

TAKAHASHI Kiyoshi “Semiconductor Electronics “

Personal History



(1957) Graduate from Tokyo Institute of Technology

(1962) Doctor Course

(1964) Associate Professor

(1974) Professor

(1995) Professor Emeritus, Tokyo Institute of Technology,

Professor of Teikyo Science University

(2015) Received The Order of the Sacred Treasure, Gold Rays with Neck Ribbon

1, Why did I choose Tokyo Institute of Technology for my undergraduate study?

When I was a junior-high school student, I heard of the invention of a transistor in the U.S., which was solid state and functioned as a vacuum tube and had a great interest in the transistor. At that time, there was a professor active in research on transistors at Tokyo Institute of Technology. He was Professor Yoshio Sakai.

2. I joined Professor Sakai's lab with a great ambition to carry out a senior project on semiconductors.

3. Why did I become interested in solar cells?

At that time, the main research activity in Sakai's lab was on the Se-based photovoltaics.

However, I was more interested in a Ge pn diode as a photovoltaic device. Later, my interest changed from Ge to Si and then to GaAs solar cells¹⁾.

4. Another research activity in Sakai's lab was on thin-film devices such as an InSb Hall sensor.

5. Starting MBE growth of GaAs research²⁾

It was very difficult to get large GaAs crystal, so I was interested in starting to get GaAs evaporated thin film by three temperature method which is MBE in present,

6, Starting Sensor research³⁾

Sakai's lab was on thin-film devices such as an InSb Hall sensor. so I was interested in Sensor research.

7, Number of Ph.D. students by way of dissertation : 9

(All Professor of Univ.)

8. The number of books I authored and coauthored : 4 4⁴⁾

References,

1) Denki Gakkaishi, Vol, 80 p, 43 (1960)

2) Sinku Gakkaishi, p, 1 (1962)

3) J. Vacuum Sci. and Tech., 9, pp. 502–506, ((1971)

4) Abbreviation

(Presented on 10 April, 2021)