

may prove to be aspects of a single physical phenomenon produced from the later history of supermassive gas clouds that condensed in an initially cold universe.

Arnold, Cohen, Fitch, Latter, Storer Get Lawrence Awards

Five US nuclear scientists were selected to receive the Ernest Orlando Lawrence Memorial Award for 1968. Honored for meritorious contributions to the field of atomic energy, each has received \$5 000 along with a gold medal and citation. They are James R. Arnold, professor of chemistry at the University of California at San Diego; Richard Cohen, associate director of the science center, North American Rockwell Corp; Val L. Fitch, professor of physics at Princeton; Richard Latter, RAND Research Council, RAND Corp; and John B. Storer, deputy director, division of biology and medicine, US Atomic Energy Commission, on leave from Jackson Memorial Laboratory, Maine.

Fritz London Award Goes To Fairbank of Stanford

The Fritz London award for outstanding contributions to low-temperature physics has gone to William M. Fairbank, Stanford. The award consists of a certificate and \$1000. Given only six times, it is named for the pioneer in low-temperature physics.

Glenn Seaborg Receives Arches of Science Award

The chairman of the Atomic Energy Commission, Glenn T. Seaborg, was named winner of the annual \$25 000 Arches of Science Award, given in recognition of outstanding contributions to the public understanding of science. The cash award and gold medal is sponsored by the Pacific Science Center in Seattle. Seaborg was selected for the award from more than 200 people nominated throughout the country.

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Hugo Benioff, Seismologist, Was Professor at Cal Tech

Hugo Benioff, a fellow of the Acoustical Society of America and a professor



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emeritus at California Institute of Technology, died last spring at his ranch home in Mendocino, Calif. Benioff was known for his research in seismology and for his design of seismological instruments. This work was recognized by membership in the National Academy of Sciences.

He was presented with the Arthur L. Day Gold Medal by the Geological Society of America for helping to solve geological problems through physics and chemistry. Prior to his work at the institute seismological laboratories, he was with the Carnegie Institute in Washington.

Robert W. Crowe Dies; Former Lockheed Engineer and Editor

Robert W. Crowe, staff research engineer of Lockheed Electronics, died at age 46 in his home in Webster, Texas. Crowe's field was gaseous electronics, including gaseous insulation, electric breakdown in gases and quenching of gaseous ionization.

A member of the American Physical Society, Crowe also worked actively with the Conference on Electrical Insulation and Dielectric Breakdown. During his short career Crowe was granted several patents, served as American editor of the international journal, *Dielectrics*, and contributed as author or coauthor of nearly 30 papers.

He studied physical chemistry at Princeton under Charles P. Smyth and was granted his PhD there in 1951. Later he was employed in research activities at General Electric Research Laboratory, Thomas A. Edison Laboratory, Franklin GNO Corp and Lockheed Electronics.

Yale K. Roots Was Teacher at NYU, Findlay and Western

On 28 Aug. Yale Kirby Roots died after a short illness. He was a professor at New York University and served as department head at Findlay and Western colleges, both in Ohio. After retiring from teaching, he was a research physicist for the US Naval Propellant Plant in Indian Head, Md. He was a member of the American Physical Society, the Optical Society of American and the American Association of Physics Teachers, from which he received a distinguished service citation in 1961. □

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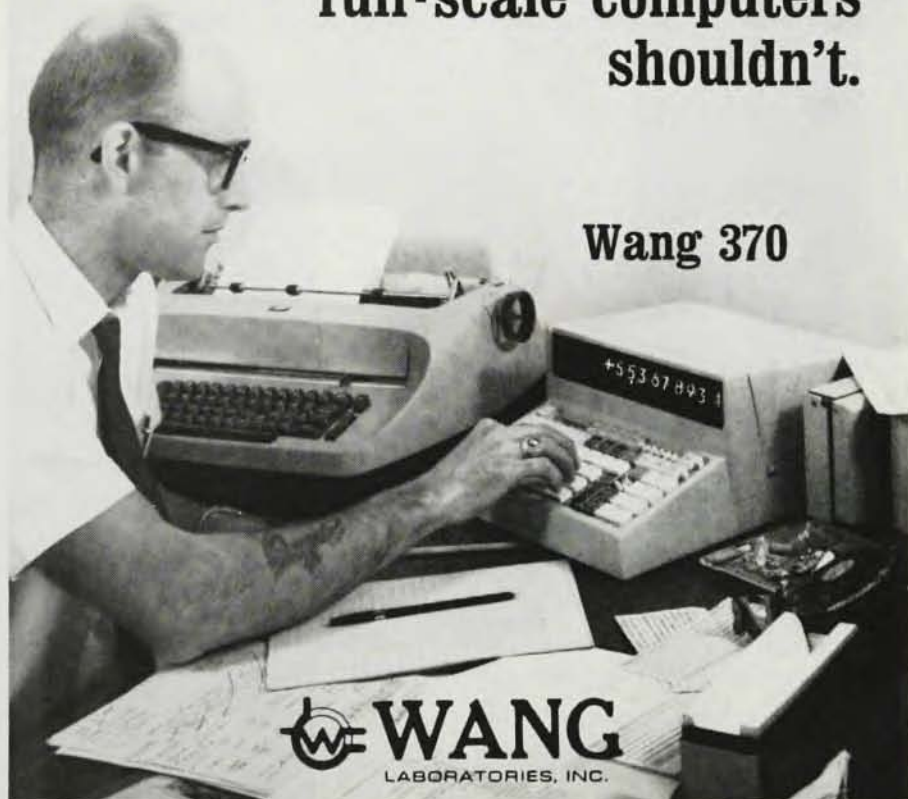
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