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OPEN SPACE FOUNDATION

Annual Report 2021-2022



YEAR OF NEW BEGINNING



Year of New Beginning

Open Space Foundation
Annual report - 2021-22

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ABOUT US

Youth-led Science Communication & Education organization



VISION

To inculcate scientific temper among people as a way of life

MISSION

We strive to build and connect alternative education models through decentralized platforms

MISSION STATEMENT

Open Space Foundation (OSF) is a youth-led organization committed to promoting science education and building a scientific temperament among the people through public outreach. Our mission is to strive to build and connect alternative education models through decentralized platforms. With this in mind, we have initiated various programs that focus on fostering scientific curiosity and critical thinking among students and the public. One such program is the O'IC (Our Interesting Cosmos) campaign, which aims to share daily facts about space science and technology with the public. Through this program, we have reached over 20,000 people on social media and supported our STEAM teachers network in their classrooms. Our flagship project, the Open Science Center, is a hub for science education, research, and outreach, designed to provide a unique learning experience to students and the community.



Bharathkumar Velusamy,
Co-Founder & Secretary

Activities Overview



In the past year, Open Space Foundation (OSF) has carried out a range of activities and initiatives to promote science education and literacy and to make science more accessible to all. Our flagship project, Democrazily Science, continued to be a hub for science enthusiasts, hosting various workshops, lectures, and events throughout the year. We also organized the **Tamilnadu Asteroid Search Campaign**, which engaged students and volunteers from all over Tamilnadu in the search for real asteroids. The campaign was a massive success, with over **150 signatures of real asteroids** detected, and **36 asteroids** listed under the Preliminary category of Minor Planet Center—International Astronomical Union.

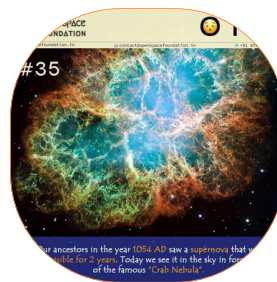
Additionally, our **Democrazily Science programme "O'IC"** shared daily facts about science, with a particular focus on space science and technology, with the public through social media. This programme reached a wide audience of over **20,000** people and helped to foster discussions about science in classrooms through our **STEAM Teachers network**. Furthermore, OSF partnered with several like-minded organizations and stakeholders, both locally and globally, to expand our outreach efforts and promote scientific literacy. Finally, we are proud to have completed our **"Gender Talks in Tamil"** project, organized in association with the **Women's Studies Department of Bharathidasan University, Tiruchirappalli, and Nirangal, Chennai**, to promote equality in education space and beyond. We are excited to continue our mission of democratizing science and building scientific temperament among people through public outreach, and look forward to the year ahead.



Meet the Astronomer



Asteroid Day



O'IC



Democrazily Science

IMPACT REPORT

Key impacts measurements

OSF's impact can be measured in terms of its contribution to promoting scientific culture, accessibility to quality science education, and community engagement. By organizing various science communication activities, OSF has been successful in motivating young students to take up science education as a career and promoting scientific temperament in society.

IMPACT SNAPSHOT

247 Beneficiaries directly impacted

14 Varieties of activities & campaigns

20000+
Indirect reach outs

A year with unique challenges

During the post COVID-19 era One of the main challenges that Open Space Foundation (OSF) has addressed is the accessibility to quality science education, especially for children from socio-economically disadvantaged backgrounds in remote regions of India. OSF aims to bridge this gap by developing and implementing various science engagement programs, such as the Democrazy Science & OSF VISTA. Through these programs, OSF empowers young science graduates and community volunteers to reach out to children in remote areas and provide them with hands-on science education and learning experiences. This approach not only fosters scientific curiosity among children, but also inspires them to pursue careers in science and technology, which in turn contributes to the overall development of the community and the country.

Democrazily Science

MEET THE ASTRONOMER

Open Space Foundation (OSF) organized an exciting virtual event, "**Meet the Astronomer,**" in association with the **International Astronomical Union—Office for Astronomy Outreach**. The event was aimed at promoting science education and increasing awareness of space science and technology among the public. **Dr Clamentian Sasso**, a renowned astronomer from the **INAF Observatory in Italy**, was invited as a guest to talk about the Sun and its various phenomena.

