



## Department of CSE- Cyber Security

Dt: 10/02/2023.

### CIRCULAR

The students of I year I Sem Cyber Security are hereby informed that there is an Industrial Visit scheduled to National Remote Sensing Center (NRSC), **Jeedimetla**, Hyderabad tentatively on **13/02/2023**.

The transport arrangements will be made. The students are to compulsorily board the transport vehicles from the college campus only.

#### Note:

The CR of respective class are required to report of the visit who are selected for the scheduled Industrial visit within 2 days after the visit.

Sd/-

Mr. G. Lingaiah,  
Asst. Prof, Dept. Of CSE-CS,  
Faculty Incharge-Industrial Visit  
SNIST, Hyderabad

Dr. K. Shirisha,  
Professor and HoD,  
Dept. of CSE-CS, SNIST,  
Hyderabad



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# NRSC Report on 13 Feb 2023

**Name of the Company:** National Remote Sensing Center (NRSC)

**Address:** Jeedimetla, Hyderabad

**Date and Time of Visit:** 13 Feb 2023 From 10.00 am to 03.30 pm

### Details of the Visit:

From the class of the 1<sup>st</sup> year 1<sup>st</sup> semester CSE- Cyber Security, total of 15 students went for the Industrial Visit on 13 Feb 2023.

National Remote Sensing Center (NRSC) is a branch of the Indian space research organization (ISRO) the new outreach facility at Jeedimetla in Hyderabad to overcome the ever growing requirement of the capacity building in Space-based applications the campus concentrates on the metrological related issues.

We were welcomed warmly by the Mr. V.V. Ganesh, Scientist and Head, Outreach Division, TEOG, NRSC, Jeedimetla campus who introduced about the growth of the ISRO and subsequently the growth of NRSC from beginning to recent missions, and the contribution to the Nation. The details of the geospatial and polar orbit satellites, were presented. The launch vehicles, the missions they carried out using these and about the specification in detail with the visuals of the satellite images of the earth which were taken from the remote sensing areas were also talked about.

### **Orbits, types, Geostationary and Polar orbits, the satellites, uses, Chandrtayaan, MoM**

**Polar Satellite Launch Vehicle (PSLV)** Planning group under S Srinivasan to develop a vehicle capable of delivering a 600 kg payload to a 550 km sun-synchronous orbit from SHAR began in 1978. Among 35 proposed configurations, four were picked; by November 1980, a vehicle configuration with two strap-ons on a core booster (S80) with 80 tonne solid propellant loading each, a liquid stage with 30 tonne propellant load (L30), and an upper stage called the Perigee-Apogee System (PAS) was being considered.

**Geosynchronous Satellite Launch Vehicle (GSLV)** The first development flight of the GSLV (Mk I configuration) was launched on 18 April 2001 was a failure as the payload failed to reach the intended orbit parameters. The launcher was declared operational after the second development flight successfully launched the GSAT-2 satellite. During the initial years from the initial launch to 2014 the launcher had a checkered history with only 2 successful launches out of 7.



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The next lecture followed up by the Mr.Satish Engineer from the NRSC briefed about the usage of the AI&ML in the field of the remote sensing satellites in which the image can be used to create a data set and to train the model to fetch better accuracy in predicting the data. The techniques of ML such as the supervised and unsupervised learning techniques were introduced to students.

Sd/-

Mr. G. Lingaiah,  
Asst. Prof, Dept. Of CSE-CS,  
Faculty Incharge-Industrial Visit  
SNIST, Hyderabad

A handwritten signature in black ink, appearing to read 'Dr. Shirisha'.

