Monthly Descriptive Report of programs and activities organized at Nehru Science Centre, Mumbai and its Satellite Units for the month of February, 2024

NEHRU SCIENCE CENTRE, MUMBAI

Package Tour

During this month, in all 85 (5,120 visitors) package tours were organized for students and teachers. Guided tour to the galleries, Science Odyssey, Science on Sphere show and Science Shows were organized for them.

Marathi - Malayali Ethnic Fest

The Centre organized Marathi - Malayali Ethnic Festival from 02.02.2024 to 04.02.2024 in collaboration with All Mumbai Malayali Association (AMMA). During the event following competitions were organized for the students, teachers & general public:

- <u>Painting Contest:</u> Held on 02.02.2024, from 11:00 AM to 1:00 PM, this contest featured two categories.
 Category A focused on a visit to the Science Museum, with 102 students up to Std. 5th participating, while Category B centered around Chandrayaan-3, attracting 160 students from Std. 6th to 8th.
- Written Quiz Contest: Also on 02.02.2024, at 2:00 PM, a written quiz contest on "Science & Technology in India" was conducted, with 52 students from 7th to 9th standard participating.
- <u>Dance Competition (Bharatnatyam Solo):</u> On 03.02.2024, solo dance performances in Bharatnatyam were showcased. Bharatnatyam solo was held from 11:00 AM to 1:00 PM, with 17 participants.
- Rangoli Competition: Also on 03.02.2024, from 2:00 PM to 4:00 PM, a rangoli competition in 2 categories with powder and with flowers, took place with 23 students from 7th to 9th standard participating. The theme was Indian festivals.
- <u>Singing Competition (Patriotic Solo):</u> Held on 04.02.2024, from 11:00 AM to 1:00 PM, this solo singing competition featured 19 participants from 7th to 9th standard.
- <u>Dance Competition (Lavani Solo)</u>: Also on 04.02.2024, from 1:30 PM to 3:00 PM, a Lavani solo dance competition was held, with 5 participants from 7th to 9th standard.
- <u>Dance Competition (Koli Dance Team):</u> Also on 04.02.2024, from 3:00 PM to 5:00 PM, a team dance competition for Koli dance was conducted, with 24 students participating from 7th to 9th standard.

On the last day of the event, certificates and trophies were distributed to the winners, marking the conclusion of the program.

Annual Inter-School Quiz Grand Finale and Valediction

Nehru Science Centre Mumbai (NSCM), in collaboration with Rotary Club of Bombay Queen City and Rotary Club of Bombay Pier, organized the Annual Interschool Science Quiz Contest spanning from September 2023 to February 2024. This year, the format was revamped, with separate quizzes held for Middle School and High School categories. Over 200 schools participated in the written elimination round conducted in September 2023. Following the qualifying stage, oral rounds based on a knockout system were conducted, culminating in the finals. The Middle School finale took place on 31.01.2024, while the Senior Group finale was held on 06.02.2024, with District Governor of Rotary International, District 3141, Rtn. Arun Bhargava, gracing on the occasion as the Chief Guest. The enduring success of the program over its 20-year span was lauded by the Chief Guest, highlighting the significance of sustainability and program quality. The Senior Group finale, conducted by professional Quizmaster Mrs Sowmya Bhattacharya, featured questions covering various facets of Science and Technology, including exhibits at the Centre, current affairs, and practical applications of scientific principles. The High School finale witnessed the participation of 4 schools, with Atomic Energy School no 4 winning the First prize. The finale event attracted a total of 260 students and 6 teachers, providing an enriching experience for all involved.

Vaccines Injecting Hope Exhibition

The Exhibition was inaugurated on 10.02.2024 and is scheduled to stay at the Centre till 28.07.2024. The exhibition has been developed and organised by National Council of Science Museums (NCSM), Ministry of Culture, Govt. of India, in collaboration with Science Museum Group, London, the Wellcome Trust, UK and Indian Council of Medical Research. The exhibition was inaugurated by Dr. Anil Kakodkar, Chancellor, Homi Bhabha National Institute, Chairman, Rajiv Gandhi Science & Technology Commission, Former Chairman, Atomic Energy Commission in the august presence of Dr. Muffazal Lakdawala, Director, Dept. of General Surgery and Minimal Access Surgical Sciences, Sir H. N. Reliance Foundation Hospital, Prof. Emeritus, B.Y.L Nair Hospital, Ms. Alison Barrett MBE, Director India, British Council, British High Commission, New Delhi, Ms. Catherine Barnes, Deputy Head of Post, British Deputy High Commission, Mumbai, Ms. Helen Jones, Director of Global Engagement, Science Museum, London, Ms. Philomena Gibbons, Associate Director, Transition & Legacy, Wellcome Trust, London and other distinguished guests on

Saturday, 10.02.2024 at 11:00 a.m. This month a total of 2,877 visitors which includes visit of general public and school students have visited the exhibition. Out of the total visitors 1,592 visitors were women/ girl students. As a part of the exhibition a Mobile Science Unit was also flagged off to various remote areas of Mumbai and its adjacent districts to spread the message among large section of society.

