

**Theni Melapettai Hindu Nadargal Uravinmurai**

**NADAR SARASWATHI COLLEGE OF ARTS & SCIENCE, THENI**

**Re - Accredited by NAAC with 'B+' Grade**

**Approved under 2(f) and 12(B) Status of UGC**

**Permanently Affiliated to Mother Teresa Women's University, Kodaikanal**

**An ISO 9001:2015 Certified Institution**



## **DEPARTMENT OF PHYSICS**

### *Report on Educational Tour*

One day Education trip was organized by Department of Physics, Nadar Saraswathi college of Arts & Science, Theni on September 15, 2022.

The tour comprised of 46 students of II B.Sc Physics, III B.Sc Physics and M.Sc Physics with four faculty members.

All the students were directed to the college hostel at 4.00 on 14.9.2022 and stayed overnight. From hostel the trip was started by 3.00 am in our college vehicle and reached ISRO at 9.10am after completing breakfast at Nila Restaurant.

After completing primary security checking, we entered into ISRO by 10.00am in their vehicle, they initially taken us to the space museum [IPRC], where they explained completely about activities happening in IPRC centre.

They started their explanation with

- The master minds of India were behind the formulation of ISRO, they are India Gandhi, Homi Bhabha & Vikram Sarabhai.
- The formulation started from 1958 and ends in 1972.
- After the explanation, ISRO organization space establishments in India was played as video
- Then the narrator clearly explained about the Telemedicine project carried out by ISRO and also about the broad casting system
- Through telemedicine project human who do not have an idea of medicines can get their medicines through satellites and also can receive good hospital facilities

- Innovative explanation was given on India's two operational launchers PSLV & GSLV
- Models of PSLV and GSLV rockets were placed inside the museum.



He explained the three levels of fuel systems in the rockets, PSI is the first stage of PSLV and it provides the launcher the high thrust that is required for lift off. It contains Aluminium perchlorate as an oxidizer.

The second stage is powered by a single Vikas engine and carries 41.5 tons contains unsymmetrical dimethyl hydrazine as fuel and nitrogen tetroxide as oxidiser in two tanks.

In GSLV they used Cryogenic engine for launching heavier satellites, then he explained and showed various models of satellites used in rockets and they also explained about the space capsule recovery experiment to test some of the critical technologies for manned space missions in future, they showed a piece which is recovered in Bay of Bengal through this project, then our students know their weights in Eight planets in a weighing machine and they got excited to know the weight in other planets. Next we visited the testing area of fuel filling place in their vehicle and it motivated the students to enter into astrophysics.

After this the students enquired about Internship programme and also the job vacancies in ISRO. After completing the visit, we exit the place by 12.30pm. This ISRO visit was very unique helped us to learn lot more in Physics and also we heard new things and also the job opportunities.



Next we reached Kanyakumari sea shore had lunch and went to Kanyakumari Gandhi museem, Kamarajar Manimandapam and then the students spent time in shopping with sea breeze and then we entered into Bagavathi amman temple, after that we see the sunset, this makes us a pleasant feel.



Totally the one-day education tour made us knowledgeable, kept us refreshing and energetic, we thank the management for giving us this opportunity.