

Hidetoshi Takahashi

Died June 1985; one of the most eminent figures in the development of Japanese computing.



Honors and Awards: National Person of Cultural Merit, Government of Japan.

Hidetoshi Takahashi played an important role, not only in the development of Parametron computers, but also in the field of general numerical calculations. He influenced all who worked in the computer field in Japan.

BIBLIOGRAPHY

Biographical

Takahashi, Hidetoshi, "Some Important Computers of Japanese Design," *Ann. Hist. Comp.*, Vol. 2, No. 4, Oct. 1980, pp. 330-337.

UPDATES

The Information Processing Society of Japan keeps a list of their Computer Pioneers on their IPSJ Computer Museum website. Their entry for Takahashi is as follows:

Takahasi Hidetosi (b.1915/01/15, d.1985/06/30) graduated from the Department of Physics, the Tokyo Imperial University in 1937. After serving as a Research Assistant, he was promoted to Associate Professor of Science Faculty, the Tokyo Imperial University in 1942, and Professor in 1957. From 1968 to 1971, he was the Director of the Computer Centre, the University of Tokyo. Takahasi retired from the University of Tokyo in 1975, becoming Professor Emeritus and moved to Keio University as a Professor of the Engineering School, where he helped to establish the Physics Department. In 1980, although he had reached retirement age, he stayed there as a Guest Professor until he passed away in 1985.

He was elected as the Vice President of IPSJ in 1953, and then became the President of IPSJ from 1960 to 1971. He was nominated to an Honorable Member of IPSJ in 1980. He served as the chairman of the Programming Symposium Committee from 1979.

His laboratory was in the Physics Department of the University of Tokyo, which was the base for his wide variety of activities including ferro-electricity, speech science, circuit theory, before formal research on computer science emerged.

Early in the 1950s, he prototyped the digital ohmmeter with his graduate students. Then while he was trying to realize a sort of Electro Mechanical Calculator, [Goto Eiichi](#), a graduate student under his supervision, invented the Parameteron logical element. These elements were used to build the nimmaster (nim player), penny match machine, etc. When the dual frequency memory scheme was devised, Takahasi guided the construction of Parametron computers. Once the [Parametron Computer](#) appeared, the research topics of the laboratory shifted to software research except for a few architectural studies such as interrupt mechanisms. Takahasi proposed most of the brand new ideas.

The Parametron Computer [PC-1](#) was completed in March, 1958. The first initial input routine was coded by Takahasi himself, merging many original ideas.

Being a professional physicist, Takahasi also made contributions in physical academia with theories on phase transitions, ferro-electricity etc. He was also talented in numerical analytic arts. His interests were further enabled by acquiring his own digital computer, hence he kept inventing unique methods like modular arithmetic, fast Fourier transforms, and double exponential formulas for numerical integration.

Takahasi had a great interest and profound knowledge in living and thinking processes on one hand, and on the other hand showed an infinite curiosity in tiny physical phenomena in daily life. He minted the new word "Logergik" from "Logos (word)" and "Ergon (work)" and wrote a lot of essays representing the essayist circle "Logergists".

Portrait added (from the IPSJ Computer Museum website) (MRW, 2013)