

Monthly Descriptive Report of programs and activities organized at Nehru Science Centre, Mumbai and its Satellite Units for the month of October, 2023

NEHRU SCIENCE CENTRE, MUMBAI

Sci-Birthday

2 Sci-Birthdays were organized during the month on 14.10.2023 & 15.10.2023 for groups of 50 & 30 people respectively. The participants were taken around in the galleries, enjoyed 3D show, SOS show and Motion simulator ride. Sessions on hands-on activity were also organized with demonstration on Liquid Nitrogen.

Special Campaign for Institutionalizing Swachatta

The Centre organized following programs / activities as part of Special Campaign for Institutionalizing Swachatta:

1. **Shramdaan**

The Center consistently maintained cleanliness by regularly cleaning up the Campus, office spaces, public restrooms, disposing of outdated office documents, and other areas within the Centre. Photos of these efforts were daily forwarded to the headquarters for documentation.

2. **Painting Contest on 15.10.2023**

The Centre organized a Painting Contest on 15.10.2023. The contest was organized for three categories. Category A centered on 'Swachha Bharat' with 38 students up to Std. 4th participating. Category B focused on 'My Dream City,' and it saw the involvement of 62 students from Std. 5th to 7th. Category C's theme was 'Green City, Clean City,' with 25 students from Std. 8th to 10th participating. The contest results were posted on the Centre's Facebook page on 19.10.2023, and e-certificates were awarded to the winners.

3. **Chalte Chalte Quiz from 21.10.2023 to 25.10.2023**

The Quizzes, held daily from 21.10.2023 to 25.10.2023, were part of Campaign 3.0, aiming to institutionalize cleanliness. It featured questions related to cleanliness and various government cleanliness campaigns. About 79 visitors participated, and prizes were awarded on the spot.

4. **Film Screening from 01.10.2023 to 31.10.2023**

The Centre screened three short films, each lasting 4 minutes. These films aimed to promote cleanliness among the general public and were viewed by an average of around 200 visitors per day.

5. **Drop your slogan contest on 10.10.2023 and 31.10.2023**

The Centre organized a 'Drop Your Slogan Contest.' The contest, themed 'Swachhata,' welcomed slogans from general visitors and students. Participants wrote slogans and dropped them in a designated slogan drop box at the reception counter. A total of 115 slogans were collected.

6. **Street Play by students of Children's Academy on 18.10.2023**

The Centre welcomed students from Children's Academy. They performed a compelling street play titled 'Swachhta'. This performance aimed to raise awareness and inspire a cleaner, greener future, with 280 students and general visitors as the audience.

7. **Nukkad Natak plays on 19.10.2023**

The Centre invited Natyashala Charitable Trust, Mumbai, to organize a Nukkad Natak on 19.10.2023. One performance was held near Jijamata Nagar Police Station, and 02 were held at the Centre. A total of 68 visitors witnessed these Nukkad Natak performances and were inspired by the team's efforts.

8. **Online Quiz Contest on 19.10.2023**

The Centre conducted an online Quiz on Aviation and Space. The quiz garnered participation from 148 participants. Quiz results were shared on the Centre's Facebook page on 21.10.2023, and e-certificates were awarded to the winners.

9. **Workshop on Waste to Art on 22.10.2023**

A workshop on transforming waste into art was organized on October 22, 2023. , Students made Tortoise out of empty Coconut shell, Santa from egg shells and various other articles using waste plastic bottles. 22 registered students participated in it.

Show on Matter at Low Temperature

On 18.10.2023 a special show was organized for a college group of more than 150 students at the Auditorium of the Centre. Students witnessed the thrilling behavior of matter at extreme low temperature and enjoyed at its best. Students also got some words of guidance from the Director Umesh Kumar Sir.

Innovation Hub Sessions

The Centre is organizing sessions for 16 members of the Innovation Hub, which is from 14.10.2023, to 30.12.2023. 03 sessions were conducted during this month. These sessions encompassed a foundational understanding of Discovery, Invention, and Innovation, the enhancement of critical thinking skills, hands-on activities ranging from toys to reusing materials, exposure to 3D printing technology, and a session titled 'Know the Innovators'

World Space Week celebration

The Centre organized following programs / lectures / events to commemorate World Space Week:

1. Screening of video clips on various Indian Space Missions

The Centre screened films of various Indian space missions which included glimpses from Chandrayaan 1, 2, 3 and the Mars Mission. The films showcased behind the scenes of the mission, small snippets of few scientists & technicians sharing their experiences of the missions. The films were played on loop throughout the day, and was watched by around 150 visitors on an average every day.

2. Chalte Chalte Quiz on 04.10.2023

On 04.10.2023, a quiz was organized for the Centre's visitors in the Hall of Aviation and Space. Prizes were awarded on the spot to visitors who answered correctly. A total of 40 visitors participated in the quiz.

