

**A  
Selected List of  
Books, Articles, and Internet Resources  
on  
Work of Acharya Jagadis Chandra Bose**



**A  
Bibliography  
Compiled  
By  
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## Jagadis Chandra Bose - A Brief Biography



*"The whole world is a living laboratory in which the most wonderful experiments are constantly being performed. We should indeed be fascinated if only we had eyes to see them"*

- J. C. Bose-

Jagadis Chandra Bose, popularly known as J.C. Bose, occupies a unique position in history of modern Indian science. India's first modern scientist, Acharya Jagadis Chandra Bose (1858-1937) was an outstanding physicist. He pioneered research in electromagnetism and invented devices for short distance radio-communication with short waves in 1895 at Calcutta, India. Later, he moved on to investigate the response to external stimuli in plants and invented highly sensitive instruments for detection of these minute responses.

The ascent of sap had long been a puzzle to scientists. Bose found that there exists pulsating cells throughout the length of a plant, from the absorbing root up to the transpiring leaf. He arrived at the conclusion that it is this pulsating action of the cells that gives rise to the physiological conduction of sap.

J C Bose thus anticipated from his experiments, the parallelism between animal and plant tissues which was confirmed later by contemporary bio-physicists.

In 1903 Bose was honored with Commander of the Order of the Indian Empire (CIE) at Delhi by the British Government. He received in 1912 the Commander of the Star of India (CSI) at the Coronation of the British Emperor. He was knighted by the British Government in 1916. Bose was elected a fellow of the Royal Society (FRS) of London in 1928. Bose died on 23 November 1937 at Giridih in Bihar.

One of London's leading newspapers, The Times wrote: "To bringing about the scientific renaissance (In India) Sir Jagadis had influentially contributed. Indians are justly proud of the possession of a few men who have gained world-wide reputation in their particular fields of activity, and this pride reacts strongly on public opinion. At the Research Institute a group Indian post-graduate students devote their lives to research. The published Transactions of the Institute show that under the leadership of this eminent Bengali, Indian research is making substantial contribution to scientific knowledge, that in this field there is no fundamental difference between the Western and the Eastern mind, as was assumed when Sir Jagadis began his work".

Bose's zeal for investigating natural processes in physical and life sciences led him to path-breaking theoretical and experimental science. He worked under severe constraints, sometimes financial, but doggedly pursued his quest for scientific knowledge. The charter of JBNSTS thus follows the motto of "pursuit of excellence" and tries to imbibe within its scholars this zest and determination for becoming a scientist.

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### **Honors**

- ✚ Knighthood, 1916
- ✚ Fellow of the Royal Society (1920)
- ✚ Member of the Vienna Academy of Science, 1928
- ✚ President of the 1927 session of the Indian Science Congress Association
- ✚ Member of the League of Nations' Committee for Intellectual Cooperation
- ✚ Founding fellow of the National Institute of Sciences of India (now renamed as the Indian National Science Academy)