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

NEHRU SCIENCE CENTRE, MUMBAI

Package Tour

During this month, in all 25 (3,555 students) 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.

Vigilance Awareness Week 2023

a. Poem Recitation program 01.11.2023

The Centre organized a poem recitation ceremony for its Staff members on 01.11.2023. A total of 8 Officer / Staff members of the Centre participated the programme. The theme for poem recitation was "अष्टाचार का विरोध करें; राष्ट के प्रति समर्पित रहें".

b. Interaction Session on 02.11.2023

The Centre on 02.11.2023 organized a lecture by Mrs. Manisha Zende, Astt. Commissioner of Police, Anti-Corruption Bureau (ACB) Mumbai on the theme "अष्टाचार का विरोध करें; राष्ट्र के प्रति समर्पित रहें,". The lecture, was held as part of Vigilance Awareness Week 2023, aimed to instill a vigilant ethos among the Centre's staff, emphasizing ethical conduct and national dedication. A total of 43 Officers/ Staff members were part of this interaction.

c. Slogan Writing Contest on 04.11.2023

The Centre organized a Slogan writing Contest for the visitors on 04.11.2023. The theme of the contest was 'Say no to corruption; commit to the Nation' 25 such slogans were received in the drop box kept at the Reception Counter.

d. Quiz Contest on 05.11.2023

The Centre organized yet another on-the-spot Quiz Contest for the visitors of the Centre. Question related to Vigilance Awareness were asked to the visitors. Visitors who gave correct answers were handed over prizes. 84 visitors were part of this on-the-spot Quiz Contest

Chemistry Week Celebration

Chemistry Week is a public awareness campaign that promotes the value of chemistry in everyday life. The Centre conducted Chemistry Week Celebration form 05.11.2023 to 11.11.2023 by organizing various programmes / activities / events.

a. Chemistry Demonstration for Visitors (05.11.2023 to 11.11.2023)

Daily chemistry demonstrations were conducted at 11:30 am at the Centre, captivating the audience with the wonders of chemistry. These interactive sessions aimed to make the subject more accessible and engaging for all visitors, offering a glimpse into the fascinating world of chemistry and its real-world implications. Across the week, a total audience of 2035 individuals engaged in these captivating demonstrations,

b. Online Popular Science Lectures

I. "In the Wonderland of Chemistry" by Dr. D. V. Prabhu

The Centre on 05.11.2023 organized an online Popular Science Lecture titled 'In the Wonderland of Chemistry' by Dr. D. V. Prabhu, Adjunct Professor and Former Head, Dept. of Chemistry, Wilson College, Mumbai. This engaging session witnessed the active participation of 46 online participants on Zoom participation and Audience reach of 1134 on Facebook

II. "Chemistry: From Alchemy to Modern Marvels" by Dr. A. P. Jayaraman

The Centre on 11.11.2023 organized a online popular Science Lecture by Dr. A. P. Jayaraman, former Nuclear Scientist at BARC, Mumbai. The session attracted 43 participants on Zoom, while an impressive 1536 viewers engaged with the lecture across Facebook and YouTube platforms, highlighting the widespread interest in exploring the evolution of chemistry.

c. Do-it-yourself chemistry hands-on experiments

On 07.11.2023, a hands-on chemistry session engaged 476 students (6th to 9th standards) and visitors. Redox, exothermic and endothermic reactions, acid-base experiments, and more were showcased. Expert guidance by the Staff of the Centre ensured practical learning experiences.

d. Online Chemistry Workshop

On 08.11.2023, an online chemistry workshop catered to students from 6th to 10th grade. The session utilized household materials to teach techniques such as chromatography and the application of universal indicators,

showcasing chemistry's relevance in daily life. This engaging workshop hosted 16 participants on the Zoom platform, facilitating interactive learning experiences.

e. Online Chemistry Demonstrations

On 09.11.2023, the Centre conducted live online chemistry demonstrations via Facebook, attracting 116 active participants. The stream garnered significant attention, with 1,267 online visitors having viewed the demonstrations to date. This initiative showcased engaging chemistry experiments to a broad audience, fostering interest and accessibility in the subject.

f. Open House Quiz

On 10.11.2023, an Open House Quiz was held exclusively for the visitors, aimed at testing and engaging their knowledge in chemistry. A total of 156 participants enthusiastically joined the quiz, resulting in 10 deserving winners who were awarded certificates for their outstanding performance. This interactive event furthered engagement and appreciation for the subject among the participants.