3. Online Popular Science Lectures

a. Planetary Missions of India

Professor Anil Bharadwaj, a distinguished scientist and Director of the Physical Research Laboratory, Ahmedabad, delivered a lecture on Indian planetary missions, associated challenges, and the scientific achievements derived from these missions. The registered participants joined on the zoom platform and the program was streamed on the YouTube channel of the Centre. This online talk attracted 305 viewers.

b. Online PSL on 'Planning and Execution of Vikram Lander on the Moon'

Dr. Syed Maqbool Ahmed, a Payload Scientist with a rich background in space research, presented an online lecture on October 7, 2023, discussing the planning and execution of a successful Vikram Lander mission. A total of 356 viewers participated in this online talk including zoom platform.

4. Online Quiz on Aviation and Space

The Centre organized an online quiz on aviation and space on 06.10.2023, with the participation of 187 participants. The results were published on the Centre's Facebook page on 10.10.2023, and winners received e-certificates.

5. Treasure Hunt (Identify the Exhibit)

The contest was organized in the Hall of Aviation and Space gallery. The participants were given the task to identify the exhibits in the gallery based on the clues given to them. Around 80 students participated in the contest.

6. Water Rocket making workshop

The Centre hosted a workshop for 42 registered participants on making water rockets. Students not only had the opportunity to construct their rockets but also engaged in experiments with them. The workshop provided valuable insights into the scientific principles underlying rocket operation.

7. Open House Quiz

On 04.10.2023, a quiz was organized for the Centre's visitors, with prizes awarded on the spot to those who answered correctly. A total of 40 visitors participated in this quiz.

8. Water Rocket demonstration

As part of the World Space Week celebration on 10.10.2023, a special session on water rocket demonstrations was organized for students, teachers, and general visitors. A total of 69 participants had the chance to witness rocket launches and gain a better understanding of the underlying scientific concepts.

Online lecture cum Interaction session on 'Meet the Cosmonaut'

The Centre, in collaboration with the Russian Centre for Science and Culture, Mumbai, organized a lecture cum interaction session featuring Mr. Denis Vladimirovich Matveev, a Test Cosmonaut from the Roscosmos cosmonaut squad on October 20, 2023. During the session, Mr. Denis shared his experiences of his flight, which lasted for approximately 195 days. He also briefly discussed the challenges he encountered and how he successfully resolved them during his four spacewalks, totaling 26 hours and 8 minutes. He answered many questions by the participants. The session was attended by Shri Umesh Kumar Rutagi, Director of Nehru Science Centre Mumbai, and Dr. Elena Remizova, Vice-Consul & Director of Russian House in Mumbai. A total of 56 participants engaged in this Zoom interaction session. The interaction was later uploaded on the YouTube channel.

International Symposium on Metalions 2023 (28.10.2023 and 29.10.2023)

In collaboration with the International Association of DentoMaxilloFacial Radiology (IADMFR), Asian Academy for Oral and Maxillo-Facial Radiology, and the Society for Cancer Research and Communication, VELMENI, the Centre organized the 18th International Symposium on Metalions. This symposium was conducted in both online and offline modes, attracted around 85 national and international delegates. The participants presented their research presentations and papers as part of this symposium. All attendees were awarded certificates for their presentation and participation.

The Vigilance Awareness Week will be observed at the Centre from 30.10.2022 to 05.11.2022. Following programs have been planned:

1. Oath Taking Ceremony on 30.10.2023

The Centre organized an Oath taking ceremony for its Staff members on 30.10.2023. 79 Staff members attended this ceremony.

2. Open House Quiz on 31.10.2023

The Centre will conduct an Open House Quiz for public on 31.10.2022. Questions related to Vigilance Awareness will be asked to students and general public.

3. Poem Recitation program 01.11.2023

The Centre will organize a poem recitation ceremony for its Staff members on 01.11.2023.

4. Interaction Session on 02.11.2023

The Centre will organize an Interaction session for its Officers / Staff members on 02.11.2023, where the Officers/ Staff members will share their experiences on corruption.

5. Guest Lecture on 03.11.2023

The Centre will organize a Guest lecture on the topic 'Say no to corruption; commit to the Nation' for its Officers / Staff members in the Conference Room of the Centre on 03.11.2023.

6. Slogan Writing Contest on 04.11.2023

The Centre will organize a Slogan writing Contest for the visitors on 04.11.2023. The theme of the contest will be 'Say no to corruption; commit to the Nation'

7. Quiz Contest on 05.11.2023

The Centre will organize yet another on-the-spot Quiz Contest for the visitors of the Centre. Question related to Vigilance Awareness will be asked to the visitors. Visitors giving correct answers will be handed over prizes.

