

# Thirumalachari Ramasami

Padma Bhushan (2014) and Padma Shri (2001) for Science and Engineering



**BORN ON APRIL 15, 1948, IN TAMIL NADU**

Have you ever thought about how your leather shoes or bags are made? Or how science can help the process? Dr. Thirumalachari Ramasami did, and he turned these questions into groundbreaking innovations.

## Career

Dr. Ramasami studied chemistry and earned his PhD from the University of Leeds, UK. He later became Director of the Central Leather Research Institute (CLRI) and then served as Secretary of the Department of Science and Technology (DST).

## Achievements

Dr. Ramasami saw how leather-making polluted water, used harmful chemicals and created waste. So, he created solutions:

- Enzyme-based unhairing
- Waterless chrome tanning

and other safer and eco-friendly techniques. These innovations helped tanneries across India and even influenced global leather standard.

He developed **12 technologies**, earned **37 patents** and published over **220 research papers**.

He even used computer models to predict leather colour, making production more accurate. He combined chemistry and biology to reduce chemical usage, showing how science disciplines can work together to solve real-world problems.



As Secretary of the Department of Science and Technology (DST), he launched national science missions and the INSPIRE Programme, which has impacted millions of students across India. If you've ever thought of building a science project or joining a science exhibition, he's one of the people who helped make that possible.

## Awards and Honors

Awarded the Padma Shri, Padma Bhushan and the Shanti Swarup Bhatnagar Prize, Dr. Ramasami is proof that real-world problems need science and young scientists to solve them. Maybe your next idea could help the planet too