The Summer Astro Space Camp 2018 was organized from 23/04/2018 to 29/04/2018 in JSS Public School by Society for Space Education, Research and Development (SSERD) and supported by ISRO and Genex Space. 68 students participated who hailed from different schools from different parts of the city. This space camp was a remarkable milestone as we had level 1 and level 2.

The SSERD team considers the camp as a milestone and a unique one because in the span of Seven days of the camp, SSERD rendered optimised service. The camp was fun packed, entertaining and knowledge harvesting. The kids were very curious and enthusiastic which made it a tad little difficult to handle them. SSERD’s aim being to reach out students more practically and having events which will have hands on was kept in mind while designing the whole structure for Astro Space Camp.
Students had theory sessions as well as hands-on Hydro Rocketry, Aeromodelling, Astronomy, Gliders, Space Robotics, Telescopes, Sky Watch, Recovery Test. Lot of competitions such as Hydro Rocketry - Longest Range, Aeromodelling- Longest Endurance Glider, Robotics- Robo Race, Poster Making, Collage making, Students’ presentation, Space Quiz and Egg Recovery Test were organized so that students get sportive while learning Space Science.
Level – 2 had new concepts of Space Science. This Level was only for the students who had attended our previous Level 1 workshops (As this level required pre requisites from Level 1). Out of 150 students, 10 students opted for Level 2 which makes us very proud.
It was a great surprise to meet our previous camp students. They had the same enthusiasm and excitement towards learning new topics this year too.

Level -2 Students mentioned that they would like to join next year if we plan for Level – 3. Topics were discussed for Level -3 such as Designing Human Rover, Space Pod, and Communication Systems etc.
Summer Space Camp – v2.0 had lot of Eminent Speakers from various backgrounds to give a talk on Space related topics which connected the dots of the Camp.

**GUEST SPEAKERS**

Dr. Sivathanu Pillai, Founder of BrahMos Aerospace Pvt Ltd. had given talk on Future of Space Technology. He is also known as Father of Missiles.

“I really loved interacting with students, they have really good temper on Space Technology.”

- Dr. Sivathanu Pillai

Mr. Subramani A, is a Scientist at ISRO Satellite Centre, Secretary of ISRO’s Upagrah Amateur Radio Communication. He had given a talk on Space Communication and demonstrated the working of Receiver, Transmitter, and Ground Systems.

“First I doubted if students of this age would be able to understand these heavy topics, but the students were way much better than college students whom I usually interact with. I really loved the session. I would love to train the interested students to get HAM License.”

- A Subramani
Mr. Nagraj Ananth, Scientist – Electrical Engineer at ISTRAC, ISRO had given a motivational talk on Dr. Kalam, Rockets & Satellites.

“Mingling with the students was an exciting experience. I thoroughly enjoyed the session. Good luck and keep going.”

- Nagraj Ananth

A team consisting of Ratan, Swaroop and Saravana from “Next Big Innovation Labs” gave a talk on 3D Printing. Students experienced this cutting edge technology with the real 3D printer the team had got.

“Next Big Innovation Labs congratulates SSERD team on the amazing work they are doing in introducing to the youth, new age technologies like 3D printing, that will be a part and parcel of their daily lives in the near future, much like computers are today for those born in the 80s and 90s. Keep up the great work!”

- Alok Medhikepur Anil,
  Director, Next Big Innovation Labs
Mr. Mohan Sivam, Co-founder & CEO of Gamasome had given a talk on Virtual Technology. Students were mesmerized by viewing it individually.

“I was afraid that my session might be an overkill for such small kids, but to my surprise the kids are smarter than what I thought. There were asking very clever questions that explains that they were observing my session carefully. I am impressed and very happy about the session.”

- Mohan Sivam

Mr. Sujay Sreedhar, Co-founder & Chairman SSERD handled a session of Model Satellite Development for Level-2 students.

“I always wanted our students to have hands-on any topics we teach here at SSERD, this time for level 2 we introduced Cansats. Students where smart and learnt all the basics, working and even made working model that recorded the data.

- Sujay Sreedhar
SPACE TREK

Summer Space Camp – 2018 was scheduled with a field trip to Space Gallery in Vishveswarayya Industrial & Technological Museum and HAL Heritage Aerospace Museum. The kids enjoyed whole package in SSERD tees. They had fun as well as a learning experience during the trip. Both the kids and the team went home satisfied.

