## Who Is J.C. Bose?



Jagadish Chandra Bose was an Indian scientist. He made pioneering contributions in the fields of biophysics, plant and cell physiology and botany. He was also one of the fathers of radio science.

> Scientific Journey of Jagadish Chandra Bose

 A Curious Mind Ignites: Bose's passion for science was ignited during his college years when he pursued a degree in natural sciences at Cambridge University. During this time, he developed an interest in physics and made significant contributions to the study of electromagnetic waves.

Invention of the Mercury Coherer: In 1894, Jagadish Chandra Bose invented the mercury coherer, a device that detected radio waves and played a pivotal role in the development of wireless communication

technology. His work in this field laid the foundation

for later advancements in radio and telecommunications.

Contributions to Plant Physiology: Bose's curiosity extended beyond physics into the field of plant physiology. He conducted pioneering research to demonstrate that plants have sensitivity to external stimuli, such as light, heat, and various chemicals. His work challenged conventional scientific beliefs and led to the discovery of the similarities between plants and animals in responding to stimuli.

## Contribution of Jagadish Chandra Bose



J.C. Bose decided to become a scientist to recover the fame that India enjoyed all over the world in ancient times. He did pioneering research in India - initially in physics and later in plant physiology.



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Contribution of Jagadish Chandra Bose in Physics



**Demonstration of electromagnetic** 

waves

**Microwaves and equipment** 

The first patented semiconductor

## He even foresaw the development of Ptype and N-type semiconductors

Contribution of Jagadish Chandra Bose in Plant Physiology

J.C. Bose made some important discoveries in plant physiology. Turning his attention towards the electrical response of living things, he made invaluable contributions to electrophysiology and the inorganic models of biophysical phenomena. Awards and Honours Received by Jagadish Chandra Bose

Due to his ground-breaking investigations, Jagadish Chandra Bose left a lasting legacy in India as well as in the world. He was the recipient of numerous accolades and honours.

- He was made a Knight in 1917 and a Fellow of the Royal Society of London in 1920 for his paper on "The Electromagnetic Radiation and Polarisation of Electric Rays." He was the first Indian scientist to receive this honour in the field of physics.
- In 1928, he became a member of the Vienna Academy of Sciences.
- He was the president of the Indian Science Congress's 14th session in 1927.
- In 1929, he became a member of the Finnish Society of Sciences and Letters.
- Along with Einstein, Curie, and Millikan, he represented Asia on the League of Nations International Committee on Intellectual Cooperation.

## • He has a lunar crater named in his honour.