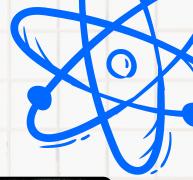
Jagadish Chandra Bose



Jagadish Chandra Bose (1858–1937) was an Indian polymath known for his contributions to physics, biology, botany, and science fiction. He is recognized for his significant work in radio and microwave optics and plant physiology.



Key Contributions and Achievements:

- Pioneer of radio and microwave optics: Bose conducted early research in radio and microwave optics and
 is considered one of the first to generate electromagnetic signals in the microwave range. He
 demonstrated wireless communication using millimeter wavelengths in 1895, which helped pave the way
 for technologies like Bluetooth and Wi-Fi. He also invented various components for his communication
 system and studied the electrical response of living and inanimate objects.
- Significant contributions to plant physiology: Bose was a pioneer in applying physics to the study of plants. He invented the Crescograph, an instrument that could magnify plant growth and movement. Using this, he showed that plants respond to stimuli and have a system similar to a nervous system. His research also indicated that sap movement in plants is comparable to blood pressure in animals.
- Other Notable Aspects: The IEEE considers him the Father of Radio Science. He founded the <u>Bose Institute</u> in Kolkata in 1917, the first interdisciplinary research center in Asia. He is credited with establishing experimental science in India and has a lunar crater named after him. He authored influential books like "Response in the Living and Non-Living" (1902) and is known as the father of Bengali science fiction.

Jagadish Chandra Bose's work continues to be relevant in fields like physics, radio science, and plant physiology. He remains an inspirational figure in science, particularly in India.

