Brief report on IEEJ Technical meeting on "History of Electrical Engineering"

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Technical meeting on "History of Electrical Engineering", Institute of Electrical Engineers of Japan (IEEJ) was held on January 28, 2013 at the IEEJ office in downtown Tokyo. Following eight papers were presented:

- Eiju Matsumoto: Following the footsteps of James Smithson
- Akihiko Yamada: Machine translation systems in early days in Japan
- Takako Shimizu: Various processes for development of Japanese computers.
- Ariyoshi Ishizaki: History of technical development of incandescent lamps.
- Motokazu Okawa: Historical review on digital still camera.
- Kojima Kenji: The history of transmission electron microscopy.
- Yoshiki Hirao: X-ray computed tomography for medical use.
- Yutaka Wakasa: The history of process control system.

Matsumoto presented that James Smithson is a son of the first Duke of Northumberland, never visited the US, died at Geneva in 1829 and left his legacy, more than $500,000 to the US, to found the Smithsonian Institution at Washington D.C. He told few British people know these facts. He followed the footsteps of Smithson in England, Scotland and the Continent. He translated Heather Ewing's "The Lost World of James Smithson" into Japanese. He once studied at the Smithsonian Institution.

Yamada reported hardware systems dedicated to machine translation developed in early days in Japan. Kyushu University started the research on machine translation from 1955 and built KT-1, a computing system for translation experiments among three languages, Japanese, English and German, in 1960. It used a common intermediate language file in three languages. Electrotechnical Laboratory developed the first Japanese transistor computer in 1956. They built the "Yamato" English-Japanese machine translation system with transistor circuit boards used for their transistor computer.

Shimizu researched early Japanese computers and analyzed why their development started or their momentum of development. At first, universities and public research organizations started the research of computers for research purposes. Computer manufacturers followed them and started the development of computers. She investigated 16 organizations that developed early computers and especially Hitachi's case in detail. She also reported the development of early software such as languages, library routines, initial loaders and compilers.