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

# **NEHRU SCIENCE CENTRE, MUMBAI**

### **Package Tour**

During this month, in all 19 package tours (2,230 people) were organized for students and teachers. Guided tour to the galleries, Science Odyssey, Science on Sphere show and Science Shows were organized for them.

## Sci-Birthday

During this month, 01 Sci-Birthday is scheduled to be organized for a group of 50 people on 29.09.2024. Children will be engaged in hands-on science activities, science demonstration, science on a sphere show and gallery visit.

# Regional Science Seminar, Mumbai Region

The Dy. Director of Education, Mumbai in collaboration with Nehru Science Centre, Mumbai organized the Regional Level Science Seminar for Mumbai region on 02.09.2024. The theme for the seminar for this year is 'Artificial Intelligence: Potentials & Concerns'. In all 10 participants from five zones of Mumbai region participated in the event. 247 students witnessed the deliberation of the participants.

# **Teachers' Day celebration**

To commemorate the Teachers' Day, on 05.09.2024, the Centre organized few Special No Cost Low-Cost Experiments & Liquid nitrogen demonstrations for Bombay Teachers' Training College, Mumbai. Few teachers also presented inspirational and motivational stories of Dr. Radha Krishna and Savitri Bai Phule. The session was attended by 230 Trainee teachers.

### **Tree Plantation Activity**

The Centre on 12.09.2024 organized a Tree Plantation Activity. Shri Arnab Chatterjee, Director I/c, Nehru Science Centre, Mumbai along with other Officers of the Centre planted 25 saplings in the Science Park of the Centre. A total of 64 Officers & Staff Members and 52 school students were part of this Activity.

#### **Exercise of Innovative Thinking**

28 students participated in the each batch conducted on 24.09.2024 and 29.09.2024. Participants were provided with materials for conducting physics experiments. Participants were encouraged to develop their own procedures to perform the experiments and draw conclusions by altering different parameters.

### हिन्दी पखवाडा 2024

केंद्र ने 14 से 30 सितंबर 2024 तक हिंदी पखवाड़ा मनाने के लिए कई कार्यक्रमों का आयोजन किया। इसमें विज्ञान आधारित फिल्म, सामान्य विज्ञान प्रश्नोत्तरी, ऑनलाइन प्रश्नोत्तरी, राजभाषा प्रतिज्ञा, प्रश्नोतरी प्रतियोगिता, हिंदी कार्यशाला, अनुवाद प्रतियोगिता, श्रुतलेखन प्रतियोगिता, निबंध प्रतियोगिता, हास्य कार्यक्रम, और प्रोफेसर विजय सिंह द्वारा व्याख्यान शामिल थे। अंतिम दिन 30.09.2024 को हिंदी गीत गायन प्रतियोगिता के साथ कार्यक्रम का समापन हुआ। सभी गतिविधियों में विद्यार्थियों, अधिकारियों और कर्मचारियों ने उत्साहपूर्वक भाग लिया, जिससे हिंदी और विज्ञान के प्रति जागरूकता बढ़ी।

#### **Engineers Day**

The Centre celebrated Engineers Day on 15.09.2024 with an engaging online quiz in the honor of Bharat Ratna Shri M. Visvesvaraya. The event saw enthusiastic participation from 58 individuals. Questions covered a range of engineering topics, including Shri M. Visvesvaraya's life and achievements. All the participants were awarded with the digital certificate.

### **Experimental Skill Test**

In collaboration with Bombay Association for Science Education (BASE), the Centre organized an Experimental Skill Test Program on 15.09.2024. Total 20 students participated from various schools in Mumbai. Students were tested on their experimental and lab handling skills.

### **World Ozone Day**

On 16.09.2024, the Centre marked World Ozone Day with an engaging online quiz which was open for all. A total of 62 participants joined, showcasing a keen interest in environmental conservation. The quiz covered a range of questions about the ozone layer and its importance. The results of the Online Quiz were posted on the Facebook page of the Centre on 18.09.2024.

## **World Bamboo Day**

On 18.09.2024, the Centre commemorated World Bamboo Day by organizing a Bamboo Exhibition. Shri Ramesh Date, a veteran artist and former student of J. J. School of Art, curated the exhibition and served as the speaker. He emphasized bamboo's historical significance and its modern-day relevance in art, culture, and sustainability, while advocating for training programs to teach bamboo craftsmanship and encouraging young artists to innovate. A total of 648 visitors attended the exhibition.

