

1. Gaganyaan Outreach programme

The Gaganyaan Outreach programme organised during April 3rd to 9th, 2022 at Gujarat Science City was an event which has exhilarated the spirit of celebrations of AKAM as well as enlightened the audience about the scientific & technological advancements of our country.

The event was organised jointly by Space Applications Centre and Development & Educational Communication Unit/ ISRO, Gujarat Council on Science & Technology (GUJCOST), Department of Science & Technology and Gujarat Science City as part of Azadi Ka Amrit Mahotsav.

Each day of the programme witnessed unique events targeting different groups of participants, with new themes on every particular day. A theme talk by expert scientists from SAC was also arranged on each day to enlighten different target audience and to encourage their talent and



Exhibits at the venue

Divyaang category, which turned out to be a very special and memorable one. The happiness which they expressed on getting a stage to showcase their skills was felt by all the audience. The unique talent which each one of them possess and exhibited was really a motivation for all who were present there.

The entire event was well organised, and accepted well by the participants & the arrangements made by the organisers from SAC and Gujarat Science City for a smooth conduct of the event were worth appreciating. The eagerness of the children to know about Indian manned mission and the excitement on seeing the crew module was visible all throughout the programme. More than 10000 participants of different age groups attended the event.



interest in scientific subjects.

A live interaction with the first Indian Astronaut Wing Commander Rakesh Sharma, on the 6th day of the event, was the main highlight of the week long programme. It was a unique opportunity for the participants, especially for the students, when they got a chance to interact with such a great personality and the efforts made by SAC management in making it possible were well appreciated. A **day was ear marked for the**



Inauguration

The inauguration of the week-long celebrations was held on 3rd April, 2022 at Vigyan Bhavan, Gujarat Science City with Shri Nilesh Desai, Director, SAC as Chief Guest. The Chief Guest also inaugurated the exhibition of Gaganyaan Crew Module and other ISRO exhibits, including Space on Wheel.

Shri D K Singh, Deputy Director, Dr. D Ram Rajak, Group Director along with other SAC colleagues joined the inauguration. Shri Narottam Sahoo, Advisor, Gujarat Science City and his team,

who have toiled endlessly for the excellent conduct of the event, were also present.

A talk on Indian Gaganyaan Programme by Shri Anurag Verma, Associate Programme Director, Gaganyaan Project was the highlight of the day. A large number of audience, a majority from the young student community, were present for the inaugural function. On-the-spot quiz, on topics related to science, was arranged for the students. Participants were given Gagannaut models as token of appreciation.



GAGANYAAN OUTREACH PROGRAMME

2 satellites to keep contact with Gaganyaan intact

TOI 04.04.2022

SAC-ISRO Team Says Project Pushed Boundaries Of Knowledge

It's not just rocketry or satellite communication or launch vehicle that would be tested when India's ambitious human spaceflight mission Gaganyaan would finally take off some time in 2023, the scientists at Space Applications Centre (SAC) of ISRO in Ahmedabad on Sunday said that the Rs 10,000 crore mission is pushing boundaries of knowledge in almost all areas for Indian experts from the field as diverse as space medicine and crew-escape system in case of emergency.

Ahmedabad hosted India's first Gaganyaan outreach event at Science City on Sunday that will continue for seven days for the visitors.

The life-size model of crew module is the main attraction of the exhibition. Speaking on the occasion of launch, Nilesh Desai, director of SAC-ISRO, said that India would be fourth country to try to plan such a mission.

"We want to save lives at any conditions, and want to avoid Challenger shuttle-like disaster. We have also devised technologies to ensure that the module is in constant touch," he said, adding that about 3,000 scientists and technicians are currently working on the project.

Anurag Verma, deputy assistant project director at SAC, said that two communication satellites will be stationed at 120 degrees apart so that even when the module will be behind the Earth from India's point of view, it will not lose connection.