Mobile Science Exhibition: Vaccines Injecting Hope

Mobile Science Exhibition (MSE) toured to various local school of Thane District, and the surrounding regions. The Exhibition has covered 14 sites so far within the Thane district. 11,695 students, teachers and other visitors visited the exhibition.

Creative Science Camp for Pratham Education Foundation

A residential Creative Science Camp was organized for the students from remote areas of Maharashtra on 15.02.2024 and 16.02.2024 at the Centre. 47 students and teachers participated in the camp. The participants were given exposure to the various hands-on activities based on Physics/ Mechanics along with the facilities of the Centre. 2 more similar camps will be organized in the month of March 2024.

Inauguration of SIAC, Devrukh

The Science and Innovation Activity Centre in Devrukh was inaugurated on 24.02.2024, with Padmavibhushan Dr. Anil Kakodkar as the Chief Guest. Approximately 720 students, teachers, and other participants attended the program. Staff members underwent training to facilitate various activities for students. Additionally, a two-day Annual Meet for mentors from all existing SIACs was conducted, during which functional SIACs showcased the activities conducted at their respective Innovation Centres. There were 2 presentations from NSC, Mumbai – 1 about exhibit maintenance and another about designing activities for the SIACs. Furthermore, a hands-on workshop was organized for a group of 35 students.

The Officials from the Centre travelled to Science and Innovation Activity Centre (SIAC), Devrukh to set up the Innovation Centre laboratory and to train 05 newly appointed staff members. The training sessions focused on conducting basic experiments, including the Super Cool Liquid Nitrogen Show, SDL on Physics, Water Rocket Demonstrations and activities. Additionally, the training covered experiments related to various sections of the Innovation Centre such as Biology, Chemistry, and Physics, along with engaging activities like Tod-Fod-Jod, Kabaad-se-Jugaad, Design Challenges, Robotics, and the Hall of Fame.

Innovation Hub Sessions

Throughout February 2024, the Centre conducted three sessions focusing on electromagnetism and disaster management. These sessions were held on 03.02.2024, 10.02.2024, 17.02.2024, respectively engaging a total of 27 students. A session on Robotics challenge was conducted on 25.02.2024. The sessions aimed to provide hands-on learning experiences and practical knowledge.

National Science Day 2024

A weeklong celebration of National Science Day 2024 unfolded from 23.02.2024 to 28.02.2024, showcasing a series of engaging events and activities.

- Online Science Quiz contest: We hosted three online quizzes on 23.02.2024, 24.02.2024 and 25.02.2024, covering various science topics. A total of 1,412 participants enthusiastically took part, with 335, 332, and 745 participants on each respective day. Every participant and winner received digital participation certificates.
- **Sky Observation Program:** On 24.02.2024, 118 participants joined an evening sky observation program. They learned the basics of Astronomy and had the opportunity to observe Jupiter and the Moon through a telescope.
- Robotics Workshop (Domino Placing challenge): 2 captivating 'Domino Placing Robot' workshops were organized on 25.02.2024. The event drew a total of 37 students and 23 parents, who actively participated in building, experimenting with robots and meeting the challenge.
- <u>Painting Contest:</u> On 26.02.2024, a painting contest unfolded with 72 participants across three categories.
 Students showcased their creativity by crafting paintings on the theme of National Science Day. Prizes were awarded to the top three entries in each category.
- Online Video Making Contest: An Online Video Making contest was held, attracting 28 student submissions
 via Google Forms. The challenge was to convey everyday science in an engaging video format. Three students
 won prizes for their outstanding videos that effectively communicated scientific concepts.
- Science Demonstration: The Centre was invited to conduct Science Demonstration on 29.02.2024 by Balmohan Vidyamandir, Dadar, Mumbai to celebrate National Science Day 2024. 02 Liquid Nitrogen Shows (LN2) were organized which had attendance of 1,087 students.

