

Project: Thirty Meter Telescope (TMT)

Mr. Viswanatha Narasimhaiah, India TMT Coordination Centre, IIA, Bengaluru Indian Contribution to TMT Project and the Challenges



Abstract:

- Thirty Meter Telescope (TMT) International Observatory (TIO) is a joint venture of scientific institutions in Canada, China, India, Japan and the US to build advanced 30m diameter optical—infra-red telescope. India is 10% partner to this mega project and is contributing 70% of its share as in-kind hardware.
- Majority of the "Primary Mirror Systems" which form heart of the telescope are to be delivered by India as part of India's contribution to TMT. India-TMT Coordination Centre (ITCC) at Indian Institute of Astrophysics, Bangalore is the nodal group responsible for these developments and deliveries. A brief of systems that are to be delivered from India and the associated challenges are discussed.

About the Speaker:

- Viswanatha N, a mechanical engineer is working as "Consultant-Principal Engineer" for India TMT Project, ITCC at Indian Institute of Astrophysics, Bangalore from past three years. Previously he was Group Director, Spacecraft Mechanisms Group, UR Rao satellite Centre. He retired from ISRO in 2015.
- He has 39 years of experience; he is the designer of Solar array deployment mechanisms for our first Indian communication satellites INSAT-2A. He has designed many first-of-its-kind novel and innovative mechanisms for our satellites. He was the Design Team Leader of "Large Unfurlable Antenna" of GSAT-6 satellite. Is recipient of NRDC Technology day award 2002, bagged many ISRO awards including "Performance Excellence" Award. He has three International patents, published more than 40 papers.