SEVEN DAYS IN SPACE

The present plan is to put the module in 400km orbit around Earth, which is identified as Low-Earth Orbit (LEO). The crew would go around Earth 16 times a day in the orbit that goes from India roughly above Australia and coming back to India. The crew - consisting of Air Force pilots - will study micro gravity and other phenomenon.

ISRO TEAMS MAKING DREAM A REALITY

India would join elite club of countries that have made a human spaceflight possible by developing the required technologies from scratch. The SAC team (in picture) in Ahmedabad is working on various aspects of the project - right from developing communications to providing operational assistance. The project would provide India with its own human-rated launch vehicle, habitable module, life support system, space suit and so on which would expand boundaries for ISRO.

COMING BACK HOME

After seven days, the crew will de-boost, re-orient the module towards Earth and start downward journey which will take 36 minutes. After the splashdown near Gujarat coast, the crew will have eye to signal in water nearby to increase visibility, beacons, satellite phones and survival kit. The crew members will be kept in quarantine and checked for any health issues.

SUSTAINING LIFE IN SPACE

The Environment Control and Life Support System is the heart of the mission preparations. It will monitor oxygen and carbon dioxide levels, pressure, temperature, humidity, fire detection and suppression, and ensure personal hygiene.

INSIDE CREW MODULE

The model at Science City shows the panels and screen above the seats of the astronauts. Narottam Sahoo, advisor to GUSCOST, said that the exhibition provides a unique opportunity for students and visitors to have a peek at India's giant leap in space technology with the mission. The exhibition started on April 3 to coincide with India's first astronaut Rakesh Sharma's flight to space on the same day in 1994.



Events Held

All programmes were held in Gujarat Science City, Ahmedabad

Day 2: 4th April 2022

Theme for the day : **Crew Module**
 Expert Talk by : Shri Ashish Soni
 Event : Colouring
 Target Audience : Class 3-5



Day 3: 5th April 2022

Theme for the day : **Space Habitat**
 Expert Talk by : Shri Rajesh Kumar Singh
 Event : Drawing & Painting
 Target Audience : Class 6-8



Day 4: 6th April 2022

Theme for the day : **Indian Space Station**
Expert Talk by : Shri Anurag Verma
Event : Model Making
Target Audience : Class 9-12



Day 5: 7th April 2022

Theme for the day : **Space Colonisation**
Expert Talk by : Wing Commander
Rakesh Sharma
Event : Oral Presentation
Target Audience : UG/PG/open to all



Day 6: 8th April 2022

Theme for the day : **Space for everyone**
Expert Talk by : D B Bhatt (Retired)
Event : Interaction with Scientists
Target Audience : Divyaang



Day 7: 9th April 2022

Theme for the day : **Indians in Space by 2047**
Expert Talk by : Panel Discussion by ISRO Scientists
Event : Elocution
Target Audience : Open to all



Among the audience: Director, SAC & Director, HSFC



Visit by Senior Citizen

Visit by an enthused group of very senior citizens on 5th April, 2022 made the day memorable.



Valedictory Function

A grand valedictory function on 9th April, 2022 with Shri R Umamaheshwaran, Director, HSFC as the Chief Guest, marked the conclusion of the week-long event. The Chief Guest expressed his immense happiness on being a part of the programme and on the thought process involved in chalking out the most relevant programmes for awakening public interest towards Gaganyaan. He congratulated the entire team involved in the professional execution of the overall event. Shri Nilesh M Desai, Director, SAC & Shri Narottam Sahoo, Advisor, Gujarat Science City also addressed the audience.



Prizes for the winners of various competitions were distributed and the organising team members of both SAC and Gujarat Science City were honoured in the function. National Anthem by the Divyaang students stole the show.



Thanksgiving Function

A special thanksgiving function also was arranged in SAC campus on 29th April, 2022 to felicitate the award winners and the organisers, in continuation to the valedictory function.



*Performance by Divyaang Students
on Thanksgiving Function*