- Special Events: On 26.02.2024 and 27.02.2024, a multitude of special events captivated 856 students from various schools
 - **Cryogenic Spectacle Demonstration**: 7 shows featuring liquid nitrogen experiments thrilled students.
 - > <u>Hydro Thrust Rocketry Demonstration:</u> 7 shows displaying the science of rockets and live demonstrations of water rockets left students fascinated.
 - Rapid Response Challenge: 6 rapid response quizzes tested students' scientific knowledge, with 44 participants winning prizes for their answers.
 - Create and Collect Workshop: A workshop that engaged 310 students in creating simple science toys like vibrating snakes, paper helicopters, caterpillars, bird in a cage and Newton's discs.
 - ➤ <u>Treasure Hunt Contest:</u> Treasure hunt contest on the exhibition Vaccines Injecting Hope was organized on 27.02.2024. A total of 46 students who participated in the contest were given different clues based on the exhibition and were asked to search the answers for the clues from the exhibition.
- Popular Science Lecture: A noteworthy lecture on 'How to Become a Scientist' by Prof. M. N. Vahia attracted 380 participants on 28.02.2024. The lecture provided insights into C V Raman's Nobel Prize-winning work on the Raman Effect and guidance on pursuing a career in science.
- Prize Distribution Ceremony: The National Science Day program concluded on 28.02.2024 with a prize distribution ceremony. 17 students were awarded prizes in 03 competitions (online video making, painting contest, and treasure hunt). They received science kits, books, and certificates as recognition for their achievements.
- Interview of Director, NSCM on Radio 98.3 Red FM: On 27.02.2024, Director NSCM engaged in a telephonic interview with Radio 98.3 Red FM to discuss the significance of National Science Day. The conversation centered around the observance of this day at Nehru Science Centre Mumbai, Raman Science Centre and Planetarium, Nagpur, and the National Council of Science Museums' perspective on using such occasions to educate the public about the importance of scientific temper. The dialogue highlighted the various initiatives undertaken by these institutions to commemorate National Science Day and promote scientific awareness among the masses.

Mobile Science Exhibition: Health and Hygiene

Mobile Science Exhibition (MSE) was organized for the various local school of Solapur District, and the surrounding regions. The Mobile Science Exhibition covered 15 sites this month.

Mobile Science Exhibition: Curriculum Based

The Centre organized a Mobile Science Exhibition (MSE) 'Curriculum Based' in Dhule district. Apart from the exhibition, Science Demonstration Lecture (SDL) & film shows were also organized during the visit. The MSE toured 13 sites of Dhule district.

Outreach Programme

On 26.02.2024, a Sky Observation Programme was conducted at Billabong International School, Malad, Mumbai engaging 98 students in a sky observation session. Jupiter, the Moon, and various deep sky objects were shown through the telescope.

RAMAN SCIENCE CENTRE AND PLANETARIUM, NAGPUR

Mobile Science Exhibition 'Science in Syllabus' to Gondia District

The exhibition was organized at 6 sites during 01.02.2024 to 13.02.2024 in Gondia District. 5,093 students and teachers visited the exhibition. 4 No. of SDLs were conducted for 1315 students. 03 films show organized for 491 students. Also 4 Sky Observation programme were organized for 248 students and teachers.

Mobile Science Exhibition 'Hygiene & Sanitation' to Bhandara District

The exhibition was organized at 08 sites during 01.02.2024 to 17.02.2024 in Bhandara District. 6170 students and teachers visited the exhibition. 30 No. of SDLs were conducted for 3649 students. 21 film shows were conducted for 2736 students.

Test Your Experimental Skills - Level 1

The 8th Experimental Skill Test was held at the Centre on 29.02.2024, in collaboration with the Bombay Association for Science Education (BASE) Mumbai. Thirteen students from Std. 8 to 12 participated, each assigned two science experiments covering various topics without discrimination between Physics, Chemistry, and Biology. Six observers, including former Heads of Departments, professors, and Post Graduate Teachers (PGT) from colleges and schools

(two each from Chemistry, Physics, and Biology), assessed the students' experimental skills. Evaluation focused on their proficiency in readings, measurements, graphs, calculations, and data presentation. Students achieving 75% and above received certificates. Out of twelve participants, two qualified. Ms. Avika Sharma from Std. VIII, Kendriya Vidyalaya, Ajni, Nagpur, the previous winner, received the certificate.

Science Museum School

Programme was organized at RSCN on 06.02.2024, 15.02.2024, 21.02.2024 and 29.02.2024. 35 underprivileged students of Maharashtra Adhyayan Mandir School attended these sessions. Hands on activities related to clay sculptures, paper box making and experiments with mirrors, paper folding (origami) were arranged for them. Also special session on Bird Identification & Nature Trail was organized. The students collected various material from the Garden area like twigs, flowers, dry & green leaves, grass etc. and made beautiful artistic sculptures (part of their syllabus). Students made tablets and decorated it with spirals. They also made caterpillars, lamps, bunny etc. during this session. Refreshments were given to the participants. The programme is supported by an NGO Nishchay Foundation, Nagpur.

