

Jagadish Chandra Bose : A Legend

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Jagadish Chandra Bose was born in 1858 in a small village in Mymensingh of erstwhile East Bengal, now Bangladesh. His father was a Deputy Magistrate who did not want his son to have an exclusive upbringing and sent him to



an ordinary rural school. After completing Matriculation he joined St. Xavier's College, Calcutta for graduation. Then he began to study medicine, but ill health compelled him to change over to the less strenuous discipline of natural science. Jagadish Chandra passed the Natural Science Tripos of Cambridge in 1884 and obtained the B. Sc degree from University of London in 1887. On his return to Calcutta he was appointed a Professor at Presidency College.

From this time he began research on the new and tantalizing subject of electric radiation. These were the days before the invention of radio and television when it was not known how message could be sent through space. He introduced the concept of transistor which earned him London University's admiration. However, another European Scientist, G. M. Marconi was the first to patent it. In the mean time, Rabindranath Tagore made him the Vice-President of a newly formed international university, the Vishwa Bharati. In the year 1912 he earned D.Sc from the University of Calcutta and the imperial honour "Companion of the Star of India."

From Physics, he gradually shifted towards Biology. He started experiments showing the similarity of responses in organic and living matter. He discovered the existence of nervous system in the plant. Like animals, when a hot wire touched the stems of a plant, electric shock was recorded by means of galvanometer. During this time the invention of "High Magnification Crescograph" brought him praise and admiration from the scientists of every corner of the world. It could record a hundred-thousandth parts of an inch of growth per second with a magnification of ten thousand. This invention revolutionised plant physiology with the promise of exploring new dimension in the world of medical and agricultural science. For this invention he was made a Fellow of the Royal Society of London.

After this, another phase of his life started. All his life he had dreamt about building a research laboratory in India which would be comparable to the best in the West. In 1917 he materialised his dream and the Bose Institute was founded providing facilities for research in different streams of science.

Jagadish Chandra was a true patriot and was aware of his responsibility to his countrymen. He did a lot to uplift the country in terms of its scientific education and had a strong desire of introducing research foundation in every aspect of life.

Jagadish Chandra, one of our greatest patriots, whose life is a living example of the many-sided character and our renaissance, breathed his last on November 30, 1937.

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