### **Popular Science Lecture on Green Chemistry**

The Centre on 20.09.2024 hosted a Popular Science Lecture on "Green Chemistry for a Sustainable Future" for school students. The lecture, led by Dr. Krishna Sharma, a Postdoctoral Research Associate from the Green Chemistry Centre of Excellence at the University of York, UK, focused on how green chemistry promotes sustainable, eco-friendly innovations. Over 300 students from various schools in Mumbai attended the event, which aimed to raise awareness about the role of green chemistry in creating a more sustainable future.

### International Symposium on Metalions 2024 on 21.09.2024 and 22.09.2024

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 19<sup>th</sup> International Symposium on Metalions. This symposium was conducted in offline mode and 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. A total of 679 people attended the event which included participants, school children, attendees, and audience.

### Outreach program at Lodha School, Wadala

On 21.09.2024, science demonstrations on the topics - Matter at Low temperature and Fun with Physics were organized at the Lodha Oakwood School, Wadala, on the request from school authorities. Total 456 students & teachers witnessed the show.

### Science Ke Funday

The Centre on 22.09.2024 conducted a session on Science Ke Funday. The event attracted 09 families (36 persons) to promote family engagement in science-related activities, creating a sense of wonder and enthusiasm for science. The event featured hands-on experiments, demonstrations, and all shows at the Centre, aiming to engage participants in educational and entertaining activities.

### **Meeting on Record Management**

The Centre participated in an online training session conducted by Ministry of Culture, on Record Management for selected officers from the Council. 06 officers from the Centre participated in the session. The training covered various topics, including the creation and utilization of records, retention and disposal procedures, record categorization (A, B, and C), indexing, an overview of the Public Records Act, 1993, as well as techniques for the weeding out and disposal of records.

### Regional Level Science Drama

The Dy. Director of Education, Mumbai in collaboration with Nehru Science Centre, Mumbai organized Regional Level Science Drama on 24.09.2024. The theme for Drama Contest was 'Science and Technology for the benefit of mankind'. 05 Schools participated in the event. Each team (08 students including 02 teachers) performed their act for around 25 minutes each. Mrs.

Shraddha S. Degonkar and Mrs. Madhuri M. Jog, were the panelists who evaluated the drama performances. The Winners of the Regional Level Drama will participate in the next level. The Zonal Drama Contest is scheduled to be held at this Centre on 28.11.2024. A total of 126 participants / audience were part of the event.

#### Annual Inter-School Science Quiz 2023

The Centre launched the Annual Inter-School Quiz Competition on 28.09.2024. The program was organized in collaboration with the Rotary Club of Bombay Pier and the Rotary Club of Bombay Queen City. The first written elimination round was organized on the inaugural day. This event had approximately 140 schools registered from Mumbai & its sub-urban areas.

Each participating school represented by two teams, and each team consisted of two members. One team represented the Junior School (5<sup>th</sup> to 7<sup>th</sup>), while the other represented the High School (8<sup>th</sup> to 10<sup>th</sup>) division, showcasing a diverse range of talented students across various age groups. In total, there were 652 students who actively participated in this intellectually stimulating competition, showcasing their knowledge and quiz-solving skills.

The event also had the presence of 20 members from the Rotary Club, adding an esteemed touch to the occasion.

In addition to the students and Rotary Club members, the event was also graced by 150 invitees, which included students, teachers, parents, and other well-wishers who came to support and encourage the young talents participating in the competition.

### **International Day of Scientific Culture**

To foster scientific temper and culture among the masses, the Centre is hosting a "Science and Miracle" show in 28.09.2024. This event was organized in the reception area of the Centre. A total of 97 students attended the show to observe experiments with liquid nitrogen.

#### Science in Seconds

The Centre launched a new video series titled "Science in Seconds" this month to commemorate the International Day of Scientific Culture. This series aims to bring our most captivating exhibits to life through quick, engaging episodes that highlight the essence of science and innovation within just a few seconds.

So far, two episodes have been released and circulated on the Centre's social media handles, collectively garnering 369 views on Facebook:

# 1. Episode 1: Body Transport Network

This episode provides a general overview of blood circulation within the human body, focusing on the concept of double circulation.