The event was a massive success, with 1647 people attending the virtual talk online. OSF collaborated with several educational institutions, including the **Chiguru Center for Science & Technology Education, Research and Communication (CSTERC) in Bangalore, SNMV College in Coimbatore, Sri Akilandeswari College for Women in Vanthavasi, and Hindustan College for Engineering in Coimbatore**. These collaborations allowed the event to reach a wider audience and fostered partnerships with like-minded organizations and stakeholders in the field of science education.

The talk by Dr Clamentian Sasso was informative and interactive, covering various aspects of the Sun, including its composition, magnetic fields, and activity cycles. The audience had the opportunity to engage with the astronomer and ask questions, making the event a truly engaging and participatory experience. Overall, the "Meet the Astronomer" event was a significant step towards promoting scientific literacy and curiosity among the public, and OSF looks forward to organizing similar events in the future.



THE IAU
ASTRONOMER !!

Our Guest:
Clementina Sasso,
INAF - Osservatorio
Astronomico di Capodimonte,
Italy.

Topic : "Introduction to the Sun"

10th June 2021
05.00 - 06.00 PM (IST)
11.30 - 12.30 AM (UTC)

Join us Live on
OSF Pages

Register Here
<https://bit.ly/3cgrV>

Partners:

CSTERC
Hindustan
College of Engineering and Technology
Approved by AICTE, Affiliated to Anna University, Chennai
Established in 1982, Accredited with A Grade by NAAC

contact@openspacefoundat

Highlights

1647 participants
(Online)

5 Partnership

Livestreamed on OSF
YouTube & Facebook

SDG 4

Virtual Talks & Seminar



Democrazily Science



NAMMA TELESCOPE "Telescope 4 All"

We are thrilled to announce that we have been awarded a functional Telescope by the **International Astronomical Union - Office for Astronomy Outreach, in partnership with SSVI - Belgium, Leiden University - Netherlands, and Bresser Telescopes - Belgium, under the theme of Telescope for All - 2021**. The project "Namma Telescope" has been selected by IAU to offer a telescope to promote Astronomy for everyone. We are proud to receive this recognition and support from IAU, which allows us to equip community spaces and marginalized schools with a functional telescope.

Namma Telescope is our new initiative, and we believe that this awarded Telescope from IAU will be the starting point for a larger goal. OSF works with marginalized children across Tamilnadu, and we believe that this project will help in promoting astronomy for everyone. It is an honour for us to be selected as one of the **12 projects across the world** to receive this telescope from IAU. We are grateful to IAU, SSVI—Belgium, Leiden University—Netherlands, and Bresser Telescopes—Belgium for their support and recognition. We look forward to making the most of this opportunity to promote scientific curiosity and inquiry among the community.

Highlights

100+ Applications across the world

12 Project has selected

only one in India

SDG 4

Astronomy Outreach



Democrazily Science

பாலினம் பேசுவோம்

பால், பாலினம் மற்றும் பால் ஈர்ப்பு பற்றி விவாதிப்போம்.

#24 தலைப்பு :

மாற்று பாலின, பாலீர்ப்பு மக்களின் நிலை

பகிர்பவர் :

சிவா,
நிறங்கள்.



11 ஏப்ரல்
2021



5.00 - 6.30 மாலை

இணையவும் :

<https://classmeet.chiguru.tech/app/gendertalks>

நேரலையில் OSF youtube & FB

ஊண்பாளர்கள் :



GENDER TALKS IN TAMIL

Open Space Foundation (OSF) is proud to have organized the Online Gender Talk in Tamil in association with Women Studies Department, Bharathidasan University, Tiruchirappalli, and Nirangal - Chennai. The programme was aimed at promoting gender equality in education spaces and beyond. The talk series comprised 24 interactive sessions, which covered a wide range of topics related to "Gender, Sex, and Sexuality".