Outreach Program at Science City, Ahmedabad on 27.10.2023 and 29.10.2023

1. Demonstration Sessions

The Centre participated in the 18th National Convention of Chemistry Teachers held at Science City in Ahmedabad, Gujarat. During this event, science demonstrations focusing on the subject of chemistry and the properties of matter at low temperatures were conducted. A total of 159 teachers had the opportunity to observe and engage with these educational demonstrations.

2. Lecture and Guest of Honor

Director, Nehru Science Centre, Mumbai was extended an invitation to deliver a lecture on the topic of "Sustainable Development" by Gujarat Science City, Ahmedabad. This lecture was a significant component of the National Convention for Chemistry Teachers, a three-day event that drew the participation of around 159 teachers. Furthermore, during the valedictory program on 29.10.2023, the Director had the esteemed opportunity to address the attendees as the Guest of Honor.

Experimental Skill Test on 21.10.2023

The Centre, in collaboration with the Bombay Association for Science Education (BASE), coordinated a session of the Experiment Skill Test at the Centre on 21.10.2023. This program was designed for 09 participants registered from grades 8 through 12. During the test, the students were provided with experimental setups and were expected to conduct experiments under the supervision of experts from the Centre and BASE. The primary objective of this initiative was to evaluate the participants' ability to perform experiments and demonstrate their keen observational skills.

Mobile Science Exhibition: Health and Hygiene

The Centre organized a Mobile Science Exhibition (MSE) 'Health and Hygiene' in the govt. schools of Pune district. Apart from the exhibition, Science Demonstration Lecture (SDL) & film shows were also organized during the month. The bus has covered 03 sites during the month till now.

Mobile Science Exhibition: Curriculum Based

The Centre organized a Mobile Science Exhibition (MSE) 'Curriculum Based' in the govt. schools of Pimpri Chinchwad district. Apart from the exhibition, Science Demonstration Lecture (SDL), Rotocopter Workshops & film shows were also organized during the month. The bus has covered 11 sites till now.

Sci-Mail

Sci-Mail for the month of October – December, 2023, the quarterly membership newsletter was published, shared and uploaded on Social Media handles of the Centre. The post has reached to 3,395 people till 30.10.2023.

RAMAN SCIENCE CENTRE AND PLANETARIUM, NAGPUR

Activities and programs during International Travelling Exhibition “Vaccines Injecting Hope”

To disseminate the message of the exhibition to larger masses, the Centre ran a social media campaign on our Facebook, X, and Instagram handles:

1. Videos on visitors' experiences posted during the month.
2. Visitors' feedback stuck to 'Visitors Expression Point' were also posted during the month.
3. 3949 students & teachers from 41 schools visited the exhibition & were guided by the demonstrators in the exhibition area including teachers (data till 29th Oct)
4. 18303 visitors visited the exhibition including students (data till 29th Oct).
5. 39 students & teachers from 1 special school visited the 'Vaccine' Exhibition

Activities and Programs during Vaccines Injecting Hope Exhibition -

The Centre, organized many activities and program to mark the 'Vaccine Injecting Hope' Exhibition display at the Centre during October 2023:

- a. 8 no's of Open House Quizzes on 'Vaccines' were conducted for 461 students.
- b. A street play was organized on the theme 'Vaccines Injecting Hope' at Main Railway Station, Nagpur during the evening time on 14.10.2023. The members of professional group 'DevelpArtz' conducted the play for 200 people. (Outreach program)
- c. The Centre in collaboration with Films Division, Mumbai and NFDC, Mumbai organized an online Film Festival during 25.10.202 to 30.10.2023. The films were screened online on the Centre's social media platform 'Facebook' every day at 11 am.
- d. The Centre has started an online quiz on the theme 'Vaccines Injecting Hope' during the month. In all 26 questions were posted on Facebook and 'X'.

Mobile Science Exhibition on 'Vaccines Injecting Hope'

The Exhibition was organized in the schools of Gondia, Bhandara and Nagpur city. To date the exhibition was arranged at 9 sites and for 20 days. 13877 visitors visited the exhibition. 7 SDLs were conducted for 6382 students.

Test Your Experimental Skills - Level 1

4th Experimental Skill Test was conducted at Raman Science Centre and Planetarium, Nagpur in collaboration with Bombay Association of Science Education (BASE, Mumbai) on 01.10.2023. 12 students (Std 8 to 12) participated in the program. The assessment of the students was done by assigning two science experiments (without any choice). These experiments were on any topic of science (not discriminating between Physics, Chemistry & Biology). Direct measurement of physical quantities was involved in Level-1. 6 Observers, Ex-HOD, Professors, PGT from Colleges and Schools (2 each from Chemistry, Physics & Biology) were present as Examiners for the Test. The criteria was to observe the experimental skills of the students on how they take readings, do measurements, plot graphs, do calculations, data presentation etc. Based on the Observations made by Examiners, the students who scored 75% and above marks got Certificate. 2 students were eligible to get the certificate.

