

Indian Scientist

Kariamanikkam Srinivasa Krishnan

The Silent Architect of the Raman Effect



(4 December 1898 – 14 June 1961)

While the world celebrates the "Raman Effect," few realize that the groundbreaking discovery was a dual effort. **K.S. Krishnan** was the dedicated co-discoverer alongside Sir C.V. Raman, serving as the backbone of experimental physics in India. A man of immense humility and deep intellectual range, Krishnan was as much a philosopher and scholar of Tamil literature as he was a world-class physicist.

Pioneering Contributions

Born in **Tamil Nadu**, Krishnan was a brilliant **physicist and mathematician**. His most famous contribution occurred at the Indian Association for the Cultivation of Science, where he worked tirelessly with C.V. Raman. It was Krishnan's meticulous experimental records and observations that were vital in proving the existence of the **Raman Effect** in 1928.

Later, he turned his focus to **Magnetism**. He developed the "Krishnan Method" to measure the magnetic anisotropy of crystals, a feat that earned him international acclaim.

His work provided deep insights into the molecular structure of solids, making him a pioneer in **Solid State Physics**.

Achievements and Leadership

Krishnan's leadership was pivotal in building India's scientific infrastructure after Independence. He served as the **first Director of the National Physical Laboratory (NPL)** in New Delhi. Under his guidance, the NPL became a center of excellence for standards and measurements in India.

He was also a close associate of Homi J. Bhabha and Vikram Sarabhai, helping steer the Atomic Energy Commission. His leadership style was defined by **intellectual integrity**; he believed that true science required both rigorous mathematics and creative intuition.

Honours and Recognitions

In recognition of his profound impact on global science, he received:

- **Padma Bhushan** (1954)
- **Knight Bachelor** (1946)
- **Fellow of the Royal Society (FRS)** (1940)

Sir K.S. Krishnan remains a hero for young innovators because he proved that great scientific breakthroughs require patience, precision, and the ability to work harmoniously within a team.

