

Baron Joji Sakurai

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## BARON JOJI SAKURAI\*

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Joji Sakurai was born in Kanazawa, Ishikawa Prefecture, on August 18, 1858. Coming to Tokyo in 1871, he entered Daigaku Nanko, the forerunner of the Tokyo Imperial University, where he received general education in modern sciences, specifying himself, later, in chemistry. In 1876, he was sent to England by the government to study under Professor A. W. Williamson in University College, London. Soon Sakurai distinguished himself by carrying off the gold medal in chemistry at the end of the first year, and secured the Clothworker Scholarship for two following years. In 1879, he was elected a Fellow of the Chemical Society, London, of which he has been a life member, and elected an Honorary Fellow in 1931.

Returning home in 1881, Dr. Sakurai was appointed lecturer in the newly established Tokyo University and, in the following year, promoted to a full professorship which he held until 1919, when he reached the traditional age limit and retired from the University, after serving the cause

(\*) This Obituary is based on a note left by Professor Sakurai himself. A notice nearly the same as this was contributed by Professor Yukichi Osaka to the Proceedings of the Imperial Academy, Tokyo. 15, No. 2. February (1939). Here my name is affixed both as one of those who were pupils of Professor Sakurai in the last decade of the nineteenth century and were near him ever since, and as a present member of the American Chemical Society.—K. M.

of science and education for nearly forty years, not only as a teacher but also as a University Councillor, Dean of the Faculty of Science and Acting President of the University. The title of Honorary Professor of the Tokyo Imperial University was conferred on him soon after.

The Degree of Rigakuhakusi (D.Sc.) was conferred upon Prof. Sakurai in 1888. In 1901, the Honorary Degree of Doctor of Laws was conferred upon him by the University of Glasgow, when he attended the celebration of the Ninth Jubilee of the University as a representative of the Tokyo Imperial University. He was elected a member of the Imperial Academy of Tokyo in 1898, in which he was elected the President in 1926, after assiduous service as Secretary during the preceding thirteen years. He was reëlected several times and remained in the post until his death.

Professor Sakurai was, in brief, the founder of Scientific Chemistry in Japan. He worked at first in the field of organic chemistry, but his natural bent of mind was in the direction of theoretical and physical chemistry. When the brilliant researches of van't Hoff, Ostwald, Arrhenius, Nernst and a host of others were published in succession, he recognized at once their immense importance, and endeavored to take up the new

principles and introduce them in all stages of chemical education. Among the scientific contributions of Prof. Sakurai, special mention may be made of his modification of Beckmann's ebullition method for the determination of molecular weight, published in 1892. To avoid superheating, he passed the vapor of the solvent through the solution, and succeeded in overcoming the difficulty. This idea was followed by several other investigators.

Professor Sakurai was one of the most active members of the Chemical Society of Japan almost since its foundation as the Tokyo Chemical Society in 1878, and served as its president for several terms of office. When he completed twenty-five years of his professorship in 1907, the occasion was celebrated by his friends and former pupils. On this occasion, a respectable sum of money was raised to be used as a fund in association with his name under the direction of the Chemical Society.

Important as were the contributions to chemistry and chemical education in the earlier years of his career, Prof. Sakurai was destined to be an outstanding promoter of research activities in Japan and her international cultural relations. Indeed, he left imperishable footprints in both of these fields.

The bitter experience in the World War, which deprived Japan of several necessities, which had been imported from Germany, taught the nation a valuable lesson in the importance of self-supply. Professor Sakurai and his colleagues lost no time in embarking upon a movement with the object of realizing an independent research organization. This movement, strongly backed by influential men of business, succeeded in raising an ample fund, including a subsidy from the government, and in consequence Rikwagaku Kenkyusho (Institute of Physical and Chemical Research) was established in 1917. At the same time, H. M. The Emperor graciously made a contribution to the fund of the Institute. The Institute is now, as is well known, one of the most important and active centers of research in Japan, in the field of exact sciences and their applications.

When the International Research Council, renamed afterwards International Council of Scientific Unions, was organized as the result of the conferences held in London and Paris in 1918, in which Prof. Sakurai was a representative of the Imperial Academy, that Academy proceeded at once to organize a National Research Council. It

was Prof. Sakurai who drafted the Constitution and actively promoted its organization. He was elected the President of the National Research Council shortly after its foundation, and remained in the position until his death.

Professor Sakurai was always looking to another sort of organization of a much wider scope, namely, an organization having for its main object the general promotion of research in all branches of science, pure and applied, by giving aids in research funds to competent scholars. The movement for its realization was started in 1931 by convening a meeting of the representatives of all the Universities, important research organizations and other like bodies. As the most important effect of the meeting, two Houses of the Imperial Diet soon adopted by a unanimous vote a resolution aiming at the speedy promotion of scientific research. Those directly concerned in the movement were deeply moved when, in August, 1932, it was officially announced that H. M. The Emperor was graciously pleased to make a magnificent gift toward the fund of the proposed organization for the encouragement of scientific research. The government was now determined to take definite steps to help the organization with an ample subsidy, and the Nippon Gakujutu Shinkokwai (Japan Society for the Promotion of Scientific Research) came into existence with H. I. H. Prince Chichibu as Patron and Viscount Saito, then Premier, as President. Professor Sakurai was elected Chairman of the Board of Directors, and the Society started its work from the fiscal year commencing April 1, 1933. At its seventh general meeting on January 19, 1939, Prof. Sakurai gave an eloquent official address to the meeting. On the next day he took cold. suffered pneumonia and passed away after eight days.

His long stay in London and his attendance at many international scientific meetings, combined with his extended tours in the world gave him splendid opportunities of studying men and world affairs, of which his knowledge was both deep and wide. This knowledge and his love of mankind, besides his being President of the Imperial Academy and of the National Research Council for so many years, made him a figure particularly suited to promoting Japan's international cultural relations.

In recognition of the valuable services rendered to the State, Prof. Sakurai was, in 1920, appointed by the Throne a member of the House of Peers and, six years later, Privy Councillor, this being the first occasion on which a man of purely scientific career has been raised to the high post of supreme adviser to the Throne. Further, in 1916, the Order of the First Class of the Sacred Treasure was conferred upon him and in addition, in 1929, that of the Grand Cordon of the Rising Sun. Shortly before his death, Prof. Sakurai was decorated with the Order of the Grand Cordon of the Rising Sun and Paulownia and was created a Baron in recognition of his meritorious services to the State.

Professor Sakurai's work was also widely recognized abroad. In addition to his election as an

Honorary Member of the American Chemical Society in 1926, he received the Honorary Degree of LL.D. from the University of Glasgow in 1901, was elected an Honorary Member of the Chemical Society of France in 1923, the Society of Chemical Industry (of London) also in 1923, the Royal Institution of Great Britain in 1925, the Academy of Sciences of U. S. S. R. in 1927, the Chemical Society of Poland in 1929 and the Chemical Society (of London) in 1931. On the occasion of his last visit to London in 1937, he was elected by his alma mater an Honorary Member of University College, London, an honor which had never before been bestowed upon a foreigner.