

Nagaoka's Geophysical Studies and Their Role in His Physical Researches

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§ 1. Introduction

Hantaro Nagaoka (1865–1950) was one of the outstanding Japanese scientists for the period between the last one decade of the previous century and the first half of this century. He wrote about 350 papers during his scientific activities. Through his life, he had a great interest in geophysical sciences and gave out about 150 papers on these sciences, which were not less than 43% of his whole published papers.

Our research group, whose members are Dr. Kiyonobu Itakura, Dr. Eri Yagi and myself, has completed a biography of his works. (This will be soon published in Japanese.)

In this paper, we discuss the character of his viewpoints of geophysical sciences and the role of his studies on this field in his whole researches.

§ 2. A Summary of Nagaoka's Personal History¹

H. Nagaoka was born at Ômura, Nagasaki Prefecture, in the southern part of Japan, as a son of Jisaburo Nagaoka (1839–91) who was a *samurai* in Tokugawa Period and visited Europe and North America as a member of a group for inspection, sent by the Meiji government during 1871–73. H. Nagaoka went to Tokyo for studying the European culture and science by his father's advice at about eight years old.

He graduated from the Colledge of Science of the Imperial University (the present University of Tokyo) in 1887. At the same time, he started to carry out his scientific activities as a graduate student of the University. He obtained a *Rigakuhakushi* (D. Sc.) in 1893. In the same year, he was sent to Germany

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¹ Nagaoka's brief biographies and list of his papers in foreign languages have been published as follows: *Anniversary Volume dedicated to Professor Hantaro Nagaoka by His Freinds and Pupils on the Completions of Twenty Five Years of His Professorship* (1925) i–iv, Tokyo (English).

H. Yukawa: *Nature*, 168 (1951), 409 (English).

Z. Yamauti: *Proies-Verbaux, Comité international des Poids et Mesures* (1951), 200–202 (French).

T. Kimura, K. Itakura and E. Yagi: *List of Hantaro Nagaoka's Papers in European Languages* (1966), pp. 38 (mimeograph).