Commemorating C.V. Raman's 135th Birthday

On 07.11.2023, in commemoration of C.V. Raman's 135th Birth Anniversary, a quiz was organized, drawing the participation of 147 students. This event served as a tribute to the esteemed scientist, providing an educational platform for students to engage with and celebrate his legacy through the quiz activity.

Centre's Anniversary and Science Museum Day

The Centre celebrated its 38th Anniversary on 11th November, 2023 and International Science Centre and Science Museum Day on 10th November, 2023. Following programmes were part of these celebrations

a. Supercool Show (10.11.2023 and 11.11.2023)

This captivating demonstration showcased experiments utilizing liquid nitrogen, captivating 456 visitors across two days at the Children's Science Park. Participants marveled at the fascinating properties and applications of this supercool substance.

b. Vibrational Voyage (10.11.2023)

Exploring the realms of sound and vibration principles, this session engaged 376 visitors at the Science Park, providing an immersive experience into the science behind sound waves and their effects on various mediums.

c. In the Absence of Air (10.11.2023 and 11.11.2023)

Through experiments conducted in low-pressure environments, 765 visitors at the Children's Science Park delved into the intriguing world where air pressure's absence led to fascinating scientific phenomena and observations.

d. Aqua Thrust (10.11.2023 and 11.11.2023)

With 897 participants, this demonstration at the Iron Pillar Exhibit unfolded the mechanics of water rockets, elucidating the diverse types and functioning of these rockets, captivating audiences with the wonders of aerospace science.

e. Make and Take Sessions (10.11.2023 and 11.11.2023)

Attracting 874 participants, these sessions at the Museum Building's Main Gate empowered visitors to create small, hands-on educational kits and toys, fostering creativity and active learning among attendees of all ages.

Al Workshop

The Centre, in collaboration with Myracle.io, Germany, hosted an online workshop titled 'Future Creator's Al Adventures' on November 10th, 2023. This workshop, delving into the realms of artificial intelligence, engaged 17 students in an insightful journey exploring Al's future possibilities and innovations.

Childrens Day Celebration

In celebration of Children's Day on November 14th, 2023, the Centre organized a special Make and Take Science Toys Session. A total of 1556 children, accompanied by their parents, enthusiastically participated in this engaging activity, fostering creativity and scientific curiosity among the young participants.

Outreach Programme

As part of the Children's Day Celebration on 14.11.2023, the Centre organized a Sky Observation program at Minisurat residential society, Sarvodaya Nagar, Ambernath (West), District Thane. A total of 356 individuals participated in the Sky Observation Sessions and engaging hands-on activities, providing an enriching experience in astronomy and celestial exploration for all attendees.

Workshop for Seva Sahayog Foundation

On 21.11.2023, a specialized Physics and Chemistry workshop was organized for the teachers of Seva Sahayog Foundation. This workshop offered engaging demonstrations covering chemistry, air pressure, sound, and related concepts. Additionally, hands-on activities were conducted to enhance the learning experience. A total of 30 dedicated

teachers actively participated in this enriching workshop, furthering their understanding of these scientific principles for effective classroom instruction.

Commemoration of Constitution Day

On 26.11.2023, the Centre commemorated Constitution Day through various activities. An Open House Quiz engaged 82 visitors, while an Online Quiz drew participation from 549 individuals. Additionally, an Online Pledge initiative witnessed the administration of 249 pledges, collectively honoring and celebrating the significance of the Constitution.

Workshop for Staff members of NSC, Mumbai

On 07.11.2023 the Centre conducted a workshop-cum-interactive sessions for the Officers and Staff members of the Centre. The session led by Mr. Mandar Kanvinde, from CEM Brand Capita Pvt. Ltd., the session emphasized aligning personal purpose with the Council's mission. The workshop sparked introspection, highlighting the importance of finding meaning in tasks and understanding their impact on society / organisation. Participants were encouraged to connect emotionally with their roles, realizing the significance of their contributions. This session reiterated the value of purpose and happiness in work, fostering a more engaged and purpose-driven workforce. Such initiatives reaffirm the Center's commitment to continual growth and a harmonious work environment.

