

Dr. Srikumar Banerjee

Padma Shri (2005) for Contributions to Nuclear Energy



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Meet Dr. Srikumar Banerjee, a brilliant Indian metallurgical engineer and nuclear scientist whose work powered our nation! He wasn't just a scientist; he was a national hero who helped shape India's self-reliance in nuclear technology.

The Master of Materials

Dr. Banerjee's brilliance lay in understanding how materials behave, especially under the extreme conditions inside nuclear reactors. He studied **radiation damage** and **phase transformations** in metals like zirconium and uranium, ensuring our reactors run safely and efficiently. Imagine being able to make the "skin" of nuclear fuel incredibly strong – that's what he did by optimizing **fuel cladding materials** for India's power plants.

Fueling India's Future

As Director of the **Bhabha Atomic Research Centre (BARC)** and later Chairman of the **Atomic Energy Commission of India (AECI)**

and Secretary of the Department of **Atomic Energy (DAE)**, Dr. Banerjee championed **indigenous development**. This meant India built its own reactor components and developed its own nuclear fuels, reducing reliance on foreign countries.

He was a strong supporter of India's **Three-Stage Nuclear Power Program**, especially pushing for **thorium-based reactors**, a game-changer given India's vast thorium reserves.

A Legacy of Excellence

Dr. Banerjee's impact was monumental. He received:

- **Padma Shri** (2005) – Fourth-highest civilian award in India.
- **Shanti Swarup Bhatnagar Prize** (1989)— India's top science award.
- Fellow of:
 - Indian Academy of Sciences
 - Indian National Science Academy
 - Indian National Academy of Engineering
- Lifetime Achievement Award from the Indian Nuclear Society.

His 200+ research papers and mentorship inspired countless young scientists. He ensured India's place on the global nuclear stage and fostered scientific self-reliance, contributing to both our energy security and national defence. Isn't it inspiring how one person's dedication built such a strong foundation for our nation's future?