

# MERIT Course Work Report (Corporate Internship in Japan)

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## 【Abstract】

I participated in the internship of NIPPON SHOKUBAI CO., LTD from February 13 to March 24, 2017. The theme of the internship is “Development of functional inorganic fine particles”. I studied in synthesizing high purity SiO<sub>2</sub> particles, one of functional fine particle products, in information and functional materials laboratory. I synthesized SiO<sub>2</sub> particle possessing a certain particle size and examined the effect of synthesizing conditions. I made presentation about above-mentioned experimental data at the office meeting. I visited the production areas in Himeji Plant.

## 【Activities】

By changing synthesizing conditions from the developed scheme, SiO<sub>2</sub> particle possessing a certain particle size could be synthesized. I examined the effect of various parameters for the functions and properties of SiO<sub>2</sub> particles. I made presentation about above-mentioned experimental data and considerations at the office meeting in March 24 (final day of the internship).

I visited the production areas in Himeji Plant and observed experimental apparatus for large-scale (dozens of liters) production after small-scale (laboratory-scale) production.

## 【Impressions】

Both “basic research” and “production” are carried out in information and functional materials laboratory. In the internship (themed as “Development of functional inorganic fine particles”), my works were also related in both basic research and production. Members at the office always confirms the mutual progress, and experiments and works were conducted by multiple members at the office, which is different from the research at laboratory in university. Teamwork and communication skills were required for the works.

## 【Acknowledgement】

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