### 2. Episode 2: Human Heart

As part of the World Heart Day celebrations on 29.09.2024, the Centre released an episode focused on the functioning of the human heart. This episode provided a concise yet insightful explanation of the heart's operations, with particular emphasis on the role of coronary veins in maintaining the health and efficiency of the heart's circulation system.

This episode, aligned with the World Heart Day theme, aimed to raise awareness about heart health and the importance of understanding the heart's mechanisms for overall well-being.

# **Pre-examination Training for Staff-members**

On 26.09.2024, an online training session was conducted via video conference for the Centre and other NCSM units in preparation for the promotion exams for Section Officer, Office Assistant (Gr. I), and Senior Stenographer, set for 30.09.2024. The session saw participation from 61 staff members (from all the Units of NCSM) and featured two key presentations: Shri Gafoor Shaik, Controller of Administration, Nehru Science Centre, Mumbai, addressed "General Administration, FR & SR, Conduct Rules," while Shri R. K. Bhoyar, Deputy Controller of Finance and Accounts,

covered "Stores & Purchase," including procurement from foreign countries, departmental estimates, tenders, and the GeM portal.

### **Mobile Science Exhibition**

02 MSE buses of the Centre are visiting Schools of Wardha, Solapur, Sangli, Ambajogai and Parbhani districts. Curriculum based MSE bus has given visits to 17 sites and Hygiene & Sanitation Bus has visited 18 Schools in the month of September 2024. Various educational activities such as science demonstration, film shows and sky observation are being organized at the sites.

#### Innovation Hub

03 educational sessions were held in the Innovation Hub (IH) on 14.09.2024, 21.09.2024, and 28.09.2024, engaging 30 members in activities centered on educational tools, Kabaad-se-Jugaad, Chemistry and fostering creativity & sustainability by transforming plastic bottles into art. The sessions included exploring online physics tools and building homopolar motors, as well as investigating natural indicators and chromatography in chemistry.

#### Param Con 2.0

The Director of Nehru Science Centre (NSC), Mumbai, was invited to take part in a panel discussion titled "Unified Vision for Science" during ParamCon 2.0, a one-day conference organized by the Param Science Experience Centre in Bengaluru. The diverse panel featured Shri Umesh Kumar Rustagi (Director, NSC Mumbai), Dr. Shonali Chinniah (Director, Curiosity Discovery Centre), Ms. Ipsa Jain (Creative Science Visualiser, Srishti Manipal School of Arts), and Mr. Divyansh Mansukhani (TEDx Speaker & Science Communicator). The annual science event attracted more than 100 attendees.

# RAMAN SCIENCE CENTRE AND PLANETARIUM, NAGPUR

# **Annual Interschool Science Quiz Contest 2024-25**

A total of eight quarter-final rounds of the Annual Interschool Science Quiz Contest were conducted for 32 selected teams from English medium schools. A total of 64 students participated in the contest, while 184 students and teachers attended the quiz program.

# Science Demonstration Lecture and Science Film Festival Programme

A special Science Demonstration Lecture and Science Film Festival programme was organized for school groups visiting the Science Centre. Demonstrations on topics such as 'Colourful Chemistry,' 'Fun with Physics,' and 'Matter at Low Temperature,' were conducted alongside the screening of syllabus-based science films. A total of 558 students from four different schools participated in the programme.

# **Science Museum School Project**

As part of the Science Museum School Project, 35 underprivileged students from classes 5, 6, and 7 of Maharashtra Adhyayan Mandir visited the Centre on 13.09.2024 and 24.09.2024. Lectures and demonstrations at the SOS facility covered various aspects of geography and Ancient Indian languages, including a demonstration of palm and copper manuscripts. A total of 35 students participated in the program.

