BULLETIN OF THE
CHEMICAL SOCIETY OF JAPAN

Professor Masao KATAYAMA.

Professor Masao Katayama, the second son of Seigo Katayama, was born in Chayamachi near Okayama on September 11, 1877. In 1900 he finished the chemistry course in the Faculty of Science, Tokyo Imperial University, and continued to study as a post-graduate student.

In 1902 he was appointed to a professorship at the Higher Technical School of Tokyo and after three years he was sent to Europe as a Government Research Fellow. He studied there for three years, spending one half of the time in the Laboratory of Professor Lorenz in Zürich and the other half in the Laboratory of Professor Nernst in Berlin. In 1911 he was appointed Professor of Theoretical Chemistry of Tohoku Imperial University in Sendai. In 1919 he was called back to his *alma mater* to succeed Professor Joji Sakurai, now Privy Councillor and the President of the Imperial Academy, in the chair of Physical Chemistry in the Faculty of Science. This chair he has held continuously since then.

Outside the university he is also active as a member of the Imperial Academy and of the National Research Council; as the head of the Katayama Laboratory in the Institute of Physical and Chemical Research in Tokyo; on a committee of the Shanghai Science Institute; and as the Chairman of the Fifth Committee of the Japan Society for the Promotion of Scientific Research.

Professor Katayama's works on physical chemistry cover a notably wide scope, extending over the energetic and atomistic fields. Among them his studies on gas equilibrium and on surface tension are well known and cited in many chemical publications as important researches. The former was carried out with Professor Bodenstein for the dissociation of the vapour of sulphuric acid and nitrogen dioxide, and not only the result of the experiment but also the principle of the measurement was an important contribution to the study of gas equilibrium. The latter refers to the improvement of the Ramsay-Shields equation of surface tension which did not agree with the theory of corresponding states and failed to express the experimental result near the critical point. These two difficulties were overcome by the formula of Professor Katayama who took into consideration the effect of molecular attraction in the vapour phase. Under his direction many interesting researches have been carried out on electrochemistry, equation of state, chemical kinetics, atomic and mole-

cular structures, etc., but many of the results have been published under the names of his pupils. In addition to these brilliant works, Professor Katayama wrote a textbook of physical chemistry named "Kwagaku-Honron", in which the fundamental conceptions of physical chemistry are explained in an original manner and which is indisputably the best written in our language.

The papers published in the present number are dedicated to Professor Katayama by his pupils on the celebration of the sixtieth anniversary of his birthday. It is their heartfelt desire that Professor Katayama may long enjoy good health, and continue his activities on their behalf, as well as for the future development of physical chemistry in Japan.

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San-ichiro MIZUSHIMA.