National Science Drama 2023 (Western Zone)

National Science Drama Festival is one of the biggest highlights of NCSM. The Western Zonal Drama Contest was organized at the Centre. School Teams from 05 States arrived at the Centre to showcase their talents. The theme for this year's drama was 'Science and Technology for the benefit of mankind'. Each team performed their act for around 25 minutes each. Shri Shivaji Satam, famous actor and TV personality was the Chief Guest on this occasion. Shri Shivdas Ghodke, Smt. Aparna Dharmadhikari and Shri Nilay Vaidya, were the panelists who evaluated the drama performances. The panel also shared their experiences with the Centre, their love for the Centre and applauded NCSM and NSCM efforts to make people connect with science through dramas. Two winners of the Western Zonal Drama will participate in the National Drama Festival to be also held at Nehru Science Centre, Mumbai next year. A total of 310 audience witnessed the Zonal Level Drama Contest.

Launch of New Film

The Centre on 29.11.2023 launched a new large format film titled 'Australia's Great Wild North: The Wildest Place You've Ever Seen' Ms. Majell Hind, Consul-General of Australia was the Chief Guest of the event. The event was also graced by Mr. Joel Adsett, Vice Consul of Australia, and Ms. Aliya Elariss, Public Diplomacy Manager of Australia. 210 students from M. D. College, Parel and Saraswati Vidyamandir, Mumbai were also present at the inaugural function.

Annual Science Quiz (Quarter Finals)

The Centre hosted the Annual Science Quiz, where 32 teams, comprising a total of 64 students, competed against each other on 28.11.2023 and 29.11.2023. The quiz encompassed questions from various scientific disciplines including Science, Physics, Chemistry, and Biology, aligned with the syllabi of 8th, 9th, and 10th grades. This competitive yet educational event aimed to test and enhance the students' knowledge across multiple scientific domains.

Innovation Hub Sessions

Conducted for 17 individuals. 04 such session were conducted on 04.11.2023, 11.11.2023, 18.11.2023 and 25.11.2023.

- **a.** Session on Air Pressure Activities: This sessions involved various activities related to atmospheric and low pressure, providing engaging insights into air pressure dynamics.
- **b.** <u>Disaster Management:</u> The session led by Dr. Sanjay Gokarn, former mentor of Innovation Hub, of the Centre, delved on strategies for self-protection during disasters, imparting valuable knowledge and preparedness.
- **c. Biology Session:** Explored the anatomy of flowers, germinated pollens, and observed stomata and plant cells under microscopes, enhancing understanding of botanical structures.
- **d.** <u>Tod Fod Jod:</u> Engaged participants in disassembling and reassembling different machines like wipers, DC, AC, and motors, facilitating discovery of their functions.
- **e.** <u>Meet the Scientist:</u> Featuring Shri A. P. Jayaraman, where students interacted directly, asking insightful questions and gaining advice on pursuing careers in science.

Experimental Skill Test on 25.11.2023

The Centre, in collaboration with the Bombay Association for Science Education (BASE), coordinated a session of the Experiment Skill Test at the Centre on 25.11.2023. This program was designed for 02 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.

RAMAN SCIENCE CENTRE AND PLANETARIUM, NAGPUR

Activities and programmes 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:

- Videos on visitors' experiences posted during the month.
- Visitors' feedback stuck to 'Visitors Expression Point' were also posted during the month.
- 2513 students & teachers from 21 schools visited the exhibition & were guided by the demonstrators in the exhibition area including teachers (data till 29th Nov)
- 21179 visitors visited the exhibition including students (data till 29th Nov).
- 22 students & teachers from 1 special school visited the 'Vaccine' Exhibition

Activities and Programmes during Vaccines Injecting Hope Exhibition -

The Centre organized many activities and programme to mark the 'Vaccine Injecting Hope' Exhibition display at RSCN during November 2023:

