

REPORT ON VISIT TO ISRO (SAC), AHMEDABAD

Date: 11-05-2024

Institution: ISRO (SAC), AHMEDABAD

Event Day: National Technology Day

Theme: From Schools to Startups: Igniting Young Minds to Innovate

College: GMCA, Maninagar

Faculty Coordinator: Dr Jaimin B. Dave

Students: Darshit Rakhasiya, Kashish Bhanushali, Raj Solanki, Jay Purani, Tanvi Vara

INTRODUCTION:

On the 11th of May, 2024, our college had the unique opportunity to visit the Space Applications Centre (SAC), ISRO, Ahmedabad, Gujarat. This visit was organized to celebrate National Technology Day, with the theme "From Schools to Startups: Igniting Young Minds to Innovate". The event aimed to inspire young students and emerging entrepreneurs by showcasing India's technological advancements and fostering a spirit of innovation.

INSTITUTE PROFILE:

The Space Applications Centre (SAC) in Ahmedabad, India, is a key player in ISRO's mission. Established in 1961, SAC designs instruments for space missions and develops applications of space technology to benefit society. From remote sensing for agriculture to satellite communication, SAC's work has a wide-ranging impact and positions it as a leading institute for space technology advancement in India.

GROUND REPORT:

We reached our destination at 8:00AM with 5 students along with 1 coordinators faculty (Dr. Jaimin B. Dave). The event commenced with registration and a hearty breakfast at 8:20AM.

At 9:15 AM, we entered the SAC Space Application Centre Hall, where we were treated to an animated video showcasing some of ISRO's monumental missions, including Chandrayaan-3, the Pragyan Rover, orbital planning, and various other cutting-edge projects such as VELC and SUIT. This visual presentation prepared us well for the following sessions.

PRESTIGIOUS GUESTS:

- Dr. Narottam Sahoo, Advisor & Member Secretary at Gujarat Council on Science & Technology (GUJCOST)
- Shri Nilesh M. Desai, Director of SAC, ISRO
- Dr. Arvind C. Ranade from the National Innovation Foundation
- Dr. Tapan Mishra, founder of Sisir Radar and former Director of SAC, ISRO
- CA Arjit Soni, founder of MYBYK
- Astha Jhala, an award-winning space architect and CEO of AAKA SPACE STUDIO

- Mr. Chandubhai Virani, founder of Balaji Wafers

SPEECH SESSIONS:

The official proceedings began at 10:00 AM with a welcome speech, followed by a prayer and lamp-lighting ceremony. The speeches commenced with Dr. Jolly Dhar, the Group Director-MSRG and the lead organizer of the event. She highlighted the vision of Dr. Vikram Sarabhai, ISRO's achievements like the Mars Orbiter Mission, and India's milestone of a soft landing on the moon.

Dr. Narottam Sahoo, Advisor & Member Secretary at Gujarat Council on Science & Technology (GUJCOST), followed with insights into Gujarat's startup ecosystem and initiatives like Jay Vigyan and Jay Anusandhan.

Shri Nilesh M. Desai, Director of SAC, ISRO, congratulated students and organizers, reflecting on significant achievements such as the Pokhran Test and mentioned about Gary Kasparov and innovators like Thomas Alva Edison. He also touched upon India's future plans, including joining the ISS.

The chief guest, Dr. Arvind C. Ranade from the National Innovation Foundation, delivered an impactful speech on India's historical contributions to science and mathematics, emphasizing the importance of resource awareness and technological solutions. He introduced the NIF's "Inspire Manak program" aimed at fostering grassroots innovation.

Dr. Tapan Mishra, founder of Sisir Radar and former Director of SAC, ISRO, spoke about the culture of innovation and startups, using real-life examples to illustrate the importance of a Supportive atmosphere for technological growth.

Following the speeches, a photoshoot session for students and esteemed guests took place, capturing memories of this inspiring event. A tea break from 12:20 PM to 12:45 PM allowed attendees to discuss and reflect on the morning sessions.

Post-break, CA Arjit Soni, founder of MYBYK, shared his entrepreneurial journey, detailing the step-by-step process of bringing his innovative bike-sharing idea to reality.

The afternoon began with a short quiz session, engaging the audience and testing their knowledge gained from the day's presentations.

Astha Jhala, an award-winning space architect and CEO of AAKA SPACE STUDIO, shared her journey and experiences, including her contributions to the Gaganyaan crew capsule design.

Mr. Chandubhai Virani, founder of Balaji Wafers, recounted his entrepreneurial journey from humble beginnings to becoming a leading brand. His story was a testament to perseverance and innovation in business.

A Thanksgiving Speech marked the official conclusion of the speech sessions, followed by lunch from 2:20 PM to 3:30 PM.

LABORATORY VISITS AND TECHNICAL SESSIONS:

Post-lunch, we explored the technical aspects of ISRO's work. Then a session on the Chandrayaan-3 mission provided deeper insights into the mission's objectives and achievements. This was followed by visits to two laboratories where scientists demonstrated their ongoing projects, including advanced instruments and telescope spectrum lenses.

After that in a conference room, we learned about microwave remote payload/sensing, various types of radars, and Application-Specific Integrated Circuits (ASICs). The hands-on experience with live samples of different ASIC chips was particularly enlightening.

The final lab visit offered an immersive experience in planetary simulation and visualization technologies. We then moved to another conference room to watch a video on the Gaganyaan mission planning.

Then we explored the semiconductor laboratory, where we learned about semiconductor manufacturing processes and their applications. After a short break, our visit concluded with the exploration of the exhibition section, admiring various space-related models.

CONCLUSION:

The visit to ISRO on National Technology Day-2024 was a profoundly educational and inspiring experience. It showcased India's significant improvements in space technology and innovation, motivating all participants to pursue excellence in their respective fields. The day's activities underscored the importance of innovation, entrepreneurship, and a collaborative approach to scientific advancement, leaving a lasting impression on all attendees.

PHOTOS:





