

E.P. Balasubramanian

The go-to expert for the design and development of SATCOM programs, Mr. E.P. Balasubramanian has fortified a position for himself in the annals of ISRO's Communication and Navigation Payload Systems Department. He is singly responsible for the successful fruition of a number of INSAT and GSAT class of satellites, raising the bar for conceptualization and architectural implementation in space.

In his 38 years' of contribution towards space technology research initiatives, Mr. Balasubramanian's core efforts have been centred on FDMA and TDMA access techniques using experimentation as well as communication techniques using SYMPONIE, INTELSAT and other satellites. He has also developed characterization and evaluation procedures of various types of Satcom terminals and equipment.

His other significant contributions include:

1. Development of RF sub-systems for satellite communication payloads operating in S, C, Ku and Ka band frequencies.
2. Designing payload architectures and performance analysis.
3. Satellite link budgeting and interference study for mitigation.
4. Space qualification programs for sub-systems.
5. Test and evaluation for satellite systems.
6. On-orbit test performance evaluation of numerous INSAT/GSAT satellites

As an academician, Mr. Balasubramanian has mentored international participants of the Satcom Application Course as part of United Nations Development Program at ISRO and guided CSSTEAP-UN program students in the realization of their M.Tech Degree projects. He has also steered ISRO study teams in the evolutionary design and production of advanced payload for Indian Data Relay Satellite (IDRS) and communication network of the Human Space Flight Program. A lesser known but no less significant academic medallion that he wears is as Faculty Member of the Space Science Program in Gujarat University, India.

Post superannuation from ISRO, Mr. Balasubramanian was re-appointed in honorary capacity at ISRO – Ahmedabad between 2010 and 2012. He currently presides over the developmental activities of Small Satellites Systems and High Throughput Satellite & Ground Systems as Senior Advisor for a few independent agencies.