- 12 nos. of **Open House Quizzes** on 'Vaccines' were conducted for 452 students and 357 general visitors.
- **Essay Writing Contest** on theme 'Pandemic and Vaccination' was organised wherein 56 students participated in the competition.
- 'Making Your Own Virus' workshop using paper Mache mold was organised on 28th November 2023, 27 high schools' students participated in the workshop. Shri Kishor Sontakke, Art Teacher, Shri Niketan Vidyalaya conducted the workshop. Students learnt to make positives of viruses viz: Bacteriophage, Corona etc.
- A Popular Science Lecture was organised on theme 'Future Pandemic Preparedness' on 29th November 2023, delivered by Dr Umesh Shaligram, Executive Director, Serum Institute of India Pvt Ltd. Pune. The programme was attended by 146 students.
- 1 Hands on activities workshop was organised for high school students on 29th November 2023 for 20 students.
 They learnt to make paper models of Zika, Corona & Dengue virus & lock and key models of antibodies & antigens etc. Participants performed experiments such as How Germs Spread, fermentation using yeast, the science of hand washing etc. Also experiments such as Water Drop Microscope, visualizing germ spread etc. were demonstrated to them.
- A Street Play was organized on the theme 'Vaccines Injecting Hope' at Gorewada Zoo, Nagpur during the evening time on 19th November 2023. The members of professional group 'DevelpArtz' conducted the play for 275 people. (Outreach programme)

Mobile Science Exhibition on 'Vaccines Injecting Hope'

The Exhibition was organized in Reliance Foundation School, Mauda, Tal. Mauda, District Nagpur from 23 to 24 November 2023. 826 students and teachers visited the exhibition. 2 No. of SDLs were also conducted for 797 students.

Test Your Experimental Skills - Level 1

5th Experimental Skill Test was conducted at Raman Science Centre and Planetarium, Nagpur in collaboration with Bombay Association of Science Education (BASE, Mumbai) on 19th November 2023. 15 students (Std 8 to 12) participated in the programme. 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 were awarded certificates.

Vidushi - Women in STEM

RSC, Nagpur is running a social media campaign "Vidushi: Women in STEM" to salute some of the early Indian women scientists. 4 such posts were shared on social media of the Centre every Wednesday i,e. on 1st, 8th, 15th, 22th November 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.

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 RSCN on 3rd & 4th November 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 RSCN on 5th & 26th November 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.

International Science Centre & Science Museums Day was celebrated at Raman Science Centre & Planetarium, Nagpur on 10th Nov 2023.

• An introductory lecture on the importance of science and technology in today's perspective and Science Demonstration was conducted on the occasion. 78 visitors participated in the programme.

Vigilance Awareness Week

Vigilance Awareness Week was celebrated at Raman Science Centre & Planetarium, Nagpur during 30th October to 5th November 2023 by organising following programmes.

- A vigilance Pledge programme for staff members was conducted at the centre on 30th October 2023. All officers and staff members have taken a pledge.
- Essay Competition on 'Corruption Free India" was organised for staff members pf RSC Nagpur. 15 members participated and have written essays on the topic.
- As a part of Vigilance Awareness Week, a Written Quiz Contest on theme 'Vigilance Awareness' was organised on 1st November 2023 for the staff members of RSC Nagpur. 22 staff members participated in the quiz.
- A Popular Talk was organised for the staff members of the Centre on the theme 'Say no to corruption; Commit to the Nation' on 2nd Nov 23. The lecture was delivered by Shri Manojkumar Panda, PC, RSC&PN. 30 staff members participated in the programme.
- An Open House Quiz was conducted for the students and general visitors on 4th November 2023, 23 students and 19 visitors participated in the quiz.
- A Slogan Writing Contest on topic 'Corruption free India' was conducted for visitors on 5 November 2023. In all, 36 visitors participated in the Contest.

Winners of all these competitions were awarded prizes.

REGIONAL SCIENCE CENTRE, BHOPAL

Innovation Hub Programmes

Innovation Hub of RSC, Bhopal organized 9 Orientation Sessions on topics such as the Geological Time Scale and its kit, Snell's Law, Hinge Man, Archimedean Lantern, Genetic Disorders, Physiology of Nerve Impulses, Robotics, and Integumentary System. A total of 34 students participated in these programmes. Apart from this, an Essay Writing competition on the topic "Say no to corruption, commit to the nation" was also organized on the occasion of Vigilance Awareness Week on November 04, 2023, wherein 06 members participated.