National Science Day celebration

- Raman Science Centre & Planetarium, Nagpur organized many activities and programme as a celebration of National Science Day during 21.02.2024 and 28.02.2024 on the theme 'Indigenous Technologies for Viksit Bharat'.
- The programme initiated on 21.02.2024 with a Science Slogan Writing competition. 125 students from different schools of Nagpur made attractive and catchy slogans on theme 'Indigenous Technologies for Viksit Bharat' & 'Make in India'.
- The contest was followed by Teachers' Training Program for high school teachers. 17 teachers from prominent schools of Nagpur participated in the programme and learned how to make effective & low cost science model. Special science demonstrations were also arranged for them to get ideas of engaging students in class room.
- An Elocution Competition for High School students was organized on theme 'Indigenous Technologies for Viksit Bharat' on 22.02.2024. 19 students participated and showcased their public speaking skills through informative speeches.
- Written Science Quiz for Middle & High School students was organized on 23.02.2024 on theme 'General Science' and 'Indigenous Technologies for Viksit Bharat' respectively. About 300 students from both the category participated in the quiz.
- Sit & Draw Competition in three categories viz I to IV, V to VII & VIII to X was organized on 24.02.2024 on theme 'My favorite Bird' & 'My Green School' for Primary group, 'Science Park' & 'India in Space' for Middle School and 'Indigenous Technologies for Viksit Bharat' & 'Aditya L1' for High School category. 823 students from 26 different schools participated in the competition.
- PowerPoint Presentation Competition for Teachers was organized on 26.02.2024 on topic 'Indigenous Technologies for Viksit Bharat'. 14 teachers presented their views on the theme.
- An Open House Quiz was organised on 27.02.2024 on theme 'Sir C.V. Raman Life and Work'. About 189 students from various schools participated in the quiz.
- At 08:30 am a Science March past from Science Centre, ST stand square, Model mill Square, Gandhi Sagar, Subhash road and back to the Centre. Around 210 students from 6 schools actively participated in this March by carrying placards and chanting slogans.
- An Exhibition "Indigenous Technologies for Viksit Bharat" was inaugurated at the Centre by Dr. Anupam Agnihotri, Director, Jawaharlal Nehru Aluminium Research Development & Design Centre Nagpur.
- 'Sir C. V. Raman Memorial Lecture' was delivered by Dr. Anupam Agnihotri, Director, Jawaharlal Nehru Aluminum Research Development & Design Centre Nagpur. 135 students attended the lecture programme.
- The lecture was followed by Prize Distribution function. Prizes and certificates were awarded to the winners of all above competitions held during the NSD 2024 celebration.
- A daily Sky Observation Programme was organized during the National Science Day Celebrations from 21.02.2024 and 28.02.2024. In all 491 students and general visitors took an advantage of the programme.

REGIONAL SCIENCE CENTRE, BHOPAL

Innovation Hub Programmes

Innovation Hub of the Centre organized 06 Orientation sessions and 01 Kabad-se-Jugad on the topics such as Chemical Analysis of Soaps, Play with Binary Numbers, Science for Fun, Magnet and its Properties, String Art, Make Your Own Periscope and Magnetic Boat/Car during the month of February, 2024. A total of 28 students participated in all these sessions.

Hands-on Science Kit Making Workshop with PRATHAM Education Foundation

The Centre, in collaboration with PRATHAM Education Foundation, organized a Hands-on Workshop-cum-Exposure Camps from 19.02.2024 and 20.02.2024 in its premises wherein a total of 37 under-privileged students participated. As a part of the programme, each participant developed 6 science based kits i.e. Bird in Cage. Butterfly c,g, kit, Stick c.g. kit, Newton's Colour Disc kit. Magnetic Levitation kit and Lungs Model kit with all the raw materials and guidance supplied by this Centre. The completed kits, along with the Certificates of Participation, were permanently given away to the participants for use at home. Apart from this, Guided Gallery tour, Taramandal Show, 3D Film Show, Dinosaur Park visit, Daytime Astronomy with Sunspots observation, Evening Sky watch, Super-cooled Bodies Show and Visit of Innovation Hub and Orientation programmes were also organized during the programme.

Participation in the 39th Young Scientists Congress at MITS, Gwalior

The Centre, participated in the 39th Young Scientists Congress organized by MP organized at Madhav Institute of Science & Technology (MITS), Gwalior in collaboration with MP Council of Science & Technology from 21.02.2024 and 23.02.2024. As a part of the programme, the MSE unit on 'Measurement' was kept on display during the entire period. Around 2000 visitors visited the programme during the period. Two Telescope Making Workshops were also organized in which nearly 200 school/College students developed 75 nos of Astronomical Refracting telescopes of 3x magnification. Apart from this, 2 'Make & Take Science Kit Making' Workshops were also organized in which around 150 students developed 150 science toys. All the raw materials for this purpose were provided to the participants and the completed kits were permanently given away to the participants for use at home. Two evening Sky Watch programmes were also organized during the programme in which telescopic observation of the evening sky was conducted to show some visible celestial bodies in the sky. Around 1100 visitors including students, teachers, housewives, the general public participated in the event. This was supplemented by 2 sessions of Daytime Astronomy comprising observation of Sunspots on the Sun's disc using solar filters as the safe media in which nearly 500 visitors participated.