Mobile Science Exhibition on 'Science in Syllabus' @ Yawatmal District

The Exhibition was organized in the schools of Yawatmal District. In this month the exhibition was arranged at 05 sites and for 10 days. 6094 visitors visited the exhibition. 4 SDL's were arranged for 2720 students.

Mobile Science Exhibition on 'Hygiene & Sanitation' @ Wardha District

The Exhibition was organized in the schools of Wardha District. In this month the exhibition was arranged at 4 sites and for 8 days. 3814 visitors visited the exhibition. 2 SDL's & 3 film shows were arranged for 730 & 190 students respectively.

Monsoon Package Tour

In all 15 monsoon package tours were organized for about 1905 students and teachers from 01.10.2023 to 31.10.2023. They were given a guided tour of the galleries, Science on Sphere show, 3-D film show on their syllabus and SDL on theme 'Colorful chemistry', 'Fun at low temperature' and 'Fun with physics'.

Vidushi - Women in STEM

The Centre has taken the initiative of running a social media campaign "Vidushi: Women in STEM" to salute some of the early Indian women scientists. 3 such posts were shared on social media of the Centre every Wednesday i.e. On 11, 18 & 25 October 2023. The campaign allows us to connect with our audience on a personal level, engaging them

in meaningful conversations about science, technology, and innovation. The original English script was replaced with Marathi translation to facilitate the visitors in Maharashtra.

Science Museum School

The Centre has organized a Science Museum School Program on 3, 11 & 17 October 2023. 40 underprivileged students of class 5th from Maharashtra Adhayanmandir School have attended the sessions on 'ARANYA - LIPI' (Jungle speaks), 'Measuring Time', 'Hands-on science' etc., which are part of their syllabus. Also, Quizzes were arranged for them. The students were provided with refreshments during every visit. The project is supported by the Nishchay Foundation.

Swachhata Pakhwada (Campaign 3.0)

As a part of Swachhata Hi Seva Campaign 3.0, various programs were planned at the Centre from 01.10.2023 to 31.10.2023. An outreach cleanliness drive was conducted by Officers and staff members of Raman Science Centre Nagpur at Chacha Nehru Balodyan, Subhash Road, Nagpur on 01.10.2023. Also, Galleries, Office Area, Science Park, Educational activity area 1 & 2 were cleaned and old files were written off as a part of this drive. Also, a march past on the theme 'Swachhata Hi Seva' was organized on 25.10.2023. 300 students took part in the rally holding placards in hand and enchanting slogans. Swachhata Shapath was administered to all participants & staff members at the culmination of the program.

Robotics Workshop – Level I

A workshop on 'Robotics – Level I' was organized by Raman Science Centre and Planetarium, Nagpur in collaboration with M/s Brand Brains Innovations Pvt Ltd, Nagpur in the innovation hub of the Centre on 2nd, 3rd & 4th Saturday and Sunday throughout October 2023. The workshop was attended by 5 students. The participants were introduced to Robotics, electronic components involved, application and uses of bread board, resistors & all allied components, designing and making of robot and programming of robot, uses and its application etc.

Drone Workshop – Level I

A workshop on 'Drone – Level I' was organized by Raman Science Centre and Planetarium, Nagpur in collaboration with M/s Arma Aerospace Pvt Ltd, Kanpur UP (Nagpur Branch) in the innovation hub of the Centre on 29.10.2023. The workshop was attended by 6 students. The participants were introduced to Drones & components, interactive experience of building your own drone, learning rules and DGCA guidelines for operation of drones, Drone race etc.

Outreach Sky Observation Program to Swaminarayan Temple

The Centre organized an outreach Sky Observation Program on 25.10.2023 at Swami Narayan Mandir Complex. Saturn, Moon and Jupiter were shown to 180 visitors.

REGIONAL SCIENCE CENTRE, BHOPAL

Innovation Hub Programs

Innovation Hub of the Centre organized 10 orientation sessions for the members of the Hub. These sessions were organized on the topic Bottle Thermometer, Smartphone Projector, Robotics, Science behind Sunspots, Beyond Human Vision, The Science of Colors, 3D Vision, Moon Farm, Measuring the brightness of Lunar Eclipse by Danjon's Method, Adaptation in Plants & Animal etc. All these sessions were organized for 54 members of the Hub. Besides these orientation sessions, a session on Kabad se Jugad was organised in which 7 participants took part. Besides all these, a Meet the Scientist program was organised in which the members of the centre have got an opportunity to interact with Prof. Devendra Ojha, Infrared Astronomy Group, Dept. of Astronomy & Astrophysics, TIFR, Mumbai.

