

Cremer and Rabiner win ASA awards

Lothar Cremer, recently retired as director of the Institute for Technical Acoustics at the Technical University of Berlin, and Lawrence Richard Rabiner, a member of the technical staff at Bell Laboratories, have received awards from the Acoustical Society of America.

Responsible for the design of several European concert halls, including the Berlin Philharmonie, the Opera House in Munich and the Liederhalle in Stuttgart, as well as for taking part in the design of a number of halls in the US, Cremer has been awarded the Wallace Clement Sabine Medal, given for contributions to the knowledge of architectural acoustics. He has also done important work in musical acoustics, the theory of electromechanical transducers and psychological acoustics. Upon completion of his PhD at the Technical University of Berlin-Charlottenburg in 1932, Cremer became involved in the development of the German sound motion-picture industry, and in 1934 began his long association with the Technical University of Berlin. During the war he worked on underwater acoustics for the German Navy. Later he became associated with the University of Munich, and in 1954 he returned to the Technical University as professor and director of the Institute for Technical Acoustics. His major publication is *The Scientific Fundamentals of Room Acoustics*, published between the years 1949 and 1961.

Rabiner was presented with the Biennial Award of the Acoustical Society "for exceptional research contributions in speech communications, hearing and digital-signal processing." The award is given in the spring of even-numbered years to a member of the Society who is under 35. Since completing his doctorate at the Massachusetts Institute of Technology in 1967, Rabiner has been a member of



CREMER



RABINER

the technical staff in the acoustics research department of Bell Labs. There his interest in digital synthesis of speech has led to the design of sophisticated techniques for computer answerback and digital-filter design, work that has helped open a completely new field of digital filtration.

FAS Public Service Award goes to W. K. H. Panofsky

Wolfgang K. H. Panofsky, president of the American Physical Society, has been given the Federation of American

Scientists' Public Service Award for 1973. Panofsky was presented with the award for his "intellectual leadership in the Congressional debate over the ABM, 1969-71." According to the FAS citation "no American scientist

played as significant a role in this Senate debate" as did Panofsky, even though he was not affiliated with the FAS and functioned independently of other organizations opposing the ABM.

During his career Panofsky has served in various capacities as a scientific advisor to the government, holding membership on the President's Science Advisory Committee during 1960-63, among other advisory functions.

Panofsky joined Stanford University in 1951 and was made director of the Stanford Linear Accelerator Center in 1961, in which capacity he still serves. He completed his PhD at the California Institute of Technology in 1942.

Coblentz Memorial Prize presented to Kumar Patel

C. Kumar N. Patel, director of the Electronics Research Laboratory at Bell Laboratories, was recently awarded the 1974 Coblentz Memorial Prize "in recognition of his outstanding contributions to the science of molecular spectroscopy." The prize is presented each year by the Coblentz Society, an association that fosters the understanding of infrared spectroscopy and related fields.

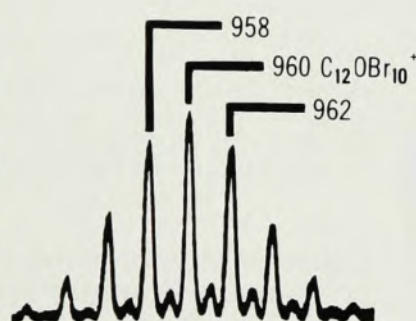
Patel's research at Bell Labs has included the exploration of various mechanisms of gas-laser excitation, quantum effects and nonlinear optics in the infrared. In 1965 he invented a carbon-dioxide free-flowing gas laser that attained the highest continuous power output at infrared frequencies and the highest energy-conservation efficiency of any laser at the time.

A native of India, Patel earned his doctorate in electrical engineering at Stanford University in 1961. He went directly to Bell Labs and was named director of the Electronics Research Laboratory there in 1970.

Formerly an associate professor in the electrical engineering department of California State University, Long Beach, John T. Frankland has been appointed senior scientist at Anaconda Telecommunications in Anaheim, California.

This spring Russell D. O'Neal will retire as special assistant to the chairman of