National Science Day Celebration -2024

The Centre celebrated National Science Day-2024 by organising a week-long programmes from 21.02.2024 and 28.02.2024 in its premises. As a part of the programme, a Science Film Show featuring the Life and Works of Sir C.V. Raman was screened on 22.02.2024 which was viewed by nearly 200 spectators. In addition to this, Daytime Astronomy programme with Sunspots observation using solar filters and Evening Sky Watch with telescope were organized from 23.02.2024 to 24.02.2024 in which around 300 visitors participated. On 25.02.2024, an experiment based Science Quest Contest was organized which saw participation of 25 students. An Atal Tinkering Lab (ATL) based activities on 26.02.2024 was conducted exclusively for girl's students. As a part of the programme, a Workshop on Hands-on Experience in Molecular Biology Techniques: Applications in Cancer Biology' was conducted by Dr Neetu Kalra, Asstt. Professor, School of Arts & Sciences, Azim Premii University, Bhopal. In addition to this, special Biology sessions on 'Investigate Alien Genetics' and Make & Take activity was also conducted. As a part of the Make & Take session, each student developed 4 kits on science (i.e. Bird in a Cage, Butterfly c.g. kit, stick c.g. kit and Newton's Colour Disc) with all the raw materials for this purpose were provided to the participants and the completed kits were permanently given away to the participants for use at home. A total of 42 girl students from JNV, Ratibad participated in the programme. Also, a Teaching aid Demonstration Contest was organised on 27.02.2024. A total of 25 in-service and pre-service teachers from Middle, High and pursuing B. Ed/ M. Ed levels participated in the programme and presented their teaching-aids on the subject ' Indigenous Technologies for Viksit Bharat'. The weeklong event culminated with the Sir C.V. Raman Memorial Lecture organized on 28.02.2024. Dr. Tanmay Basu, Asstt. Professor, Deptt of Data Scences & Engg, IISER, Bhopal delivered a Popular Talk on the subject 'Indigenous Technologies for Viksit Bharat' which was attended by nearly 300 participants. All the meritorious participants of different competitions were felicitated with prizes and certificates by Dr. Tanmay Basu, Asstt. Professor, Deptt of Data Sciences & Engg, IISER, Bhopal. As a part of the programme, telescopic observation of Sunspots using solar filters as the safe media was also conducted with the students Gyanoday Govt. Residential School, Bhopal in which around 60 students participated.

Mobile Science Exhibition

The Centre, in collaboration with Rajya Shiksha Kendra, organised Mobile Science Exhibition (MSE) on the topic "How Things Work" in the schools of the district of Dindori. Apart from the exhibition, SDL and Science Film shows are also being conducted during the month. A total of 18 schools were covered during the month. The Centre also organized Mobile Science Exhibition programme with its MSE unit entitled 'Energy' in the district of Narmadapuram and covered a total of 13 schools during the month. Apart from the exhibition, SDL shows were also conducted. The Centre, also organized Mobile Science Exhibition programme with its MSE unit entitled 'Measurement' in the district of Raisen and covered a total of 10 schools during the month. Apart from the exhibition, SDL shows were also conducted.

GOA SCIENCE CENTRE AND PLANETARIUM, PANAJI

Science Film Festival of India 2024

The Centre participated in the 9th edition of Science Film Festival of India organised by Vidnyan Parishad, Goa from 31.01.2024 to 02.02.2024 in ESG complex, Campal Goa. The programs organised during the three days is as follows:

Participation in the science Expo

The Centre participated in the science expo and exhibited table top exhibits explaining various science concepts. Science experiments on Air pressure and Vacuum, sound etc. were also demonstrated to the visitors. In total around 7,032 students, teachers and general public visited the expo.

Science demonstration

As a part of Students Science village a science demonstration in physics was conducted for the students from rural areas of Goa. A Science activity on Sound was also carried out on this occasion. In total around 125 students & teachers participated.

International Film Festival

The centre in collaboration with International Film Festival Worldwide Cell screened an award winning Environmental documentary film on 05.02.2024 from 10.00am to 12.00noon followed by an interaction session with the team. Total students 163 attended the program.

Education Expo 2024

The Centre participated in Education Expo 2024 where talents meets opportunities organized by Rotary Club of Mapusa at Peddem indoor stadium Mapusa from 14.02.2024 to 17.02.2024. The expo offered students and their parents the opportunity to plan their future and interact with various avenues of career and further education. Around 6,352 students, teachers, parents visited the exhibition of table top exhibits explaining various science concepts.

Science Fiesta 2024

The Centre celebrated the National Science Day by organizing a Grand Festival of Science called Science Fiesta 2024 from 26.02.2024 to 28.02.2024. The Science Fiesta was inaugurated by Shri Levinson J Martins, Director, Department of Science, Technology & Waste Management, Govt. of Goa and Shri Umesh Kumar Rustagi, Director, Nehru Science Centre, Mumbai. Various scientific research institutions participated in the program by displaying their research work during all three days.