# हिंदी पखवाडा

केंद्र में 01.09.2024 से 14.09.2024 तक हिंदी पखवाड़ा मनाया गया, जिसमें कार्यालय के कर्मचारियों के लिए विभिन्न प्रतियोगिताओं का आयोजन किया गया। निबंध लेखन, पत्र लेखन, अनुवाद, टंकण, गीत गायन और कविता पाठ जैसी प्रतियोगिताओं का सफल आयोजन हुआ। इसके उपरांत पुरस्कार वितरण एवं समापन समारोह का आयोजन किया गया। इस अवसर पर केंद्र के प्रकल्प समन्वयक, श्री. मनोज कुमार पांड़ा ने महानिदेशक, राष्ट्रीय विज्ञान संग्रहालय परिषद द्वारा प्रेषित संदेश का वाचन किया और सभी प्रतियोगिताओं के विजेताओं को पुरस्कार प्रदान किए गए। पखवाड़े के दौरान, आगंतुकों के लिए प्रतिदिन हिंदी शब्द और उस दिन के विज्ञान के इतिहास का महत्व सूचना पट्ट पर प्रदर्शित किया गया। कुल 45 कर्मचारियों ने इन प्रतियोगिताओं में भाग लिया।

### **Nagpur District Level Science Drama Competition**

The Nagpur District Level Science Drama Competition was conducted at the auditorium of the Centre, in collaboration with the District Education Officer's office, Nagpur, on 09.09.2024. A total of 16 teams from various talukas of Nagpur district participated and presented dramas on the theme 'Science & Technology for the Benefit of Mankind.' Approximately 191 students, teachers, and parents attended the programme as the audience.

### Swachhata Hi Seva Campaign 2024

The Centre promoted the Swachhata Hi Seva campaign by organizing various activities for staff, students, and visitors. Starting from 16.09.2024, programmes such as daily Swachhata message writing on the display board, a quiz contest for visitors on 'Swachhata Hi Seva,' a cleanliness drive in different galleries and exhibits by officers and staff, a walkathon with visitors on 'Swachhata Ki Bhagidari,' and a mass Swachhata pledge were organized at the Centre. A total of 82 participants took part in these activities.

# Mobile Science Exhibition on 'Science in Syllabus' in Nagpur District

The Mobile Science Exhibition on the theme 'Science in Syllabus' was held at 11 schools over 22 days in the rural areas of Nagpur District during the month. The exhibition received 9,375 visitors. Additionally, six Science Demonstration Lectures and six film shows were organized, with 1,477 and 1,621 students participating in each, respectively.

# Mobile Science Exhibition on 'Hygiene & Sanitation' in Amravati District

The Mobile Science Exhibition on the theme 'Hygiene & Sanitation' was organized at 12 schools over 24 days in the rural areas of Amravati District during the month. A total of 9,189 visitors attended the exhibition. Moreover, nine Science Demonstration Lectures and 25 film shows were held, with 1,860 and 4,535 students participating, respectively.

## REGIONAL SCIENCE CENTRE, BHOPAL

# **Innovation Hub Programmes**

The Innovation Hub at the Centre organized 13 orientation sessions on various topics including Turbo Air Ventilator, Video Editing, Endocrinology, Endocrine System, Probability Curve, Robotics, 3D Endocrine System, How to Generate Ideas for Innovation, Antigravity Marble, Magical Chemistry, Ball Illusion, and How Fish Sink and Float. An additional three sessions are scheduled to take place later this month. A total of 45 students participated in these sessions. In addition, the Innovation Hub conducted a college-level workshop on "Digital Transformation in Life Science" from 12.09.2024 to 13.09.2024, with five students participating.

# Participation of RSC, Bhopal in State Level Science Exhibition (Virtual)

The Centre, took part in the State Level Science Exhibition organized by the Department of School Education, Madhya Pradesh, Rajya Shiksha Kendra, Bhopal, at Jabalpur from 11.09.2024 to 12.09.2024. As part of the program, an interactive virtual session themed "Space - Sawal Apke Jawab Hamare" was conducted for government school students on 11.09.2024, led by Shri Saket Singh Kaurav, Curator E & Project Coordinator, RSC, Bhopal.

# Plantation Drive under the Campaign "Ek Ped Maa Ke Naam"

The Centre, organized a plantation drive on 12.09.2024, under the banner of "Ek Ped Maa Ke Naam," during which staff members planted a total of 15 saplings within the Centre's premises.

