



Gyanmanjari Institute Of Technology

Industrial Visit Report

23/02/2024

At

ISRO Ahmadabad



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We will like to thank **Prof.Prashant Viradiya** and our college for being supportive all the time and giving such a good opportunity to see and interact with the corporate world in college life itself.

We also would like to thank all student coordinators for their best support for making this visit successful.

INFORMATION

Space Applications Centre (SAC) at Ahmedabad is spread across two campuses having multi-disciplinary activities. The core competence of the Centre lies in development of space borne and air borne instruments/payloads and their applications for national development and societal benefits. These applications are in diverse areas and primarily meet the communication, navigation and remote sensing need soft he country. Besides these, the Central so contributed significantly in scientific and planetary missions of ISRO like Chandrayaan-1, Mars Orbiter Mission, etc. The communication transponders developed at this Centre for Indian National Satellite (INSAT) and Geo Synchronous Satellite (GSAT) series of satellites are used by government and private sector for VSAT, DTH, Internet, broadcasting, telephones etc.

There was a huge gate of Entrance. Its surrounding was pure clean. There were number of employees working. It is dream to get job in ISRO to work for our nation.



Front View of ISRO

PURPOSEOFVISIT

Industrial visits are important for the following reasons:

1. To gain a practical knowledge of the actual working of the organization.
2. To get the practical knowledge of the project development process.
3. To adopt criteria about the management.
4. To study co-ordination between different departments.
5. How to control various circumstances.

In order to achieve the above mentioned objectives we had organized an industrial visit at ISRO, Ahmedabad for students of 2nd Semester of Computer Engineering Department, I.T. Engineering Department, Mechanical Engineering Department, Civil Engineering Department and Electrical Engineering Department.

Significance of the Industrial Tour

The basic objective of having industrial tour is for studying various aspects related with different industrial units.

The different techniques and methods being used in industries are studied in order to gain wide outlook concerning industrial activities for that purpose.

What we Learnt?

On 23rd Feb 2024 (Saturday) at 10:00A.M. we reached at ISRO (Ahmedabad) Branch which is Space Application Center (SAC). Our faculty members lead us. All the students of CE branch were in discipline. It was a huge building with tight security. The director of ISRO gave the permission to visit the exhibition.

After a great photo session of half an hour we were allowed to go inside. First of all we went to the first floor where we all were given introduction to the ISRO center, the none of the 2 former scientist of ISRO gave us information on Remote sensing satellites, the working of it, its uses. What is navigation in channel, how satellite is communicated with earth. The other scientist gave us information on geostationary satellites and navigational satellites. Geostationary satellites are used for communication and are situated at 35,900km above surface of the earth.



Indian Missile Demo with Satellite and its Engine (GSLV)

