

Brief report on events and activities in history of computing in Japan

Akihiko Yamada, 13 December 2013

1. IEEJ Technical Meeting on History of Electrical Engineering

The Institute of Electrical Engineers of Japan (IEEJ) technical meeting on the “History of Electrical Engineering” was held on 3 September 2013 at Tokyo Denki University in Tokyo. In the first session, the following achievements that were commemorated by IEEJ in March 2013 were introduced:

- “Department of Telegraph in Imperial College of Engineering and Prof. W. Ayrton” by T. Koseki
- “The Inventor of Dry Batteries, Yai Sakizo” by K. Oishi
- “Hokkaido-Honshu HVDC Link: Japan’s First High Voltage DC Transmission” by Y. Makino
- “SEIKO Quartz Watch” by Kunio Koike

T. Koseki of the University of Tokyo introduced Department of Telegraph in Imperial College of Engineering, the predecessor of Department of Engineering of the University of Tokyo, and William Edward Ayrton. Japanese Government in Meiji era invited Ayrton from England in 1873 to establish the department of telegraph and appointed him as the first professor of the new department.

In the general session, the following four papers were presented:

- “Development of the World’s First Microprocessor-based Digital Relay and its Effects” by T. Maeda
- “Akira Nakashima’s Switching Theory and Later Research and Development” by A. Yamada
- “Oral History Based on Interview of Dr. M. Wilkes on EDSAC Development and Related Education” by T. Shimizu
- “Following the Papers of James Smithson” by E. Matsumoto

2. 2013 Future Technology Heritage Recognition Ceremony of NMNS

National Museum of Nature and Science (NMNS) held a recognition ceremony of Essential Historical Materials for Science and Technology, nicknamed Future Technology Heritage, on 10 September 2013 at NMNS in Tokyo. This year 22 artifacts were registered, including the following:

- Vacuum tube computer TAC, a memory rack (Univ. of Tokyo and Toshiba, 1959)
- Mechanical translation system KT-1, a logic card and a magnetic drum (Kyushu Univ., 1958-59)
- FANUC Robot Model 1 (FANUC, 1977)
- Card type calculator SL 800 (Casio, 1983)
- Shoulder phone 100/ Portable telephone TZ-802B (Panasonic/NEC, 1958/1987)
- Digital camera FUJIX DS X (Fujifilm, 1990)
- Punch cards RR/IBM (Tokushu Tokai Paper, 1938/1945)
- Direct-drive type turn table SP-10 (Panasonic, 1970)
- Sakura color film (Konica, 1941)

Manufacturers and manufacturing years are in parentheses. Figure 1 shows Casio’s SL 800 calculators. Its thickness is 0.8mm, the thinnest in the world even today. SL 800 is also in storage at the Museum of Modern Art in New York. In total, 135 artifacts have been registered. The photo panels of newly registered artifacts were exhibited at NMNS.(Figure 2)

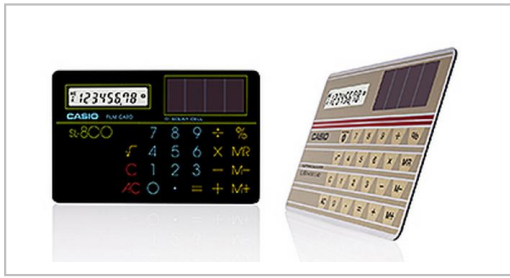


Figure 1: Casio's card type calculator SL800 manufactured 30 years ago.



Figure 2: 2013 Future Technology Heritage photo panels exhibition at NMNS.

3. IEEE Milestone Award to Toshiba's laptop PC T1100

On 29 October 2013 Toshiba's T1100 Laptop PC (Figure 1) received IEEE Milestone Award. This is the fifteenth IEEE Milestone in Japan. The dedication ceremony was held at Hotel Okura in Tokyo. IEEE President Peter Staeker gave the certification to Atsutoshi Nishida, Chairman of Toshiba Corporation. (Figure 2)



Toshiba's T1100 laptop PC
(Photo courtesy of Toshiba Corp.)



Toshiba's Chairman A. Nishida receives the plaque from IEEE President P. Staeker
(Photo courtesy of Toshiba Corp.)

The Toshiba T1100, an IBM PC compatible laptop computer that shipped in 1985 demonstrated importance of true portability for PCs. After the ceremony, a lecture meeting was held and the following presentations were given:

- "Introduction to the IEEE Milestones" by Isao Shirakawa, Chairman of IEEE Japan Council History Committee.
- "Moving forward with Innovation while Honoring and Learning from the Past" by Peter Staeker, IEEE President and CEO.
- "The Laptop PC T1100; a commemorative lecture of receiving the IEEE Milestone Award" by Atsutoshi Nishida, Chairman of Toshiba Corporation.

4. IBM Fellow Robert Heath Dennard wins 2013 Kyoto Prize

IBM Research scientist Robert Dennard has been awarded 2013 Kyoto Prize for "Invention of Dynamic Random Access Memory and Proposal of Guidelines for FET Miniaturization". He received Diploma, Kyoto Prize medal and 50 million yen as prize money at the Kyoto Prize presentation ceremony in Kyoto on November 11, 2013. (<http://www.kyotoprize.org/en/>)