The programme spanned over 24 weeks, and we were fortunate to have the participation of 30 volunteers from Tamilnadu and Puducherry. We were also honoured to have speakers from various organizations and universities who delivered insightful talks on topics ranging from gender-based violence to feminism, and LGBTQ+ rights, to name a few. The talks were streamed live on OSF's YouTube and Facebook pages, making them accessible to a wider audience.

We believe that this programme was a significant step towards generating awareness and promoting dialogue around gender equality. We are grateful to our partners and volunteers who helped make this programme a success. The positive feedback we received from participants and viewers has encouraged us to continue our efforts towards creating a more equitable and inclusive society.

Highlights

30 Volunteers

2 Partnership

26 Speakers

SDG 5, 10 & 16

Virtual Talks & Seminars



Democrazily Science

TAMILNADU ASTEROID SEARCH CAMPAIGN

Open Space Foundation (OSF), in association with the **International Astronomical Search Collaboration**, organized the **Tamilnadu Asteroid Search Campaign (TASC) in January 2022**. The campaign aimed to promote the engagement of students and the public in scientific research. As a result, **10 teams** of students from all over Tamilnadu participated in the campaign with the support of volunteers. The participants detected over **150 signatures of real asteroids**. Out of them, **36 asteroids** were listed under the Preliminary category of the **Minor Planet Center of the International Astronomical Union**.

The successful detection of the asteroids provides a great opportunity for the respective students and volunteers to name the newly discovered asteroids. OSF is proud to organize such activities to motivate rural and socially marginalized students to get exposure to science activities and learn about recent developments in the science and technology sector. It is worth mentioning that among the **56 participants, 29 were girls**, and among the **10 volunteers, 5 were girls**. OSF ensures that there is an equal space ground for all genders.

Before the TASC program, OSF trained **30 government and government-aided school teachers** to identify asteroids. In the next academic year, OSF plans to widen this activity to more schools in Tamilnadu and nearby states.

சர்வதேச விண்கற்கள் கண்டறிதல் ஆய்வுக்கு
எஸ்.என்.எம்.வி. கல்லூரி மாணவர்கள் தேர்வு



சர்வதேச விண்கற்கள் கண்டறியும் ஆய்வுக்கு தேர்வு செய்யப்பட்டு
மாணவ,மாணவிகளுடன் எஸ்.என்.எம்.வி. கல்லூரி நிர்வாகத்தின்
வ. ஆ.க. 5: சர்வதேச விண்கற்கள் கண்டறியும் ஆய்வுக்கு
எம்.வி. கல்லூரியின் இயற்பியல் துறை மாணவம்
ய்ப்பட்டுள்ளனர்.
அக்கல்லூரியின் இயற்பியல் துறைத் து