Report on Special 'Shramdan' organised on 01.10.2023

The Centre organised the special Shramdan on 01.10.2023 from 10.00 A.M. to 11.00 A.M. as a part of the special Swachhata cleanliness drive campaign. As a part of the program, a special cleanliness drive with staff members of the Centre was conducted both inside and outside the Centre's premises. The staff members of the Centre joined their hands together to clean the front Smart City Road as well as the Main Approach Road of the Centre leading to the Museum Building Entrance. Prof. Devendra Ojha, Infrared Astronomy Group, Dept. of Astronomy & Astrophysics, Tata Institute of Fundamental Research (TIFR), Mumbai graced the occasion and himself took part in the cleaning activities. A total of 32 participants including staff members and members of the Centre's Innovation Hub participated in the program. A total of 433 sq. m. area was cleaned in the process.

Public Talk on the topic Infrared Astronomy: A Potential Tool for Unlocking the Mysteries of the Universe

The Centre organised a public talk on the topic "Infrared Astronomy: A Potential Tool for Unlocking the Mysteries of the Universe" on October 2, 2023. The talk was delivered by Prof. Devendra Ojha, Infrared Astronomy Group, Dept. of Astronomy & Astrophysics, TIFR, Mumbai. In his Talk, the Speaker described how Infrared astronomy can present greater details of astronomical bodies like stars than the visible wavelengths and, thereby, unlock the mysteries surrounding the birth and death of the stars. This public talk was organised as part of the International Astronomical Union's (IAU) 100 HOURS OF ASTRONOMY event. Around 110 visitors, including students and teachers from different institutions, benefited from this program.

Participation in National Children Science Congress organised by Kendriya Vidyalaya (No-1):

The Centre participated in National Children Science Congress (NCSC) organised by Kendriya Vidyalaya (No-1) Bhopal in their premises on Oct 06, 2023. As a part of the program, Shri Saket Singh Kaurav, PC, RSC, Bhopal conducted an Interactive Session on the topic 'India's Chandrayaan-3 Mission' with the participants which was supported by clips of video, still images and animation clips. He also interacted with the audience and responded to some of their questions on the Moon and Astronomy in general with befitting answers. This was followed by the show-casing of a series of experiments on Physics, Chemistry and Supercooled Bodies with Liquid Nitrogen by the Education team of the Centre. A total of 450 student and teacher participants from different Kendriya Vidyalayas of the Bhopal region of MP participated in the program.

Participation in State Level Wildlife Week Celebration

The Centre participated in the State Level Wildlife Week Celebration organised by Van Vihar National Park & Zoo in their own premises from Oct 01-07, 2023. As a part of the program, the MSE unit of the Centre on 'Measurement' was show-cased for the public. Apart from this, special SDLs, 'Make & Take' programs, Innovation Hub activities were also conducted during these days. A total of 6116 visitors including students, teachers, housewives and the general public visited the exhibition during these days.

Participation in Science Festival organised by MPCST at Jawad, dist- Neemuch

The Centre participated in the Science Festival organised by MPCST at Govt. Higher Secondary School, Sarwania Maharaj, Jawad, dist. Neemuch from 30.09.2023 to 01.10.2023. As a part of the exhibition an MSE program on 'Energy' and a panel exhibition on 'Achievements of India on S&T since Independence' were organised. Further, a Popular Lecture on the topic 'Chandrayaan: India's Moon Odyssey' was delivered by Shri Saket Singh Kaurav, PC, RSC, Bhopal which was listened to by a total of 900 students. Apart from this a Telescope Making Workshop was also conducted in which a total of 250 students participated. An evening Sky Watch program with Telescope was also conducted wherein 80 visitors participated. A total of 1930 visitors (Students: 1150 and General public: 780) participated in all these programs.

Celebration of 2023: Annular Solar Eclipse

A rare Annular Solar Eclipse was visible in the world on 14.10.2023 to Northern, Southern and Central parts of America including some parts of the USA. Although the eclipse was not visible to India, the event created a lot of euphoria amongst the people because of its rarity of occurrence and the many dogmas associated with it in our society. Regional Science Centre, Bhopal celebrated this rare celestial occasion by organizing a series of programs such as an Interactive Session with Expert, a Safe Observation of Sunspots with the telescopic projected image, a Demonstration of a Solar Eclipse model showing different types of eclipses and an Open House Quiz on the topic 'The Sun: The Parent Star of Our Solar System'. The special Interactive session with Experts was organised in collaboration with the Dept. of Astronomy, Astrophysics & Space Engineering, IIT, Indore on 14.10.2023 from 8:30 PM to 10:00 PM. Dr Narendra Nath Patra, Assistant Professor, Dept. of Astronomy & Astrophysics and Space Engg., IIT, Indore and Dr Mayuresh Surnis, Asst. Professor, Dept. of Physics, IISER, Bhopal served as experts for the session. A total of 200 students and the general public observed the Sunspots through safe media using a solar Filter in the telescope. A total of 60 students participated in the special demonstration of the Solar Eclipse model. A total 60 students participated in the quiz. Prizes and Certificates were awarded to the successful participants of the Quiz on the completion of the program. A total of 377 viewers viewed the online Interactive session.