Function: Medium Lift Launch System

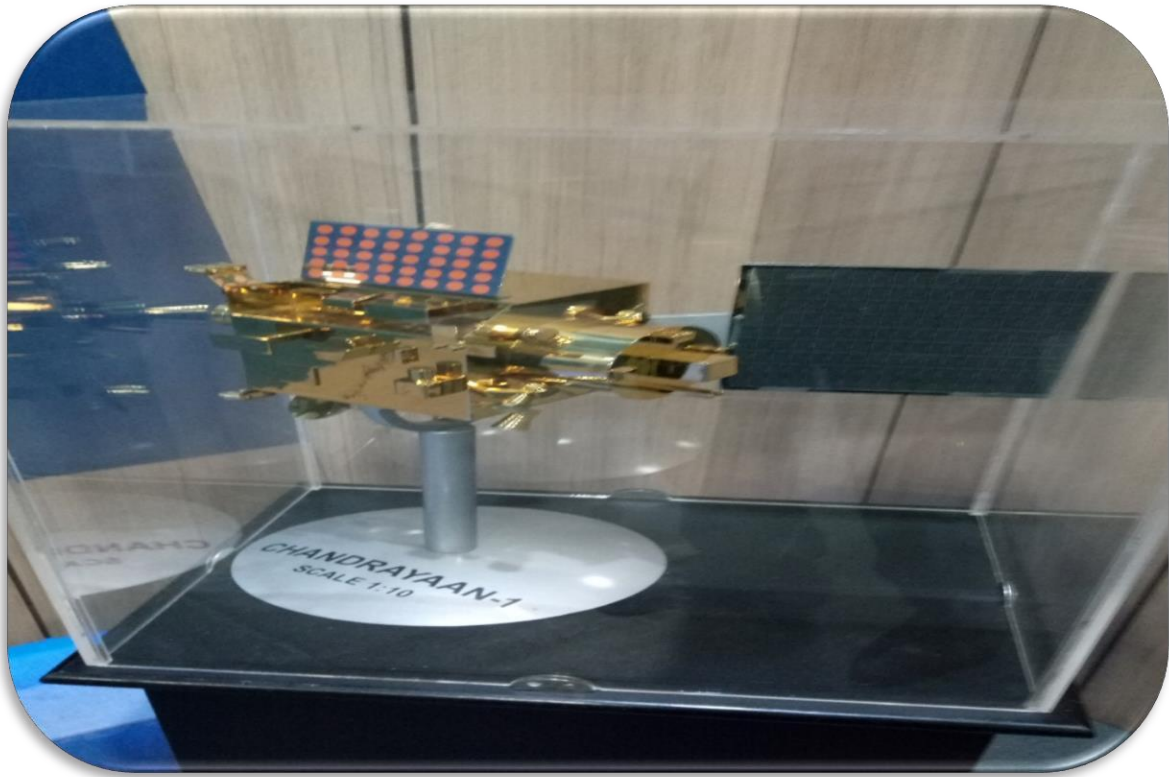
The above picture of Indian Satellite where there is GSLV–iii (Geosynchronous Satellite Launch Vehicle).GSLV is an expendable launch system operated by the Indian Space Research Organization (ISRO).

The first development flight of GSLV MK. I (GSLV-D1) was launched on 18 April 2001.



ASLV (Augmented Satellite Launch Vehicle)

The from there we were divided into 2 groups. Our 1st group went for a 3rd video. It was of approx. 15 to 20 minutes where we saw about the different space stations and some of its missions. Then we went to the different sections, where we saw all the models of satellites launched by ISRO. Then there was a real size satellite model where we were given live explanation of each of the parts of satellite in detail.



CHANDRAYAN MISSION (Scale 1:10)

Chandrayaan-1, India's first mission to Moon, was launched successfully on October 22, 2008 from SDSCSHAR, Sriharikota. The space craft was orbiting around the Moon at a height of 100 km from the lunar surface for chemical, mineralogical and photo-geologic mapping of the Moon. The space craft carried 11 scientific instruments built in India, USA, UK, Germany, Sweden and Bulgaria.

Session of Experts (Scientist):

It was memorable moment to attend an important lecture of scientist about navigation. It was very interesting session. They explained about communication of Satellite, channelization and it's working. They also explained how broad casting is done with satellite.

There was a live quiz where many attempted and scored nice marks. There were also models of our known Astronauts where all were proud to click photos with them.



Launch Vehicle



Vikas Engine



Space Suit

There is visas Engine and a Space suit which is worn by astronauts when they goto space. There is whole system of man breath, Oxygen mask, Inflammation wearing, Hand mask. There is helpmate and parachute also.

On the ground floor there were all the model so four rockets and missiles and important information about them, there was a whole section on Vikram Sarabhai having all about his life, his achievements and a photo collage of his life.

Snaps of the Visit



Conclusion

The experience of this tour was really fantastic and unforgettable. It was a reverberating experience which cherished all of us. Students got valuable information about different aspects of space application center such as satellite technology, communication technology, rocket science, information astronauts, application of space engine, launching pads, space research programs etc.