Highlights

56 Participants (29 girls)
10 Volunteers (5 Girls)

1 Partnership

36 Asteroids discovered

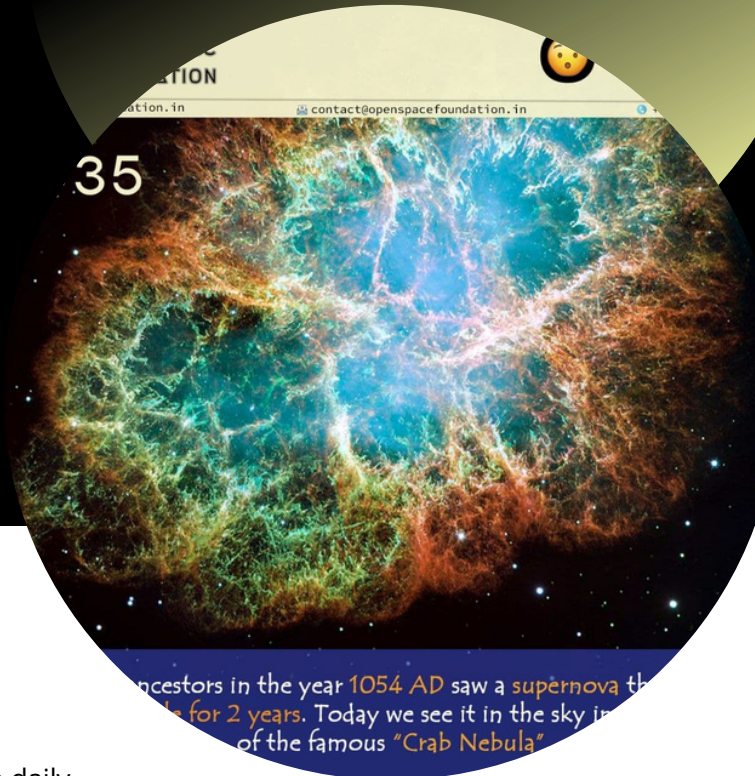
SDG 4

Citizen Science Project



Democrazily Science

35



O'IC

"O'IC" is an initiative by Open Space Foundation to share daily scientific facts with the public, especially focused on space science and technology. This programme was conducted during the **last quarter of the 2021-22 academic year** and involved the creation of **100 posters** covering various topics such as planets, space environment, asteroids, the solar system, and life on Earth. The aim of this programme was to increase scientific literacy among the public and generate awareness about the importance of science in our daily lives.

The O'IC programme was successful in reaching a wide audience of over **20,000 people** through social media platforms. The programme was especially beneficial for the **STEAM Teachers network**, as they were able to use the O'IC science facts in their classroom discussions, helping to increase scientific knowledge and understanding among students.

Through this initiative, Open Space Foundation continues to promote the importance of scientific literacy and awareness, which is crucial for the development of a scientifically aware and informed society. The success of the O'IC programme has inspired the OSF team to continue creating and sharing such scientific facts with the public, with the aim of reaching an even wider audience in the future.

Highlights

100 Space Science & Technology Facts

In Tamil

30 STEAM Teacher engaged

SDG 4

Sci Pop



Democrazily Science

OCTOBER SCIENCE CAMP - 2021

The Open Space Foundation organized a science camp for students from the Ambedkar Community Computing Center in Bangalore. The camp was held on the 16th and 17th of October 2021 at Iruway, Durgadahalli, Tumkur, Karnataka. A total of 15 students participated in the camp, which was aimed at promoting science education and inspiring young minds.

A team of volunteers, including Ramaseshan, Adithya, Mukunda, Vignesh, and Aslam, were instrumental in organizing the camp. The volunteers worked closely with the students, providing guidance and mentorship throughout the camp.

The camp included a series of hands-on sessions on fundamental science and astronomy. The students were encouraged to ask questions and engage in discussions, which helped to stimulate their curiosity and creativity.

On the second day of the camp, the group participated in a bio-walk on the Devarayandurga hills. This was a great opportunity for the students, many of whom come from urban slum communities, to experience nature and learn about the environment. The students were thrilled to be out of the city and were amazed by the natural beauty around them.

Overall, the October Science Camp was a huge success. The students gained valuable knowledge and skills, while the volunteers were able to make a positive impact on the community. The Open Space Foundation looks forward to organizing similar events in the future to continue inspiring and empowering young minds.



Highlights

15 Students (8 Girls & 7 Boys)

First time came out from their hamlet

2 Days

SDG 4

Science Camps



Democrazily Science



ORAL CANCER SCREENING

Open Space Foundation (OSF) has partnered with **Atom360, an Artificial Intelligence (AI)** based startup, to undertake a significant project of screening oral cancer using AI-based image analysis techniques.

Oral cancer is one of the most common types of cancer, with a higher incidence rate in India. As per the World Health Organization (WHO), oral cancer accounts for over **30% of all cancer cases in India**. It has been observed that people with a history of tobacco and alcohol consumption are at higher risk of developing oral cancer. Moreover, people who are working as daily wagers and labourers are at a higher risk of developing oral cancer due to exposure to Nicotine.

To address this critical issue, OSF has taken a significant initiative to screen oral cancer using an AI-based image analysis technique in partnership with Atom360. This project aims to screen **1000+** daily wage workers who are regularly using Nicotine in their daily life.

The screening will be conducted by a team of doctors, and Volunteers supported by the latest technology, and the process is completely non-invasive, painless, and does not require any specialized preparation. The results of the screening will be shared with the concerned individuals along with a detailed report of their oral condition.