Dr. K. Shirisha,  
Professor and HoD,  
Dept. of CSE-CS, SNIST,  
Hyderabad



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**Snapshot 1: Industrial Visit of B.Tech. CSE- CS Students to NRSC, Hyderabad**

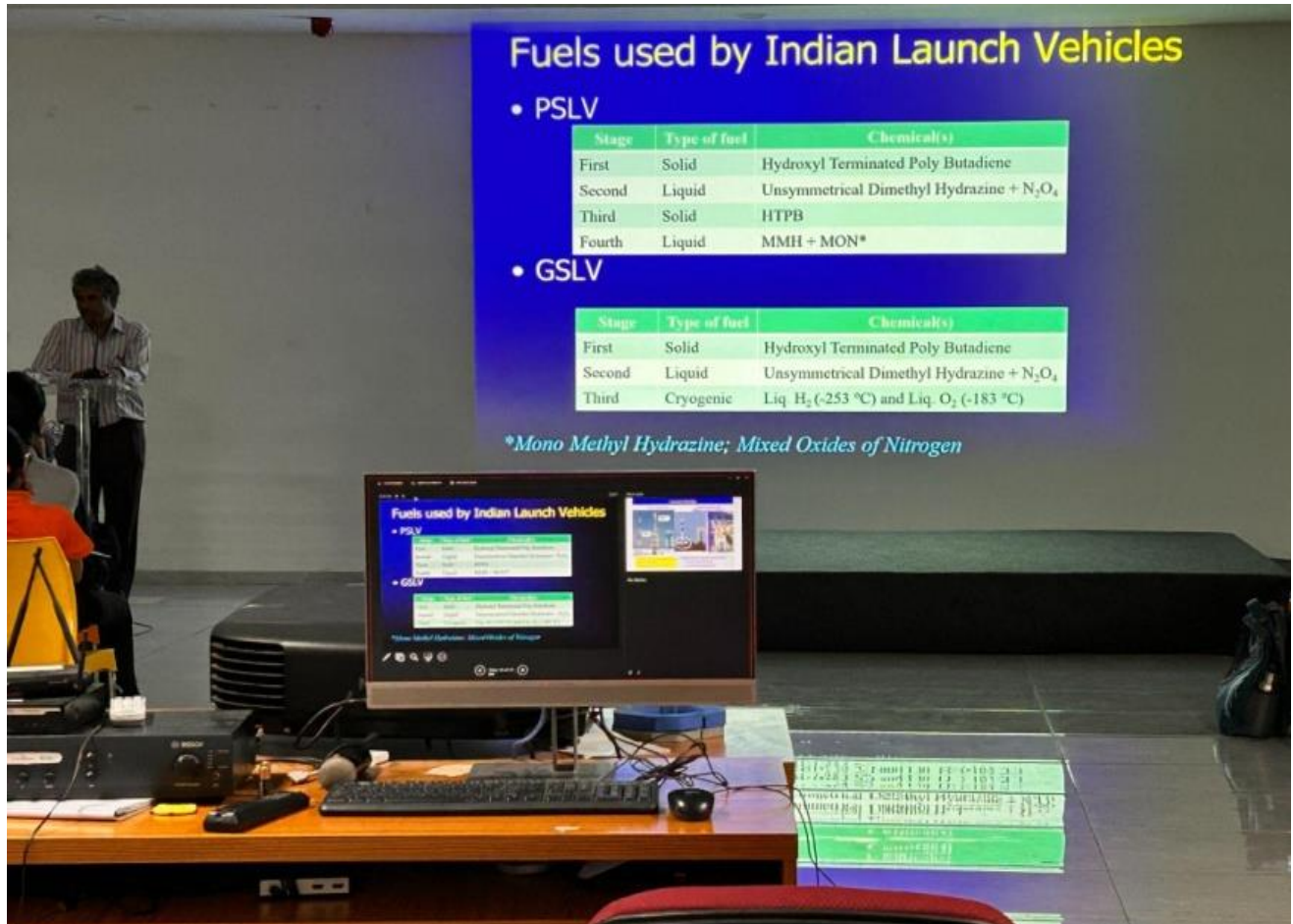






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**Snapshot 2: Mr. V.V. Ganesh, Scientist and Head, Outreach Division, TEOG, NRSC detailing the projects of NRSC and Launch Vehicles with students**





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**Snapshot 3: NRSC official discussing Applications of Machine Learning Algorithms in Satellite data analysis with students**