Celebration of World Science Day for Peace & Development

World Science Day for Peace and Development is celebrated worldwide on Nov 10 every year to highlight the significant role of science in our daily lives and the need to engage the wider public in debates on emerging issues of science. RSC, Bhopal celebrated the occasion on Nov 9 and 10, 2023 by conducting a series of programmes for students and the public. On Nov 9, 2023, a Make & Take Workshop, a Science Quiz contest on the topic 'Global Science For Global Wellbeing' and the launch of a new Science Demonstration Lecture on Chemistry under the topic 'Enchanting Chemistry' were organized. A total of 12, 29 and 35 students participated in the above events respectively. In addition to this, a telescopic view of the Sun in a safe viewing method showing Sunspots was also conducted among general visitors on this day to sensitize the public to understand the surface dynamics of the Sun that sustain life on our planet. In the Make & Take Workshop, each participant developed five science toys (i.e. Bird in a Cage, Butterfly Balance Kit, Centre of Gravity Kit, Newton's Colour Disc and Humpy Dumpty Kit) with all the raw materials and guidance supplied by this Centre. The completed kits were permanently given away to the participants for use at home. The successful participants of the quiz were awarded prizes and certificates on Nov 10, 2023, on the day of World Science Day. A Science Film Show entitled 'The Evolution of the Earth' was also screened on Nov 10, 2023.

Celebration of Vigilance Awareness Week

RSC, Bhopal observed the Vigilance Awareness Week from October 30 to Nov 5, 2023. As a part of the programme, a Pledge was administered to all the staff members of the Centre on Oct 30, 2023, by Shri Saket Singh Kaurav, PC, RSC, Bhopal. An Essay Writing Competition on the topic 'Say No to Corruption, Commit to the Nation' was conducted on Nov 3, 2023, wherein 6 students participated. A Vigilance Quiz on the topic 'Say No to Corruption, Commit to the Nation' was conducted on Nov 2, 2023, wherein a total of 40 students participated. A Slogan Drop Box contest on the

topic 'Say No to Corruption, Commit to the Nation' was conducted on Nov 2, 2023, wherein a total of 30 students participated.

Celebration of Children's Day

RSC, Bhopal organised Children's Day on Nov 14, 2023, by organizing a Dinosaur Clay Modelling workshop for students of Class I to III and a Science Toy Making Workshop for students of Class 9. A total of 24 and 10 children participated in these Workshops respectively. In the Science Toy Making Workshop, each participant developed five science toys (i.e. Bird in a Cage, Butterfly Balance Kit, Centre of Gravity Kit, Newton's Colour Disc and Humpy Dumpty Kit) with all the raw materials and guidance supplied by this Centre. The completed kits, along with Certificates of Participation, were permanently given away to the participants for use at home. This was followed by a Painting Contest on the subject 'Chacha Nehru & Children' in two categories (Juniors: Class 5 & 6; Seniors: Class: 7 & 8) in which a total of 58 students participated. All the meritorious competitors of the Contest were felicitated with prizes and certificates. An evening sky observation programme with the telescope was also organized especially among children to mark the occasion.

Teachers' Training Programme for the Atal Tinkering Labs (ATL) teachers of different Vidya Bharti Schools in the state

RSC, Bhopal organised a Teachers' Training Programme for the Atal Tinkering Labs (ATL) teachers of different Vidya Bharti Schools in the state on Thursday, November 23, 2023. As a part of the programme, they were first introduced to the activities of the Science Centre and how to establish effective science communication skills in the schools by Shri Saket Singh Kaurav, PC, RSC, Bhopal. Later, a special 'Science Teaching-aid Making Workshop', Exposure Visit to the Innovation Hub, Guided Gallery visit, Taramandal Show and an Evening Sky Observation programme with a telescope were also organized for them. In the 'Science Teaching-aid Making Workshop, each participant developed 3 teaching aids i.e. Bird in a Cage, Butterfly Balance Kit, Centre of Gravity Kit with all the raw materials supplied by this Centre and the completed kits were permanently given away to them for use at the schools. A total of 23 teachers took part in the programme.

Celebration of Constitution Day

RSC, Bhopal celebrated Constitution Day (Samvidhan Divas) on Nov 26, 2023, by organizing a series of programmes for school children and general visitors. As a part of the programme, an Online Reading of the Preamble to the Constitution programme was organized in which Shri Saket Singh Kaurav, PC, RSC, Bhopal administered the reading to all the staff members of the Centre. The staff members also logged in to the My Gov portal read out the Preamble themselves and uploaded the certificates to the official WhatsApp Group.

