

# Introducing Statistical Hypothesis Tests into Japan: The Role of Dr. Ryoichiro Sato

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## Abstract

It was around 1941 when statistical hypothesis tests were introduced into Japan. We can find that Dr. Toshio Kitagawa, a core member of the statistical science research group (*Toukei kagaku kenkyu-kai*), had played extraordinary role to spread them by his biography (Kitagawa, 1969). In this study, I will focus on Dr. Ryoichiro Sato, who played considerable role to introduce them into Japan as much as Dr. Kitagawa did. Dr. Sato, who was a professor of mathematics at Tokyo Higher Normal School at that time, had studied at the University College under the supervision of E.S. Pearson and J. Neyman in 1936-1937 and received the Ph.D. degree.

The contents of Dr. Sato's thesis are not sure because the main thesis had been missing at the University College London and also a copy of his thesis had burnt away by an air attack of Tokyo during the WWII. Fortunately, in the spring of 2017 a librarian of the UCL had found the missing thesis. I will discuss the role of Dr. Sato for spreading statistical hypothesis tests to Japan by examining the found thesis, his textbook (Sato, 1943), and others.

## Main References

- Kitagawa, T. (1969), *30 years of statistical science (Toukei Kagaku no Sanju-nen; in Japanese)*, Kyoritsu-publishing.
- Sato, R. (1943), *Mathematical Statistics (Suuri Toukeigaku; in Japanese)*, Baifu-kan.
- Japan Statistical Society ed. (1983), *50 years of statistics in Japan (Nihon no Toukeigaku Goju-nen; in Japanese)*, University of Tokyo Press.