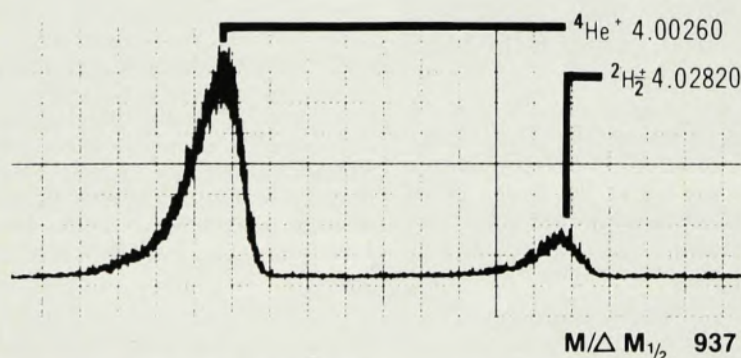
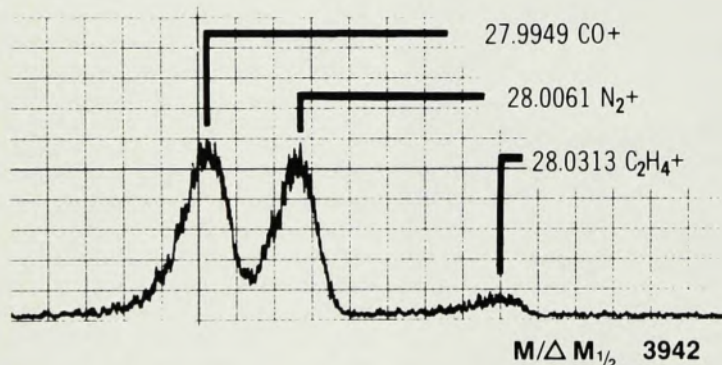
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Bendix Corp to become executive vice-president of KMS Fusion, Ann Arbor, Michigan.

Upon his recent retirement as secretary of the American Institute of Physics, **Wallace Waterfall** was given the title of secretary emeritus by the Governing Board of the Institute. He was honored for over 30 years of service to AIP and its member societies. Waterfall held a variety of positions at AIP. First appointed secretary in 1945, he served as executive secretary from 1949 to 1958, when he was appointed both secretary



WATERFALL

and treasurer. From 1964 to 1967 he was secretary and deputy director of the Institute. Waterfall also served as secretary of the Acoustical Society of America, beginning in 1929, when ASA was first founded, until 1969. He was editor of the *Journal of the Acoustical Society of America* during 1929-33.

In the physics department at North Texas State University **Jerome L. Duggan**, of Oak Ridge Associated Universities, has joined the faculty as a professor, and **David G. Seiler**, of the National Bureau of Standards, Boulder, Colorado, has been appointed associate professor. **Rogers W. Redding** has been promoted to associate professor in the department.

Rodney Bent and **George Nesterczuk**, formerly with D. B. A. Systems, Inc, have formed a new company, Atlantic Science Corp, in Seabrook, Maryland.

obituaries

Charles Greeley Abbot

The death of Charles Greeley Abbot, on 17 December, in his 102nd year of life, came as a shock to many of his close colleagues. We had come to think of him as blessed with eternal vitality.

I remember well how, as a graduate student at Harvard College Observatory in 1939, I joined the other graduate students in inviting him to be our student-selected lecturer for that year. He had already completed more than three decades of brilliant research on the spectral properties of the Sun and had established the value and constancy of the Sun's total radiation to a totally new level of accuracy. The "silver-disk pyrheliometer" and other fundamental solar instruments of his design had, by then, become already classical. His lectures were gracious and informative—as was his wont during his entire career. We youngsters gained great stimulus from him and developed a sense of personal attachment that continued through our careers.

Abbot was born on 31 May 1872 in Wilton, New Hampshire. He graduated from the Massachusetts Institute of Technology in 1894 at the age of 22. Not only did he pioneer in solar observations, but he had a lifelong interest in the practical uses of solar energy. At Mount Wilson Observatory many decades ago he built a solar cooker and could bake gingerbread in 35 minutes. In this as in so many things Abbot was far ahead of his time.

During the 37 years of his tenure as director of the Smithsonian Astrophysical Observatory, and for the 29 years following his formal retirement as director in 1944, he maintained a constant thrust towards discovery of influences of variable solar activity on

THE SMITHSONIAN INSTITUTION



ABBOT

weather and climate and published large numbers of papers on this subject. Here too, he was far ahead of his time, for the field of research is just now beginning to gain respectability and show convincing signs of progress. Only last November Abbot addressed the opening of the "Symposium on Possible Relationships Between Solar Activity and Meteorological Phenome-

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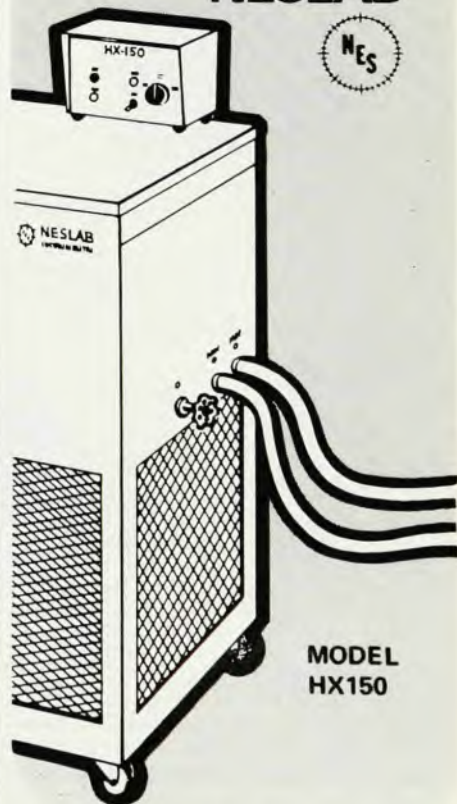
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