

AVS honors Hickman with Welch Award

Kenneth C. Hickman, director of the distillation research laboratory at Rochester Institute of Technology, was recently presented the third Medard W. Welch Award by the American Vacuum Society at the annual symposium in Chicago. The award, which is accompanied by a \$1000 prize, is in recognition of Hickman's 45 years of research and development related to condensation pumps and their working fluids, particularly his invention of the self-fractionating condensation pump. This pump, in general use today, is the workhorse of the vacuum industry, and it has had a profound influence on the growth and success of the industry.

Hickman, who was born and educated in England, joined Eastman Kodak in 1925 and enjoyed a successful career in photography before embarking on his vacuum activities. He is the author of numerous technical papers and has been granted over 100 patents.



HICKMAN

NBS Grants to Crampton, Khorana and Schuessler

The National Bureau of Standards has made three new Precision Measurement Grants for 1972. The recipients of the grants, which are valued at \$15 000 each, are Stuart B. Crampton, associate professor and chairman of the physics department of Williams College, Williamstown, Massachusetts; Brij M. Khorana, assistant professor of physics at the University of Notre Dame; and Hans A. Schuessler, associate professor of physics at Texas A&M University.

Crampton is applying his grant to the first useful experimental test of the hydrogen triplet interaction potential and the theory that relates it to the hydrogen maser oscillation frequency. Concurrent investigations of two new effects on the hydrogen maser frequency will improve the accuracy of the frequency shift cross-section measurements as a frequency standard.

Using the ac Josephson effect in superfluid helium, Khorana will attempt to achieve an accuracy of better than the present 1 part in 10^4 for Avogadro's number.

According to Schuessler a precise

measurement of the hyperfine structure of stored heavy ions may be the basis of a new primary frequency standard. His grant will be used to assist three experiments that are in progress to measure the hyperfine structure splittings of two of the isotopic ions of mercury.

Stratton Award goes to Evenson

For his achievement in high-frequency measurement Kenneth M. Evenson has been chosen to receive the 1972 Samuel Wesley Stratton Award, which is given yearly by the National Bureau of Standards for outstanding scientific and engineering achievement by a staff member. Evenson's measurement of the frequency of an infrared laser beam—the highest frequency measurement ever made—represents a measurement breakthrough that, for the first time, links the international standards for length and time. The award consists of \$1500 and a bronze plaque.

Before joining NBS in 1963 Evenson taught physics at Purdue and Oregon State Universities. At NBS his principal interest has been in working with

lasers and their applications to fundamental physical research.

Joining the Oak Ridge National Laboratory as deputy associate director for biomedical and environmental sciences is **Sidney Siegel**. He was previously vice-president of Atomics International, a California division of North American Rockwell.

Richard S. Lindzen has become Gordon McKay Professor of Dynamical Meteorology and a member of the Center for Earth and Planetary Physics at Harvard University. Previously, he was professor of meteorology at the University of Chicago.

At the University of Southern California, **William G. Spitzer** has been promoted from chairman of the department of physics to dean of natural sciences and mathematics. He is succeeded as chairman by **John H. Marburger**.

Manuel A. Huerta, of the Courant Institute of Mathematical Sciences, has joined the University of Miami, Coral Gables as an assistant professor.

At the University of Maryland's Institute for Fluid Dynamics and Applied Mathematics, **Michael A. Coplan** was promoted to research associate professor and **J. Robert Dorfman** was promoted to professor.

Z. Herbert Heller, formerly of Sperry Gyroscope, has joined DADE, a division of American Hospital Supply Corp in Miami, Florida, as director of instrumentation research and development.

At Addressograph Multigraph Corp's graphics research and development center, four physicists have been appointed department managers. **Barkev Bakamjian**, of Schlumberger-Doll Research Center, will head analysis and simulation, **Gerald J. B. Crawford**, also of Schlumberger-Doll Research Center, will direct electrographic systems. **Edwin R. Hill**, of Victoreen Instrument Co, will supervise chemical technology and **Allan S. Miller**, of Norton Research Corp, will direct micrographic systems.