Interactive Session on the topic “Unleashing the Nobel Laureates 2023: Discoveries that Changed the World”

The Centre in collaboration with the Indian Institute of Science Education & Research (IISER), Bhopal organised an Interactive Session on the topic “Unleashing the Nobel Laureates 2023: Discoveries that Changed the World” on 17.10.2023. The panelists for the session were as follows:

- a.) Dr. Rohan Singh, Dept. of Physics, IISER, Bhopal
- b.) Dr. Apurba Lal Koner, Dept. Of Chemistry, IISER, Bhopal
- c.) Dr. Debasis Nayak, Dept. of Biological Sciences, IISER Bhopal

A panel comprising experts from various domains illuminated the groundbreaking achievements that earned Nobel Prizes in the fields of Physics, Chemistry & Physiology or Medicine in 2023. The event garnered a positive response from the community of school and college-level students. Around 500 students from school & college level along with the teachers and general public got benefited with the program.

The Celestial Spectacle: Telescopic Observation of Partial Lunar Eclipse, Saturn with its beautiful rings & Jupiter with Galilean Moons

On 28.10.2023, to mark the Partial Lunar Eclipse, the Centre organised a late-night sky watch party in which visitors had an opportunity to observe the telescopic view of the Partial Lunar Eclipse (maximum eclipse at 1:44 am - October 29, 2023), Saturn with its beautiful rings & Jupiter with Galilean Moons. During the watch party, interactive sessions and science demonstrations to explain the eclipses and make & take workshops were organised for the esteemed visitors. Around 220 visitors took part in this late-night event.

Special Swachhata Campaign 3.0 (Implementation Stage)

The Centre observed the Special Swachhata Campaign 3.0 (Implementation Stage) from 01.10.2023 to 30.10.2023 by conducting a series of programs. As a part of the program, special Shramdan, Science Film show on 'Management of Legacy Waste of Bhopal', Essay Writing Competition on 'Garbage Free India' (dtd 1.10.23), Poster Making Competition on 'Garbage Free India' (dtd 2.10.23) and a number of cleaning drives by the staff members of the Centre for different indoor and outdoor facilities of the main building and weeding out of unused files were taken up during the period.

11. Interactive session on the topic "The importance of curiosity and observations in the world of science"

The Centre organised an interactive session on the topic "**The importance of curiosity and observations in the world of science**" at Shri Shantinath Digamber Jain Sanskrit Vidyalaya & Shri Shantinath Digamber Jain High School, Shri 1008 Siddh Kshetr Ahar Ji, District Tikamgarh, MP. Shri Saket Singh Kaurav, Curator 'D' and the Project Coordinator, RSC, Bhopal served as a resource person for the workshop. Around 110 students from class 6 to 12 got benefitted with this program.

Mobile Science Exhibition

RSC, Bhopal, in collaboration with Rajya Shiksha Kendra, Bhopal organised a Mobile Science Exhibition (MSE) on the topic "How Things Work" in the schools of the district of Seoni. Apart from the exhibition, SDL and Science Film shows were also conducted during the month.

GOA SCIENCE CENTRE, PANAJI

Swachata Pakhwada

In continuation with Swachata Pakhwada celebration the centre organized various programs as per the details below:

1. Painting Competition

The competition on theme 'Swachhta Hi Seva' was organized on 01.10.2023 for the underprivileged children from community classroom orphanage, tonca. After the competition the students were taken to the guided tour in galleries followed by prize distribution.

2. Fancy Dress Competition

The competition on theme 'Swachhata Doot' was organized for the primary school students on 01.10.2023 in which total 32 students participated.

3. Swachata Hi Seva- Shramdaan

The Centre participated in the cleanliness campaign under Swachata hi seva shramdaan activities aiming to generate jan-andolan through community participation; to provide impetus on implementation of Swachh Bharat Mission. The campaign was inaugurated by Shri Satish Nayak, President of Association of Friends of Astronomy on 02.10.2023 after which the staff members of the Centre actively participated in the cleanliness drive.

