Jr and Raymond L. Kelly have been promoted to professor and James V. Sanders to associate professor at the Naval Postgraduate School.

Ray J. Gans has been elected vicepresident of International Telephone and Telegraph Federal Laboratories, Fort Wayne.



GOODMAN

Ralph R. Goodman has been named associate director of research for oceanology at the Naval Research Laboratory. He will administer a program of basic and applied research in

the divisions of acoustics, ocean sciences, ocean technology and underwater sound reference. Goodman was formerly professor and acting chairman of the physics department at Colorado State University.

Richard A. Lundy has been appointed associate director of the high-energy facilities division of Argonne National Laboratory. A member of the division since 1963, he was active in the groups that prepared and performed experiments on the Zero Gradient Synchrotron.

Richard G. Leahy, director of the laboratories of the Division of Engineering and Applied Physics at Harvard University, has been appointed assistant dean for resources and planning of the Faculty of Arts and Sciences.



LANDIS

Gulf General Atomic has appointed John W. Landis to the newly created position of regional vice-president of the east coast. His activities will include technical planning

in Gulf's nuclear and non-nuclear programs. Landis was formerly general manager of Washington operations for Babcock and Wilcox.

At Ohio State University Mohammed Yaqub has been promoted to professor, Timothy R. Donoghue and James T. Tough have been promoted to associate professor and Chi C. Sung and Dale Zych have been promoted to assistant professor. New appointments as assistant professor include Charles A. Ebnar, a postdoctoral fellow at the University of Paris; Noel R. Stanton, from the University of Michigan; and Ronald Torgerson, from the University of Notre Dame.

At the University of Utah during the past year Peter Gibbs was transferred from acting chairman to chairman. In addition Abraham Sosin and Frank E. Harris were named professors; James S. Ball and Russell F. Bjorklund, associate professors; William D. Seward, assistant professor; Seinosuke Ozaki, James D. Bjorken, Richard E. Norton, and Heinz Bilz, visiting professor; and Robert B. Coats and John L. Osborne, research assistant professors.

## Yale Awards Cross Medal To Fairbank of Stanford

Yale University's Wilbur Lucius Cross Medal has been presented to Stanford professor William M. Fairbank, The medal is presented annually to

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