- On 25.02.2024 following programmes were conducted:
- ➤ <u>Demonstration and Interactive session on Development of Go-Kart for Racing Events:</u> The session was conducted by Shri Saish N. Rivankar, Assistant Professor, Department of Mechanical & Automation Engineering, Agnel Institute of Technology & Design. Total 178 students, teachers and general public attended the lecture.
- Solar Astronomy Workshop: The workshop was conducted by Shri Satish Nayak, President of Association of Friends of Astronomy followed by sunspot observation through telescope. Total 34 students attended the workshop.
- Drone Demonstration by Team Phoenix: The interactive demonstration was conducted by the Team Phoenix in which beginners guide to fly drones was highlighted. Total 189 students, teachers and general public attended the session.
- > <u>Shell Craft Making Workshop:</u> The workshop was organized for the teachers and housewives in which the participants gave their creative inputs into seashell crafting. Total 11 participated in the workshop.
- Liquid Nitrogen Show: The liquid nitrogen show was conducted by the centre in which total 216 students, teachers and general public enjoyed the show.
- <u>Demonstration on Robotics</u>: The demonstration on robotics was conducted by the Saraswat Tech Infinity in which they highlighted about Robotics with live demonstration. Total 146 students, teachers and general public attended the demonstration.
- Astronomy Slide Show: The slide show on topic Joy of Astronomy was conducted by the team of Association of Friends of Astronomy which was followed by sky observation program. Total 79 students, teachers and general public were present.
- Reel Making Competition: The competition was made open for the public where they have made the short reel on theme Science & Society and were uploaded on centre Instagram page.
- On 27.02.2024 following programmes were conducted:
- <u>Dr. APJ Kalam Memorial Astronomy Seminar:</u> Dr. APJ Kalam Memorial Astronomy Seminar was organized for 6 selected schools wherein they have presented the seminar on different astronomy related topic. Total 163 audiences were present for the seminar.
- Meet the Scientist: The popular science lecture on topic 'Achievement by ISRO' was delivered by Dr Jaya Saxena from National Remote Sensing Centre, ISRO. Total 169 students attended the lecture.

- Meet the Scientist: The popular science lecture on topic 'Intellectual Property Rights' was delivered by Dr Ashutosh Saxena, professor & Dean R&D, CMR Technical Campus, Hyderabad. Total 169 students attended the lecture
- ➤ <u>Hand Painting Competition:</u> The competition was organized for the students of class Vth to Xth standard on theme wildlife. Total 80 students participated in the competition.
- Clay Modeling Workshop: The workshop was organized by the artist from bal bhawan in which he showed simple technique to make clay models and advance the ability to create visual form in model. Total 22 students participated in the workshop.
- Fancy Dress Competition: The fancy dress competition was organized for the students of class lst to IVth standard on theme I am Scientist. Total 65 students participated in the program.
- ➤ <u>Water Rocket Workshop:</u> The water rocket workshop was organized for the students of class VIIIth to Xth standard in which 12 students made the water rocket and later launched.
- Demonstration on Fingerprinting & Forensic Science: The session was conducted by the officials from Goa State Forensic Science Laboratory, Verna in which 167 students, teachers and general public attended the session.
- Science Demonstration Lecture on Atmospheric Pressure & Vacuum: The Science Demonstration on Atmospheric Pressure and Vacuum was organized by the centre in which total 187 students, teachers and general public witness the demonstration.
- Astronomy Slide Show: The slide show on topic Era of Astronomy was conducted by the team of Association of Friends of Astronomy which was followed by sky observation program. Total 36 students, teachers and general public were present.

• On 28.02.2024 following programmes were conducted:

- ▶ <u>Meet the Scientist:</u> The popular science lecture on topic 'How climate change affecting the world ocean' was delivered by Dr Suhas Shetye, Senior Scientist, National Institute of Oceanography. Total 179 students attended the lecture.
- Meet the Scientist: The popular science lecture on topic 'Vector Borne Disease: Prevention & Control' was delivered by Dr Nadini Korgaonkar, State Entomologist, NVBDCP, Directorate of Health Services. Total 186 students attended the lecture.
- > Space Quiz: The Space Quiz was conducted by Association of Friends of Astronomy in which 64 students participated.
- Science Rangoli Making Competition: The competition was organized for the students of class Vth to VIIth standard in which 16 students participated.
- ▶ <u>Dry Ice Show:</u> Nature Walk: The show was conducted by the centre in which total 203 students, teachers and general public enjoyed the show.
- Workshop on Food Adulteration: The workshop was organized for the teachers and housewives in which 10 participated.
- Sir C V Raman Memorial Lecture: The lecture was delivered by Dr Ramesh Kumar, Rtd. Senior Scientist from NIO which was followed by valedictory and prize distribution function where Dr N. P. Waghmare, Director of Goa State Forensic Science Laboratory gave away the prizes. Total 143 students, teachers and general public attended the program.