Wild Life Week Celebration

The Centre in collaboration with Goa Forest Department organized Western Ghat Quiz for college students from all over Goa on 09.10.2023 as a part of Wild Life Week Celebration. The written elimination round was first conducted followed by final verbal round of quiz in the auditorium of the Centre. Total 165 audiences were present for the Quiz.

World Tourism Day

The Centre in collaboration with Department of Tourism celebrated World Tourism Day 2023. Details as below:

- 1. Cooking Competition using Millets:** For the increasing demand for healthy and sustainable food options, incorporating millets in our daily diet is very important hence Cooking Competition using Millets as primary ingredient for the aspiring chefs and home cooks was organized on 11.10.2023 in which total 76 participants took part in the competition. The competition was judged by Mr. Pankaj Kumar Singh, Sr Lecturer from Institute of Hotel Management, Goa, Mr Aakash Nikam, Demi Chef de Partie, Fisherman's Wharf hotel and Smt Sunetra Talaulikar, retired Home Scientist from Krishi Vigyan Kendra, ICAR Goa.
- 2. Popular Science Lecture:** After the competition an interactive session on "Importance of Millets" for the healthy life was delivered by Mrs. Sheryl Afonso e Dsouza, Assistant Professor from Department of Food Technology, Goa College of Home Science followed by prize distribution and certificate distribution function. Total 139 audience were present for the lecture.

Creative Science Workshop

As a part of Vacation Creative Abilities Activity, an activity oriented Creative Science Workshop will be conducted for the students from 30.10.2023 to 03.10.2023 in respective discipline.

Sci-Kids

To foster a love for science, spark curiosity and interest in the young minds, the workshop on Sci-Kids will be organized for the students of class Ist to IVth standard. During the workshop the students will be encourage to explore the world of scientific inquiry through hands on activity.

Lantern Making Workshop

The workshop will combine creativity and science that integrates scientific principles with artistic expression encouraging the participants to make lantern illustrating some basic scientific principles. The workshop will be organized for the students of class Vst to VIth standard.

Fun with Chemistry

The hands-on- learning environment in Fun with Chemistry workshop will provide the participants active involvement through the activities like colorful and exciting chemical reactions, soap making activity and micro scale experiments in environmental chemistry. The workshop will be organized for the students of class VIIIst to Xth standard.

Vigilance Awareness Week

The Centre is observing the Vigilance Awareness Week from 31.10.2023 to 06.11.2023. Integrity pledge will be vowed by the staff of the Centre. Also spot quiz for public visiting the Centre will be organized during the event.

DISTRICT SCIENCE CENTRE, DHARAMPUR

Swachhata Pakhwada

The Centre, organized a series of events in the month of October 2023 to celebrate Mahatma Gandhi's birthday as "Swachhata hi Seva" emphasizing cleanliness and service to the community. Here's a summary of the activities:

1. **Swachhata Pledge on 01.10.2023**

All staff members and visitors to the District Science Centre took a pledge on 01.10.2023 to prioritize cleanliness and hygiene, aligning with the ideals of Mahatma Gandhi.

2. **Swachhata Rally on 02.10.2023**

The Centre, along with 112 NSS (National Service Scheme) students from Vanraj Arts and Commerce College, Dharampur, organized a "Swachhata Hi Seva" Rally on 02.10.2023. The rally started from the Centre and followed a route that covered various locations in the Dharampur before returning to the Centre.

3. **Documentary film show on swachchhta on 05.10.2023**

Centre organized screening of documentary film on Swachhata for general visitors at the Centre.

4. **Hygiene and Sanitation Awareness**

Centre demonstrated the seven-step technique of handwashing, emphasizing the importance of proper hygiene practices.

Mobile Science Exhibition on "Hygiene and Sanitation"

The Centre organized Mobile Science Exhibition on "Hygiene and Sanitation" during 02.10.2023 to 30.10.2023 and covered the 8 schools, providing them with valuable information and insights into cleanliness and sanitation. Followed by session on ant superstition program to eradicate superstition from society. Centre participated at Block Level Science fair at Valsad and Dharampur. Shri Bharatbhai Patel, Hon'ble MLA, Valsad and Shri Arvindbhai Patel, Hon'ble MLA Dharampur visited the exhibition with other dignitaries.

Cleaning Bank of Maan River at Banti Village

On 02.10.2023 in addition to cleaning the Science Center's premises, the NSS (National Service Scheme) students from Vanraj Arts and Commerce College, Dharampur also took the initiative to clean the area around Maan River at Banti Village, contributing to the cleanliness and environmental well-being of the region.

Shramdaan

Regular cleaning of Campus, Office area, Office & public toilets weeding off old office files, Science park, etc. done during the campaign.