The project is expected to raise awareness among the people about the dangers of tobacco and nicotine consumption and provide early detection of oral cancer, thereby improving the chances of successful treatment. The project will also help the medical community to learn more about the early detection and diagnosis of oral cancer.

OSF is proud to be part of this critical project that aims to improve the health and well-being of people who are at high risk of oral cancer.

DEMOCRAZILY SCIENCE

PANEL DISCUSSION ON SCIENCE EDUCATION

Panel Discussion:
State of Science Education – Challenges and Opportunities

06th March 2022 @ 06.30 – 8.00 PM IST

Speakers



JEYARAJ MUTHUVEL
 Headmaster, Govt. High School, Nagamangalam



MUTHUKUMARI S
 Teacher, Govt. High School, Vidaththaakulam



M MAHESWARI
 Teacher, Municipal Perumalpatti Middle School, Srivilliputtur



HARISH SRINIVASAN
 Learning Experience Designer, Co Founder, Infinite Engineers, Chennai

OPEN SPACE FOUNDATION

VP-TN0107

Celebration of
National Science Day
 06th March 2022

Panel Discussion:
State of Science Education – Challenges and Opportunities

06.30 PM – 08.00 PM IST
 @meet.jit.si/OpenSpaceFoundation

+91 8754778345 | www.openspacefoundation.in

Open Space Foundation celebrated National Science Day by organizing an Online Panel Discussion on Science Education on 6th March 2022. The event was designed to address the current state of science education, its challenges, and opportunities. Teachers from three different schools and a STEAM advocate participated in the panel discussion, which was attended by 66 people from across Tamilnadu.

The panellists discussed various issues related to science education, including the impact of the pandemic on science education, the need for inclusive and accessible science education, and the role of STEAM education in promoting

scientific literacy. The panellists also highlighted the challenges faced by science teachers in delivering quality science education and proposed solutions to address them.

The event was organized with the aim of shaping the education spaces for socially excluded children in the post-Covid era. The panel discussion provided a platform for educators and STEAM advocates to share their experiences, ideas, and concerns related to science education. The event was well received by the audience and was considered to be a valuable contribution to the discourse on science education. Open Space Foundation is committed to continuing its efforts to promote science education and literacy among children and youth from all backgrounds.

OSF VISTA



VISIT TO KODANAD ASTRO-CAMP SITE

The OSF VISTA programme organized a visit for 10 students and 3 teachers from Panchayat Union Middle School, Idayathangudi, Ariyalur District to the Kodanad Astro-Camp site on the 24th and 25th of March, 2022. The Kodanad Astro-Camp site is located in one of the highest peaks in the Western Ghats.

During this residential camp, students were given the opportunity to understand the functionalities of telescopes and observe night sky objects. They were able to observe the Moon, Jupiter, Saturn and the Milky Way, along with the beautiful sunrise from the campsite.

On the second day, the students were taken to the Tea Museum where they witnessed the tea powder making process from the leaves to packing. After that, they visited the Ooty botanical garden which is one of the largest botanical gardens in Tamilnadu. The students were able to explore different varieties of flowering and non-flowering plants.

Overall, it was a wonderful experience for the students, especially as it was their first time coming out of their village. The programme provided them with a unique opportunity to explore the world of astronomy, as well as learn about the tea industry and botanical gardens. It is expected that the programme will continue to provide such valuable opportunities for students in the future.



Network & Collaborations

Annual Report
2021-22

Year of New Beginning...

Open Space Foundation (OSF) has had the privilege of collaborating with various organizations, higher education institutions, and forums to promote science education and outreach. In April 2021, OSF signed a **Memorandum of Understanding (MoU)** with **Hindustan College of Engineering, Coimbatore**, to communicate and promote science education in and around the western districts of Tamil Nadu.

OSF has also partnered with the **International Astronomical Union (IAU)**, and **International Astronomical Search Collaborations (IASC)** to promote Astronomy education in Tamilnadu. Furthermore, OSF has associated with **SNMV, Coimbatore, Sri Akilandeswari College for Women, Vanthavasi, Discover Alphas, Kodanad, and Chiguru Center for Science & Technology Education, Research, and Communication (CSTERC), Bangalore**, to organize various events throughout the year. These partnerships have helped to reach a wider audience and to promote science education and literacy among people of all ages.

