

# Dr. Udipi Ramachandra Rao

The Satellite Man of India, Pioneering Indian Space Scientist



**10 MARCH 1932 - 24 JULY 2017**

Udipi Ramachandra Rao was born in Adamaru, Karnataka. He completed his early education in Adamaru and Udipi. Rao earned a B.Sc. from Madras University in 1952, an M.Sc. from Banaras Hindu University in 1954, and a Ph.D. from Gujarat University in 1960 under the guidance of Vikram Sarabhai.

**Career at ISRO:** Rao joined the Indian Space Research Organization (ISRO) in 1963, where he played a pivotal role in shaping India's space journey. He became the Chairman of ISRO in 1984 and held this position until 1994. Under his leadership, ISRO reached numerous milestones in space science and technology, making India a global player in space research.

### Key Contributions

- **Aryabhata Mission (1975):** Rao played a critical role in launching Aryabhata, India's first satellite, marking the country's entry into space exploration.

- **INSAT (Indian National Satellite System):** His work on INSAT revolutionized India's telecommunications, broadcasting, and meteorology.
- **Rocket Development:** He guided the development of ASLV (Augmented Satellite Launch Vehicle) in 1992 and PSLV (Polar Satellite Launch Vehicle) in 1995, boosting India's rocket technology.
- **Cryogenic Technology:** Rao advanced GSLV (Geosynchronous Satellite Launch Vehicle) and cryogenic engine technology, allowing India to launch heavier satellites into space.

**International Recognition and Awards:** Rao's achievements were recognized globally, earning him several prestigious awards:

- Padma Bhushan in 1976
- Padma Vibhushan in 2017
- Bharat Ratna (posthumously in 2023)
- Yuri Gagarin Medal, Frank J. Malina Award, and Theodore Von Karman Award

He was inducted into the *Satellite Hall of Fame* in the United States in 2013, becoming the first Indian to receive this honor.

**Additional Roles:** Rao held several other prominent positions:

- Chairman of Antrix Corporation (ISRO's commercial arm)
- Chairman of the United Nations Committee on the Peaceful Uses of Outer Space (UN-COPUOS)
- President of the Indian Science Congress Association