An Online Reading of the Preamble to the Constitution & online quiz on the topic 'Bharat: Loktantra Ki Janani' available in the My Gov portal were also made accessible to the general visitors. An Open House Quiz on the topic 'Bharat: Loktantra Ki Janani' was organized among school children in which a total of 30 students participated. A Slogan Drop Box programme on the topic 'Bharat: Loktantra Ki Janani' was also organized among general visitors in which around 50 people participated.

Online AI Generative Workshop in collaboration with Myracle.lo, Germany

RSC, Bhopal, in collaboration with Myracle.lo, Germany organized an Online AI Generative Workshop entitled 'Future Creator's AI Adventure' on November 25, 2023. A total of 15 participants took part in the programme.

Mobile Science Exhibition

RSC, Bhopal, in collaboration with Rajya Shiksha Kendra, is organising a Mobile Science Exhibition (MSE) on the topic "How Things Work" in the schools of the district of Mandla. Apart from the exhibition, SDL, Science Film shows, Sky Observation Programmes etc. are also being conducted during the month.

GOA SCIENCE CENTRE AND PLANETARIUM, PANAJI

Generative Ai Workshop

To unleash creativity, power and knowledge by exploring AI, an online workshop on title 'Generative AI Workshop' was organized by the centre in collaboration with Myracle.io Germany on 03.11.2023. Total 20 students were registered for the workshop.

Creative Science Workshop

As a part of Vacation Creative Abilities Activity, a second batch of activity oriented Creative Science Workshop was conducted for the students from 06.11.2023 to 10.11.2023 in respective discipline.

Science Buzz

To foster a love for science, spark curiosity and interest in the young minds, the workshop on Science Buzz was organized for the students of class lst to IVth standard. During the workshop the students were encouraged to explore the world of scientific inquiry through hands on activity. Total 20 students attended the workshop.

Amazing Astronomy Workshop

The workshop offered students to deepen their understanding of universe and other astronomical objects through projects, activities and sky observation. The workshop was organized for the students of class Vth to VIIth standard. Total 24 students participated in the workshop.

Skill Development in Electronics

The workshop highlights basic knowledge of electronics with practically understanding the functions of different electronic component and assembling them with soldering practices. Total 9 students participated in the workshop.

International Science Centre and Science Museum Day

The Centre celebrated the International Science Centre and Science Museum Day from 10.11.2023 to 11.11.2022 by organizing the following programs:

- a. Exhibit Hunt Quiz: An exhibit hunt quiz was organized for the students visiting the Centre on 10.11.2023. Questions related to exhibits were asked to them and students attempting correct answers were rewarded. Total around 78 students participated in this quiz.
- b. <u>Science Demonstration on Atmospheric Pressure & Vacuum</u>: A Science demonstration on Atmospheric Pressure & Vacuum was organized for the general public visiting the centre on 11.11.2023 in the auditorium of the centre. Total 126 audiences were present for the demonstration.

Make & Take Science Kit Making Session: A session on make and take science kit making was organized for the students visiting the centre on 11.11.2023. Total 36 students participated in the session.

Swachh Diwali Shubh Diwali

As a part Swachh Diwali, Shubh Diwali Campaign which promotes celebrating the festival of Diwali in an environmentally friendly and in clean manner the centre organized cleanliness campaign on 13.11.2023 by the staff members in the premises of centre.

Game Design Workshop

The Centre in collaboration with Myracle.lo Germany organized online Game Design workshop from 13.11.2023 to 16.11.2023. The workshop provided a structural environment to learn fundamental principles, design techniques and standard tools in AI technology. Total 4 students registered for the workshop.

Childrens Day Celebration

To commemorate children's day and to make science engaging, fun and educational, a science kit making session was organized for the children's visiting the centre on 14.11.2023. The hands-on session was organized with an objective to foster curiosity and encouraging participants to continue exploring science. In total 96 children's participated.

National Standard Examination 2023-24.

As a part of the international Science Olympiad the first round of National Standard Examination in Astronomy was conducted on 25.11.2023 and National Standard Examination in Physics, Chemistry, Biology was conducted on 26.11.2023. In total 116 students registered for the exam.

Popular Science Lecture

A popular Science Lecture on 'LIGO-India: Challenges and opportunities will be organized on 30.11.2023 from 06.00 p.m. to 07.00 p.m. in the auditorium of the centre by guest speaker Prof. Sanjit Mitra, Professor, Scientist G from LIGO-India Science spokesperson and LIGO-India Project Coordinator, IUCAA, Pune.

