J. Sameshima

Professor Jitsusaburo Sameshima

Professor Jitsusaburo Sameshima who celebrates his sixtieth birthday this year, on July 3rd, was born in 1890 in the city of Osaka. He graduated from the Chemistry Department of Tokyo Imperial University in 1914. In this university he devoted himself to the research work on physical chemistry under the guidance of Professor Kikunae Ikeda. In the spring of 1918, during the 1st World War, he was sent abroad as a research scholar of the government. He worked in the laboratory of Professor T. W. Richards at Harvard University, U. S. A., where he was influenced by the great master of exact chemical experiments. While he was in Europe he studied under Professor F. G. Donnan in London, Professor J. Perrin in Paris and Professor H. K. Onnes in Leiden.

On his return home in 1921, he was appointed to an assistant professor and in the following year to a professor of Tohoku Imperial University in Sendai. In March 1923, he became Professor of Physical Chemistry in Tokyo Imperial University. Since then he has held this position continuously for twenty seven years. From 1939 to March 1950 he was Director of the Chemical Institute of Faculty of Science, the University of Tokyo.

Professor Sameshima's work on physical chemistry is chiefly connected with the theory of solution, properties of gas, sorption of gas by solid, and surface and colloid chemistry. The papers on the vapor pressure of binary solutions were published in 1918 in the Journal of American Chemical Society. These papers are often referred in the college text-books of physical chemistry. The separation of gas mixtures by atmolysis, i.e., the diffusion through porous plate, drew his attention and an equation was derived on the efficiency of separation in 1923. Needless to say that this phenomenon has an important meaning in the isotopic separation. He, then, carried out a series of measurements on the sorption of gases on solid matters. He proposed the opinion that the taking of gases by charcoal is the phenomenon of sorption in the interstices of carbon atoms and he obtained the equations of the velocity of sorption. He studied the sorption of gases by zeolite and other minerals. His work on surface and colloid chemistry includes the problems on viscosity, protecting colloid, surface pressure, foam etc. He devised a simple method of measuring the friction coefficient and obtained some interesting results on the surface chemistry. He published several books on chemistry, among which the "Experimental Method of Physical Chemistry" is most widely known in Japan.

His connection with the Chemical Society of Japan is worth mentioning. He is the actual founder of this "Bulletin." The Chemical Society of Japan had only one publication printed in the Japanease language when he became the professor of Tokyo Imperial University. In Japan there was no regularly issued publication on chemistry printed in any European languages. Professor Sameshima eagerly insisted on the utmost necessity of internationalizing Japanese chemical publication. Thus, by his effort, the "Bulletin of the Chemical Society of Japan" started as a monthly journal in January 1926. All the editorial and distribution business were done almost by himself alone. More than four hundred copies were distributed throughout the world mostly without charge. This was certainly a big service and contribution of the Chemical Society of Japan to the learning circles of the world. His editorship continued from 1926 to 1930. In 1935 he was elected President of the Society.

Professor Sameshima, enjoying his excellent health, is devoting his full time to the advancement of chemistry in Japan.

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