Kabaad se Jugaad

Innovation Hub, of the Centre, in collaboration with Bayer Vapi Pvt. Ltd. organized kabaad se jugaad on 10.10.2023 & 29.10.2023 in which students used waste plastic bottle, colorful wool, waste cardboards and created decorative items and useful articles from the same. In all Total 10 & 16 students participated respectively in the program.

Talk on Hygiene and Safety in Kitchen

A talk on Hygiene and Safety in Kitchen was organized for 25 Anganwadi workers at the Centre on 25.10.2023. Kitchen safety tips, personal Hygiene and other points were discussed during the programme. Antisuperstition programme was also organized for them.

Wild life Week Celebration

Wild life week was celebrated by organizing various educational activities & program during 02.10.2023 to 08.10.2023 at the Centre, in collaboration with Range Forest Office, Dharampur and The lady Wilson Museum, Dharampur.

Sensitization Program

The Centre in collaboration with DFO, Nisha Raj (IFS) organized a sensitization program for Staff of Range Forrest Office was organized on 07.10.2023 at the Centre in collaboration with Forest Dept. Valsad. Topics like Wild life protection act 1972, Wild life Crime, Human and wild life conflict, Importance of wild life etc. were discussed during the program.

Plantation Drive

The drive of medicinal plant saplings with the help of school students was organized. Open House Quiz on wild life were conducted on 08.10.2023 for students in which 56 students and teachers participated. Special film on wild life was screened in which 56 students and general public enjoyed the film. Guided tour of Natural History gallery at The lady Wilson Museum, Dharampur where the skeleton of Blue Whale and other stuffed animals are the main attraction of the gallery. Dr. Indra Vats, Curator, The lady Wilson Museum, Dharampur conducted the guided tour for the students.

Robotics Session in collaboration with Bayer Vapi Pvt. Ltd.

1. Session 01

1-day robotic session on October 02, 2023 in which students learned to make Lego mind storm robot using different sensors and programmed it according to the task. Total 3 students were part of this session.

2. Session 02

1-day robotic session on October 10, 2023 in which students learned to make Lego mind storm robot using different sensors and programmed it according to the task. Total 10 students were part of this session.

Resin Art Workshop

The Centre in collaboration with Bayer Vapi Pvt. Ltd and KBS & NATARAJ College, Vapi organized a 3-days Resin art workshop on 05.10.2023 to 07.10.2023. The Three-Day Resin Art Workshop was a resounding success, with participants leaving the workshop with a deeper understanding of resin art techniques and beautiful handcrafted keychains, bookmarks, and coasters. The hands-on experience, guided by the knowledgeable instructor allowed attendees to explore their creativity and develop new skills in the world of resin art. In Total 20 students participated in the Workshop.

Outreach program at Vibrant Gujarat - Vibrant Valsad

Innovation Hub, mentor represented the Centre at Vibrant Gujarat - Vibrant Valsad organized on 12.10.2023 to 13.10.2023. School and College students, MPs, MLAs, Collector Valsad and General public visited the stall.

Test your experimental skills

The Centre in collaboration with Bayer Vapi Pvt. Ltd., NCSM and BASE organized "Test Your Experimental Skills Level-1" on 14.10.2023. The students were given the experiments to perform and grade was given according to their performance skills. Total of 13 students participated in the experimental program out of which 2 students qualified for the Level-2.

Winner at S & S.S. Gandhi College of Engineering and Technology, Surat

Student members of Innovation Hub participated in National Level Technical Festival "Vardhnam 2023" at S & S.S. Gandhi College of Engineering and Technology, Surat on 21.10.2023 and 22.10.2023 in the event of Robotics. Two teams from IH were introduced there which won First and Third Position at the event among 10 teams.

Integrated Science

Every Saturday and Sunday Innovation Hub organizes integrated Science activities and program. Total 30 student's member enrolled in September to November batch. Students learned about different types of waves, Oxidation reaction. A hands-on activity on microscopic view of onion cell experiments.

Visit of Underprivileged Children

Exposure Visit of 155 Underprivileged Children was arranged in 2 groups in the month of October 2023. During their visit, they were benefitted with guided tour to the galleries, 3D show and Planetarium show. Science kit and refreshments were also provided to the students.

Rastriya Ekta Diwas

On the occasion of 148th Birth Anniversary of Sardar Vallhbhai Patel celebration Rastriya Ekta Diwas, will be organized at the Centre on 31.10.2023. As a part of program Pledge will be taken by staff. Poster exhibition on life & work of Sardar Patel will be displayed till 5th November for general visitors & school students and screening of documentary film on Sardar Patel will be screened for the general public.

Vigilance week

Observance of Vigilance week on theme "Say no to corruption; commit to the Nation" by taking pledge on was organized on 30.10.2023 at the Centre. To mark the event, the Centre will organize various program and activities from 30.10.2023 to 05.11.2023 at the Centre.