

## Panel "The Japanese Imperial University at Home and Abroad"

Panel Organizer: Stuart W. "Bill" Leslie

Professor, History of Science and Technology, The Johns Hopkins University

Email: swleslie@jhu.edu

Japan's system of Imperial Universities, begun in 1887, represents one of the most ambitious attempts, East or West, at reforming higher education and putting it into the service of empire. By consolidating older universities and founding new ones, at home and abroad, the Japanese government provided a striking illustration of Stalin's famous epigram: "Education is a weapon whose effects depend on who holds it in his hands and at whom it is aimed." Designed to provide the intellectual foundations for a modernizing Japan and its newly acquired colonies, the imperial universities offer an instructive contrast with European efforts to consolidate their empires by establishing institutions of higher learning. These papers look at the history of three of the nine imperial universities, Tokyo Imperial University, the first imperial university and the model for the others, Taihoku Imperial University in Taiwan, and Keijo Imperial University in Korea. Of particular significance is how the Japanese borrowed from and built upon European models of science and engineering education, and how the imperial universities in turn influenced the subsequent development of science and engineering in Japan's former colonies.

The three papers, Masanori Kaji on Taihoku Imperial University in Taiwan, Yoshiyuki Kikuchi on Tokyo Imperial University, and Dong-Won Kim and Geun Bae Kim on Keijo Imperial University in Korea, provide an instructive comparison across national and disciplinary lines. The commentator will offer some comparison of the Japanese style of science and engineering education with later US attempts to design technological universities for the developing world.

"Tetsuo Nozoe's chemical research in the Taihoku Imperial University in Taiwan and its colonial context"

KAJI Masanori (Tokyo Institute of Technology)

Email: mkaji@bekkoame.ne.jp

Tetsuo Nozoe (1902-96) was a leading Japanese organic chemist, who discovered hinokitiol, a seven-membered aromatic compound, and developed a new area of chemistry known as nonbenzenoid aromatic compounds. He discovered hinokitiol in Taiwan, when he was a professor of the Taihoku Imperial University before the World War II. The paper will analyze Nozoe's research in the colonial context, especially the role of the department of Science and Agriculture in the Imperial University for Tetsuo Nozoe's pioneering work in organic chemistry on the extract from native natural products.

In 1928 Taihoku Imperial University (Taihoku is the Japanese name for Taipei) was established with two faculties: Letters & Politics and Agriculture & Science as the second colonial imperial university after Keijo (Seoul) Imperial University and was not under the jurisdiction of the Ministry of Education, but under the Taiwan Governor-General. The economically self-sufficient Taiwan spent generously for a university education.

Tetsuo Nozoe graduated from Tohoku Imperial University in Sendai. Shortly after his graduation in 1926, he was sent by his mentor, Riko Majima, a leading organic chemist to Taiwan,

then a Japanese colony, to become one of first professors of chemistry in a colonial Imperial University to be established in Taiwan.

This paper will try to answer a delicate problem of the role of Japanese imperial universities in the colony through the case of Nozoe.

“Constructing laboratory chemistry teaching at Japanese inland imperial universities”

KIKUCHI Yoshiyuki

(The Graduate University for Advanced Studies [Sokendai])

Email: yoshik25@hotmail.com

This paper will explore the interactions between laboratory design, pedagogical practice and research culture in the emerging laboratory chemistry teaching at Japanese inland imperial universities in the late 19th and early 20th centuries.

The main focus of this paper is on the construction process of the Main Building of the College of Science at Tokyo Imperial University, the first Japanese imperial university established in 1886, which accommodated a laboratory for its Department of Chemistry. It was first designed by the Ministry of Education architect, Yamaguchi Hanroku and the pharmaceutical chemist, Nagai Nagayoshi, who was trained at the University of Berlin with August Wilhelm von Hofmann. This, however, was eventually redesigned, finished and partly occupied by the organic and physical chemist Sakurai J?ji, who was trained at University College London (UCL) with Alexander William Williamson.

I will attempt to answer the following three questions: 1) did the Berlin and UCL chemical laboratories as well as pre-existing Japanese examples play any roles as models for the construction of Tokyo’s chemical laboratory? 2) Did the resulting laboratory exert productive or constraining influence upon teaching and research activities there? 3) Did Tokyo’s laboratory chemistry teaching had any impact on the following generations of Japanese imperial universities such as the College of Science and Engineering of Kyoto Imperial University (est. 1897) and The College of Science of Tohoku Imperial University (est. 1911)?

“Fruitless Tree: Keijo Imperial University and the Development of Science and Engineering in Korea”

Kim Dong-Won (Johns Hopkins University)

Email: dwkim3@yahoo.com

Kim Geun Bae (Chonbuk National University)

Email: [rootkgb@chonbuk.ac.kr](mailto:rootkgb@chonbuk.ac.kr)

Keijo Imperial University was Korea’s only university under the Japanese occupation (1910-1945). Ever since its establishment with two faculties (the faculty of law and humanities and the faculty of medicine) in 1926, it had a great influence on Korean intellectual life. The University, however, had little impact on the development of science and engineering in Korea. The combined faculty of science and engineering began to train its first students from 1941 but failed to produce any meaningful number of Korean scientists and engineers until August 15, 1945. Korea’s political situation between 1945 and 1953 also limited the role of the graduates of Keijo Imperial University. This paper answers the following questions: Why was the establishment of the faculty of science and engineering in Keijo Imperial University so late?; Was the science and engineering education

at Keijo Imperial University different from the education that was offered at other Japanese imperial universities?; How much did the Japanese style of science and engineering influence the development of science and engineering after 1945 in both South and North Korea?