

**VIDYA PRATISHTHAN'S
KAMALNAYAN BAJAJ INSTITUTE OF ENGINEERING AND
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Department of Electronics & Telecommunication

INDUSTRIAL VISIT REPORT



Abstract:

Date From 23rd Feb 2025 to 27th Feb 2025

42 Students & 3 staff members

Industry: Indian Deep Space Network

Date of Visit: 24th February 2025

Time: 10:00 AM to 2:30 PM

Location: Byalalu, Ramanagar District, Karnataka, India

Organization: Indian Space Research Organisation (ISRO)

Introduction

On 24th February 2025, a visit was made to the Indian Deep Space Network (IDSN) facility located in Byalalu, Karnataka. The IDSN is a critical part of the Indian Space Research Organisation's (ISRO) efforts in space exploration and satellite communication. Established on 17th October 2008, the network is equipped with advanced telemetry, tracking, and command systems that support deep space missions. During the visit, we explored key components of the facility, including its large steerable antennas and state-of-the-art communication infrastructure. The visit provided an insightful look into the operations and capabilities of ISRO's space communication systems.

Key Points

- The ISRO Telemetry, Tracking, and Command Network (ISTRAC) is enhanced by two fully steerable antennas, an 18 m and a 32 m DSN antenna, improving visibility duration compared to the existing system.
- The Indian Deep Space Network (IDSN) follows CCSDS standards, enabling cross-support among Telemetry, Tracking, and Command agencies.
- The 18 m antenna supports dual downlink carriers in S-band and X-band and can uplink either RCP or LCP with a G/T of 30/39.5 dB/k.
- The 32 m antenna, designed with a wheel-and-track system, supports both S-band and X-band uplink and downlink, receiving two carriers in each band, with a G/T of 37.5/51 dB/k.
- A fibre optic link connects the DSN station to the SCC/NCC/ISSDC, and the station can be remotely controlled from the ISTRAC Control Centre in Bangalore.



Fig.1 Indian Deep Space Network



Fig.2 Launching demo



Fig.3 Group photo at Deep Space Station

Place 2: Art of Living International Center

Date & Time: 24th Feb 2025 at 06:30 pm

Address: 21st KM, Udayapura Post, Kanakapura Main Rd, Bengaluru,
Karnataka 560082

During our visit to the Art of Living International Center, we gained valuable insights both on a personal and academic level. Witnessing Gurudev Sri Sri Ravi Shankar in person was an enlightening experience, as it deepened our understanding of mindfulness, meditation, and the importance of inner peace. The meditation session allowed us to experience firsthand the mental clarity and emotional calm that such practices offer, emphasizing the significance of maintaining mental well-being amidst the challenges of student life.

From a student's perspective, the visit was a reminder of the importance of balance between academic stress and mental health. It became clear that practicing mindfulness and meditation could significantly improve focus, stress management, and overall productivity. We observed the center's serene environment, which encouraged introspection and reflection, and realized the powerful role of such spaces in promoting emotional and psychological well-being.

Additionally, the visit reinforced the value of community and self-awareness, reminding us to make time for self-care and spiritual growth, which are essential for personal development. The experience was a holistic learning opportunity, bridging mental health, well-being, and personal growth, all of which are essential for students in today's fast-paced world.



Fig.4 & 5 Group photos at Art of Living International Centre

Place 3: Mysore Palace

Date & Time: 25th Feb 2025 at 10:30 am

Address: Agrahara, Chamrajpura, Mysuru, Karnataka 570004

Mysore Palace, also known as Amba Vilas Palace, is a historical palace and a royal residence. It is located in Mysore, Karnataka, India. It used to be the official residence of the Wadiyar dynasty and the seat of the Kingdom of Mysore. The palace is in the centre of Mysore, and faces the Chamundi Hills eastward

Architect: Henry Irwin

Construction started: 1897

Owner: Wadiyar

Architectural style: Indo-Saracenic architecture

Civil engineer: B. P. Raghavulu Naidu (Executive Engineer Palace Division)



Fig.6 Group photo at Mysore Palace



Fig.7 Mysore Palace

Place 4: Namdroling Monastery Golden Temple

Date & Time: 26th Feb 2025 at 03:30 pm

Thegchog Namdrol Shedrub Dargye Ling (Namdroling Monastery)

- Location: Bylakuppe, Mysuru District, Karnataka, India
- Informal Name: Namdroling Monastery (Namdroling Vihara)
- Significance: Largest teaching center of the Nyingma lineage of Tibetan Buddhism in the world
- Sangha Community: Home to over 5,000 monks, nuns, and qualified teachers
- Observations:
 - The monastery maintains a serene and peaceful environment conducive to learning and meditation.
 - It promotes Buddhist teachings and philosophical education for both monks and nuns.
 - The community-oriented approach, with facilities for the elderly and healthcare services, reflects the monastery's deep commitment to the well-being of all.



Fig.8 Namdroling Monastery Golden Temple



Fig.9 & 10 Golden Temple, Coorg