DISTRICT SCIENCE CENTRE, DHARAMPUR

VIGILANCE AWARENESS WEEK

Vigilance awareness week was observed on theme "Say no to corruption; commit to the Nation" from 30.10.2023 to 05.11.2023. Week was started by taking pledge on integrity on October 30, 2023 at the Centre. To mark the event, the centre organized various programmes and activities from October 30, 2023 to November 5, 2023 at the Centre. Quiz competition related to Vigilance Awareness for staff members was organised. Slogan writing contest was organised during the event. A talk on "Say no to corruption; commit to the Nation" was delivered by the dr. Vijay Italia, Chief Officer of Nagarpalika, Dharampur. Altogether about 560 students and general visitors took the pledge during the event.

International Science Centre and Science Museum Day

International Science Centre and Science Museum Day was celebrated on November 10, 2023 at District Science Centre, Dharampur. To mark the event various educational activities were organized for the students and visitors.

Candle making workshop was organized for 35 students. Open House quiz contest on Science in daily life was conducted. A hands-on activity session was organized for the students. Anti-superstition show, Robotic session and other activities were organized during the event.

Swachh Diwali Shubh Diwali Campaign:

Swachh Diwali Shubh Diwali Campaign was started at DSCD from November 6-12, 2023 by taking e-pledge. In all 54 staff members and general visitor took e pledge and got certificate.

Children's week Celebration:

Children's week was celebrated during November 14 -20, 2023 at DSC, Dharampur by organizing programme like, Science Toy make and take, water rocket making, Sky observation Program, Open house quiz on Science in daily life, Exposure visit of Innovation HUB, Guided Tour of DSC Dharampur, SDL on Fun with Chemistry and Physics, 3D Show, Planetarium Show, Visit of Underprivileged Children, etc. In all 954 students and general visitors participated and benefitted by the program.

Electronics workshop:

Electronics workshop was organized at Innovation Hub DSCD during November 17-19, 2023. Basic electronics components and identification, operating digital multimetre, drawing and identifying circuit diagrams, making circuit on bread board, finalizing circuit on PCB using soldering techniques.

Projects prepared by the participants 1. Current identifying circuit 2. Touch sensing based LED glowing circuit 3.Water Level Indicator circuit. In all 10 students participated in the workshop.

Robotics workshop:

Innovation Hub, DSC, Dharampur, in collaboration with Bayer Vapi Pvt. Ltd. conducted 3 -day robotic session on November 17-19, 2023 in which students learned to make Lego mind storm robot using different sensors and programmed it according to the task. Total 2 students from participated in the session.

Exposure Visit of Underprivileged Children in District Science Centre, Dharampur

Exposure Visit of 64 Underprivileged Children was arranged in 2 groups in the month of November 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.

Constitution Day Celebration

The Constitution Day was celebrated at DSC, Dharampur on 26.11.2023. Staff members of DSCD and 25 general visitors read online preamble and also played the online quiz and generated their certificates.

Vacation Creative ability workshop

District Science Centre, Dharampur organized integrated science workshop during November 21-23, 2023. Different activities were held during this workshop like 3D Printer demonstration, working observation of Onion cell under microscope, Elephant tooth paste experiment, Oxidation reaction of Glycerin with Potassium permanganate, Preparation of Natural Indicator from flowers etc. Total 12 such hands- on activities were during the workshop. 38 students participated in the program.

Art & Craft Workshop VCAC

District Science Centre, Dharampur organized Art & Craft workshop during November 21-23, 2023. Different activities were held during this workshop like Origami Art, Lipan Art etc. Mentor of innovation hub guided them to use epoxy clay and hardener and to make different shape and texture using the materials.

Aero Modelling & Model Rocketry

District Science Centre, Dharampur organized Aero Modeling & Model Rocketry workshop during November 24- 26, 2023. 12 students have attended the workshop. Different activities were held during this workshop like introduction to Aero Modeling, making Model of Rockets from MS Paper, Making Water Rocket, Glider, Paper Aero plane etc. were made and launched successfully.

Sky Observation Program.

Sky observation program 5 Nos were organized During the month. Celestial objects like Moon, Jupiter, Saturn were shown through Celestron CPC 800 telescope. In all 142 students, teachers and parents benefitted by this program.