Mobile Science Exhibition

The Centre organized Mobile Science Exhibition in Ratnagiri District of Maharashtra wherein the bus visited 5 schools in the month of February and total 41,330 students, teachers and general public witness the exhibition, Various other interactive educational programs such as sky observation, science demonstration were also organized during the program.

DISTRICT SCIENCE CENTRE, DHARAMPUR

Special Sky Observation program(Astronight) at Vapi Public School, Vatar.

Special Sky Observation program(Astronight) 2 nos. were held at Vapi Public School, Vatar on 04.02.2024 & 16.02.2024. 227 students & teachers observed Sun, Jupiter, M42, M44 & M45 through Celestron CPC 800 telescope & Celestron SLT 102 telescope.

Innovation Festival, 2024 - "From Vision to Impact"

Innovation fest 2024 held at District Science Centre, Dharampur during 12.02.2024 to 14.02.2024. It was 3 day event. Different competitions were held during Fest. Around 5000 students & general visitor visited the fest during 3 days.

• Event Overview:

Innovation Festival – 2024 "From Vision to Impact" was organized by the District Science Centre, Dharampur (A unit of National Council of Science Museums, Ministry of Culture, Government of India), in collaboration with Government Engineering College, Valsad, under the sponsorship of Bayer Vapi Pvt. Ltd. The event took place from 12.02.2024 to 14.02.2024, and featured various competitions, seminars, and shows. The inaugural ceremony on 12.02.2024 was graced by esteemed guests including Mr. Arvindbhai Patel (MLA, Dharampur), Mrs. Geetha Narayanan (Director, Bayer Vapi, Pvt. Ltd.), Mr. Umeshkumar Rustagi (Director, Nehru Science

Center, Mumbai), Mr. Manilal Bhosara (DEO, Valsad), Mr. Mahendrabhai Patel (Principal, DIET Valsad), and Mr. A. V. Jethe (District Science Officer, DSCD).

• Competitions:

The festival featured 15 competitions, with 800 participants engaging in events like Robo Race, Robo Soccer, Tug of Botz, Cube Craft Clash, Kabaad se Jugaad, Idea Box, Bridge Brigade, Circuit Master, Cross Bow, Auto Virtuoso, Electric Buzz, Cosmos Quiz, Innovation Fair – Innovative Idea & Innovation Fair – Working model and Science Hunt. The diverse competitions showcased the talents of students across various scientific and technological domains.

Seminars:

Throughout the event, seminars were organized on topics like "The Root of Innovation: Mathematics" by Dr. Ashish, "Intellectual Property Rights" by Dr. Kirti Patel, and "Industrial Safety, Road Safety, and Fire Safety" by Mr. Chetan Patel. These seminars provided valuable insights into crucial subjects.

Shows:

In addition to competitions and seminars, captivating science shows such as "Science is Magic," "Liquid Nitrogen Show – Nitro Nexus Chiller" and "Astro Night" were organized, adding an element of entertainment and education to the festival.

• Closing Ceremony:

The closing ceremony on 14.02.2024 was attended by key dignitaries including Mr. Manilal Bhusara (DEO, Valsad), Mr. Sharadbhai Thakar (Former president, Vapi Industrial Association), Mr. Mahesh Pandya, Mr. Keyur Shah, Mr. Parthiv Mehta, Dr. Vijay Dhiman, and Mr. Chetan Patel. The chief guest, Mr. Manilal Bhusara, along with other guests, shared their thoughts on innovation and technology. Winners were awarded certificates, trophies, and a total cash prize of INR 65,000.

Mushroom Cultivation Training Programme

Innovation Hub, District Science Centre, Dharampur organized a one-day workshop on Oyster Mushroom Cultivation training programme, on 21.02.2024. In total 50 students 15 farmers and 8 teachers participated in Mushroom Cultivation Training program organised by NSS Unit of KBS Commerce and Nataraj professional Science college, Vapi at Bhensdara School, Dharampur.

Sky observation Programme

The series of sky observation programs held at the Centre on 13.02.2024, 23.02.2024 and 25.02.2024. These events provided valuable opportunities for around 225 students and general visitors to observe celestial objects such as Jupiter, the Moon, and deep-sky objects like M42, M44, and M45 through telescopes.

Astro Night- Sky observation Programme at Shree Krishna International School, Kalvada.

Astro Night Sky observation program conducted by the District Science Centre, Dharampur on 20.02.2024 at Shree Krishna International School, Kalvada, Ta. & Dist. Valsad. The use of telescopes, particularly the Celestron CPC 800 and Celestron SLT 102, allowed participants to observe several celestial bodies, including the Moon, Jupiter, the Sun, M42 Orion Nebula, M44 & M45 Pleiades. Additionally, constellations and zodiac signs like Aries, Auriga, Canis Major, Cassiopeia, Gemini, Orion, and Taurus were explored. In all 194 Students 10 Teachers & about 250 Parents and Villagers participated in the programme.