The Space – Emerging Technology in the Service of Mankind gallery showcases the achievements of the Indian Space Program. It was inaugurated on 19 June 1999. The Gallery was renovated with guidance of Indian Space Research Organization and reopened as Space Technology on 28 November 2017 by A. S. KiranKumar and Krishnaswamy Kasturirangan. It is the first Science Gallery in India dedicated to Space and Space Technology.
HAL Aerospace Museum is India's first aerospace museum located at Hindustan Aeronautics Limited premises, in Bangalore. Established in 2001, the Museum is part of the HAL Heritage Centre and Aero Space Museum, and showcases the growth of the Indian aviation industry and HAL for six decades. The museum houses displays of various aircraft and helicopters, Aircraft engine models, Flight simulators, a mock Air Traffic control tower and exhibit of Indian aviation history. The Museum is maintained by HAL (one of Asia's largest Aerospace companies).
The right window to look at the sky was scheduled on 5th day of the camp at 04:00 AM in the early morning. Surprisingly, we had all the students joining us for the sky gazing with their parents and family. Jupiter and its 3 large moons, Saturn with its beautiful rings and Mars were seen through 2 of our Astronomical Telescopes and Students’ made Telescope. Last day of the camp was a Full Moon Day, hence the students and parents got a chance to see the moon surface in detail.
ISRO’s Exhibition models like
- Geosynchronous Satellite Launch Vehicle [GSLV]
- Polar Satellite Launch Vehicle [PSLV],
- Mars Orbiter Mission [MOM],
- INSAT and
- GSAT 14 were provided by ISRO.

SSERD Team explained about each and every model to all the students in detail.
Aditya Lingam studying in 6th Standard, Oakridge International School presented a Talk on “Universe of Theories”.

He mentioned that the Winter Space Camp which he attended motivated him to study more about theories which lead to origin of world and he wanted to share his knowledge with co-participants.

Aditya Lingam was interviewed by the SSERD Team. Watch out SSERD’s Young Minds Channel on YouTube.

Aryan Prasad gave a presentation on the things Level -1 students learnt throughout the 7 days Camp.

He mentioned each and every topic, his experience and learning outcomes in front of all the parents who gathered for Valedictory program.
Students from Level-2 Group presented on what they learnt throughout the Camp.

Nabhan explained about Chemical Rocketry learning outcome and experience.

Poojitha and Sanjay demonstrated the DRONE which they made during the camp.

Arunagiri and Anish explained about modelling of Telescope and how easy it is for anyone to make their own telescope at home by giving an example of Telescope which the team made.

Devi and Varish spoke on how to make a simple Model Satellite which can measure atmospheric pressure, Temperature and Altitude with the help of sensors, fabricating the Structure, coding and Recovery of the satellite through Parachute.
The summer camp 2018 ended with happy hearts and blissful memories of getting Certificates and prizes for winning in various competitions. Surprise prizes were given to the Active Participant, Space Camp Angel and Space Camp Alien Award which were won by Nabhan, Ira and Anish respectively.
Team got a lot of appreciation from the parents where they encouraged us for organising such an event as their kids enjoyed it to the zenith. Few parents even gifted our team with surprising gifts to appreciate all the efforts we had put for making it very knowledgeable. We are really excited about the kids because their possibilities are endless.
Feedback

“I really loved the Astro Space Camp, I loved all the lectures, activities and the most, the Teachers. I liked the poster making, parachute making and Glider making. I even won prize in Glider making and Poster making competitions. We also had lecture on 3D Printing and Virtual Reality which gave me a way nice though of the topic. The best part was early morning sky gazing and the field trip. I will cherish the certificate, key chain and gifts given to me. I made many new friends during this one week camp. I will miss all the teachers a lot. Given the chance, I will surely try to attend Level – 2 in the upcoming Astro Space Camp.”

- Saksham Bandlish
  Delhi Public School

“SSERD is my first experience to work as a Volunteer, and the camp exceeded my expectations and beyond. From start to finish. It was a great experience to be a part of the camp.

The camp is unique, we got to learn many new different things day by day, and interaction with the children and sharing their ideas and opinions on some topics is really great experience based on this pace and the availability of materials.

I highly recommend this program for just about anyone. The people are amazing, the scenery can't be beat, and the flexibility of the work projects assures that your skills will be put to use.”

- Mohammed Nadeem.
  Oxford College, Bangalore
ORGANIZING TEAM

Sujay Sreedhar – Model Satellite Development
Nikhitha C – Telescope Modelling
K R Abhishek – Hydro Rocketry
Mahesh – Chemical Rocketry
Mohammed Shaik Ali – Drone
Gowtham V Reddy – Aeromodelling [Glider]
Sitara – Astronomy
Alka – Hydro Rocketry
Deepesh – Aeromodelling [Glider]
Mohan - Robotics
Ullas – Recovery Test
Gowry Shankar - Robotics
Amrutha – Telescope Modelling
Madhu Ragul – Hydro Rocketry
Nadeem – Hydro Rocketry
Sanjay - Astronomy
Sindhu – Field Trip
Praveen – Field trip
Vijay – Valedictory
Vishnu – Field trip
Payal – Exhibition

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Dr. A S Pillai, Founder BrahMos Aerospace
Dr. Devi Prasad Karnik, PR - ISRO
Mr. A Subramani, Secretary of Upagrah Radio HAM
Mr. Nagraj Ananth, Scientist ISRO
Mr. Mohan, Co-founder & CEO Gamasome
Mr. Alok M Anil, Director - Next Big Innovation Labs
GENEX SPACE
Baze Store
Samlaks Marketing Solutions
JSS Public School

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Email – info@sserd.org
Contact - +91 8861963216