In addition to the above collaborations, OSF has also partnered with **Atom360**, an Artificial Intelligence (AI) based startup, to screen for oral cancer using AI-based image analysis techniques. This collaboration aims to screen over 1000 daily wage workers who regularly use Nicotine in their daily life. This partnership marks OSF's efforts to utilize modern technology to improve public health and raise awareness about the importance of early cancer detection. OSF hopes to continue collaborating with innovative startups and organizations to drive scientific research and promote science education and literacy in the community.

Overall, these collaborations and partnerships have enabled OSF to reach a wider audience and promote science education and literacy among people of all ages. OSF hopes to continue these partnerships and form new ones with like-minded organizations in the upcoming years.



"Nothing in life is to be feared, it is only to be understood. Now is the time to understand more, so that we may fear less."

Marie Curie

Testimonials

V o i c e s f r o m t h e
B e n e f i c i a r i e s



Tr. Chitra

I am overjoyed to be a part of the Open Space Foundation's initiatives. As a teacher, it fills me with pride to provide my students with opportunities through OSF. Our students were thrilled to participate in the Tamilnadu Asteroid Search Campaign and embark on the journey of discovering new asteroids. I extend my heartfelt gratitude to the entire OSF team for their unwavering support to our school.

Panchayat Union Middle School, Thudiyalur

Tr. Kavitha & Student Ajay

Open Space Foundation has opened up a world of exploration for us. OSF VISTA is a remarkable program that offers students and teachers the chance to visit industries and significant scientific and technological hubs, connecting with experts in the field. Our participation in an OSF VISTA event in Kodanad was an unforgettable experience. Under the starry night sky, we peered through telescopes, capturing a breathtaking view of the Milky Way. It's a memory we'll cherish forever.

Panchayat Union Middle School, Edayathangudi



Krithika G Krishnan

Open Space Foundation has been a part of my journey since my undergraduate days. From a wide-eyed learner, OSF has helped me develop my skill set and transform into a mentor. Serving as a mentor for the Tamilnadu Asteroid Search Campaign in 2022 was an immensely fulfilling experience. I am deeply grateful to the OSF team for providing me with this wonderful opportunity.

Post Graduate, Bharathidasan University



Year of Change



2022-23

April 2022–May 2022:

- Launch the Tamilnadu Asteroid Search Campaign 2022, in partnership with the International Astronomical Search Collaboration (IASC).
- Conduct training sessions for interested schools and colleges to participate in the campaign.
- Kick off the Namma Telescope Project in selected regions of Tamilnadu to provide access to telescopes for students, educators, and the public.

June 2022–August 2022:

- Continue the Tamilnadu Asteroid Search Campaign with regular updates and data analysis sessions.
- Plan and prepare for the Citizen Scientist Award event to recognize and reward the teachers and students who actively participated in the campaign.
- Collaborate with local schools and colleges in Karnataka to expand OSF's outreach activities.

September 2022–November 2022:

- Host International Microorganism Day as part of Democratically Science, with a series of online events and activities.
- Plan and prepare for the OSF VISTA (Visit ISRO for Tamilnadu Students and Advocates) event, where selected students and educators will witness a rocket launch at VSSC-ISRO, Trivandrum.
- Initiate discussions and collaborations with new partners and organizations to expand OSF's reach to new regions in Tamilnadu and Karnataka.

December 2022–February 2023:

- Hold the Citizen Scientist Award ceremony to recognize and honour the teachers and students who made significant contributions to the Tamilnadu Asteroid Search Campaign.
- Host outreach programs and workshops to promote science education and awareness in the newly expanded regions of Tamilnadu and Karnataka.
- Collaborate with other organizations to conduct joint events and projects to enhance science education and research in India.

Overall, OSF plans to continue its mission of promoting science education, research and outreach activities in the upcoming year, with a focus on expanding its activities to new regions and collaborating with new partners and organizations to achieve its goals.



Contact Us



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