"हिंदी कार्यशाला तिमाही रिपोर्ट को भरने में आने वाली समस्याओं का समाधान"

विश्वेश्वरैया औद्योगिक एवं प्रौद्योगिक संग्रहालय, बेंगलुरु द्वारा 07.02.2024 को अपराहन 3.00 बजे राजभाषा नियमावली विषय पर आनलाइन हिंदी कार्यशाला का आयोजन किया गया। श्री सुशील कुमार गोयल, सहायक निदेशक (राजभाषा), न.रा.का.स.,(कार्यालय-2), मुख्य पोस्टमास्टर जनरल, कर्नाटक सर्किल, बेंगलुरु ने कार्यशाला में राजभाषा नियमावली के बारे में विस्तार से बताया। इस कार्यशाला में जिला विज्ञान केंद्र धरमप्र के नामित अधिकारी और कर्मचारी ने प्रतिभागिता की।

Mobile Science Exhibition on "Hygiene and Sanitation"

Mobile Science Exhibition on "Hygiene and Sanitation" was organized by the Centre during the month February 2024 in Ashram Schools of Valsad District. Total 13 sites were covered during the month.

"Curriculum based" Mobile Science Exhibition

"Curriculum based" Mobile Science Exhibition was organized by the Centre during the month February 2024 in Valsad District. Total 18 sites were covered during the month.

Teacher's Training Program on Culture Integrated Education

Teacher training program on "Culture Integrated Education" held at BRC Bhavan, Pardi in collaboration with DIET (District Institute of Education and Training), Valsad. The program was organized as a part of the National Education Policy (NEP). The training program took place on 20.02.2024. A total of 50 teachers from Pardi & Umargam taluka of

Valsad district attended the program. The focus of the training was on "Culture Integrated Education," aligning with the broader goals of the National Education Policy. A lecture on the "Scientific Culture of India" was delivered by the Centre, providing insights into the rich scientific heritage of the country. Dr. Pankajkumar Desai, Science Adviser, DIET Valsad along with other experts, actively contributed to covering various topics related to Culture Integrated Education during the teacher training program.

Astro Night- Sky observation Programme at Bhensdara School, Dharampur.

Astro Night Sky observation program conducted by the District Science Centre, Dharampur on 23.02.2024 organised by NSS Unit of KBS Commerce and Nataraj professional Science college, Vapi at Bhensdara School, Dharampur at Bhensdara School, Dharampur, Dist. Valsad. The use of telescopes, particularly the Celestron CPC 800 and Celestron SLT 102, allowed participants to observe several celestial bodies, including the Moon, Jupiter, M42 Orion Nebula, M44 & M45 Pleiades. Additionally, constellations and zodiac signs like Aries, Auriga, Canis Major, Cassiopeia, Gemini, Orion, and Taurus were explored. In all 215 Students, Teachers and Villagers participated in the programme.

National Science Day celebration:

National Science Day was celebrated at the Centre from 25.02.2024 to 29.02.2024, with a focus on the theme "Indigenous technology for viksit Bharat" through a series of educational programs and activities.

- Exposure visit to the Innovation Hub and guided tour of the gallery for students, providing them with interactive learning experiences.
- Hands-on Activity on Science in collaboration with The Lady Wilson Museums, Dharampur on 25.02.2024, where 75 students participated in fabricating 10 science toys such as Air Jack, bird in a cage, 2D to 3D cube, centrifugal force, straw sprinkler, Star wheel, Square Puzzle, Newton's 3rd law, barnauli's principle, and a balloon toy based on the principle of the center of mass.
- <u>Inauguration of the poster exhibition</u> "Bhartiya Vigyaan, Vishva Hetu Vardaan" on 25.02.2024 by Shri Manilal Bhusara, DEO, Valsad, in the presence of Dr. Indra Vats, Curator of The Lady Wilson Museum, Dharampur, and other students.
- <u>Liquid Nitrogen show</u> "Fun at Low Temperature" on 25.02.2024 organized for the students, offering them a captivating and educational experience.
- **Sky observation program** on 25.02.2024, allowing participants to observe celestial objects through telescopes.
- <u>Popular Science Lecture</u> on "Life & Work of Sir C.V Raman" by Dr. Rajesh Malan and another lecture on "Indigenous technology for viksit Bharat" by Dr. Bhadresh Sudani from Govt. Engineering College, Valsad, on 28.02.2024.
- Open House Quiz on "Science & Technology" and Water Rocket demonstration conducted on 28.02.2024, enjoyed by around 250 students and teachers.
- Moreover, 14 <u>Science Demonstration Lectures</u> were organized for visitors and students throughout the period of 25.02.2024 to 29.02.2024, enhancing the educational experience during the National Science Day celebrations.