## Swachhta Hi Seva Campaign

The Centre organized the Swachhta Hi Seva Campaign 2024 (Preparatory Phase) by conducting a series of programmes from 16.09.2024 to 30.09.2024. The campaign was initiated with the administration of the Swachhta pledge to all staff members on 13.09.2024. Throughout the campaign, staff members actively participated in six campus cleaning drives, covering both galleries and the park. A major off-campus cleaning drive was also conducted along the Smart City road adjacent to the Centre. Additionally, a painting competition on the theme "I Dream a Clean and Green India" was held on 19.09.2024, with approximately 96 school children participating. A Slogan Drop Box competition on the topic "Importance of Swachhta in Daily Life" was conducted on 26.09.2024, in which 12 students participated. As part of the campaign, a "Waste to Art" programme

was organized on 27.09.2024, where around 30 underprivileged children were taught to create useful products from discarded household materials. The campaign will conclude on 30.09.2024 with the felicitation of the successful participants in various competitions.

### **Revisioning Futures: Youth Connect Programme**

On 26.09.2024, the Centre, in collaboration with the MP Police Community Policing Wing and the Police Commissionerate of Bhopal, launched the "Revisioning Futures: Youth Connect Programmes," a major initiative under the SRIJAN banner. This programme aims to bring children, primarily girls from marginalized sections of society, on exposure visits to the Centre in different phases. The launch event took place in the Auditorium Hall of the Regional Science Centre, Bhopal, with Smt. Rashmi Arun Shami, IAS, Principal Secretary, Dept. of Food, Govt. of MP, and Chairperson of the Local Advisory Committee, RSC Bhopal, as the Chief Guest. She emphasized the importance of regular visits to the Science Centre for students to learn STEM concepts through fun and discovery. Other dignitaries present included Dr. Vineet Kapoor, PSO to DGP & DIG, MP Police, Bhopal, Shri Pankaj Srivastava, Additional CP (HQ & Crime), Bhopal, Shri Chandrasekhar Sharma, CGM, SBE, MP-CG, Ms. Priyanka Shukla, DCP, Zone 1, Bhopal, and Shri Saket Singh Kaurav, Project Coordinator, RSC Bhopal. Shri Umesh Kumar, Director, Nehru Science Centre, Mumbai, also joined the event virtually. The programme will conclude on 26.01.2025, Republic Day. Around 220 underprivileged children and their teachers participated in the inaugural ceremony.

#### Interactive Session with Padma Shri Prof. H.C. Verma

An interactive session with Padma Shri Prof. H.C. Verma is scheduled for 29.09.2024. The distinguished author of the renowned "Concepts of Physics" series will share his valuable insights, experiences, and enthusiasm for science with students and teachers. The event will be conducted in a hybrid format, with the online version being streamed on the official YouTube channel of the Centre. Approximately 500 visitors are expected to participate in the programme.

## Mobile Science Exhibition in collaboration with Rajya Shiksha Kendra, Bhopal

The Centre, in collaboration with Rajya Shiksha Kendra, Bhopal, is organizing a Mobile Science Exhibition (MSE) programme titled "How Things Work" in the district of Narsinghpur. A total of 12 schools have been covered during this period. In addition to the exhibition, science film shows and science demonstration lectures are being held at each location.

### Mobile Science Exhibition in collaboration with the Tribal Affairs Dept., Govt. of MP

The Centre, in collaboration with the Tribal Affairs Department, Government of Madhya Pradesh, is organizing MSE programmes with two mobile units under the themes "Energy" and "Measurement" in the districts of Khandwa and Dhar, respectively. The programmes are being conducted through the outsourcing agency M/s Varnaaz Technologies. A total of 25 schools (12 in Khandwa and 13 in Dhar) were covered during this period. Alongside the exhibition, science film shows and science demonstration lectures are also being conducted at each venue.

### GOA SCIENCE CENTRE AND PLANETRIUM, PANAJI

## **Sci-Birthday Celebration**

A Sci-Birthday celebration was held on 04.09.2024. During the event, the birthday guests were treated to a guided tour of the galleries, a 3D show, a Planetarium show, a Science Toy Making session, and a Science demonstration. A total of 25 children participated in the celebration.

### Hindi Pakhwada

In observance of Hindi Diwas, a Hindi Pakhwada was organized from 14.09.2024 to 28.09.2024. The programmes held during this fortnight were as follows:

### • Pledge Ceremony

On 14.09.2024, the staff of the Centre took a pledge to promote the use of Hindi in their daily office work.

# Hindi Workshop

A workshop titled "Checkpoints on Official Language" was organized for the staff of the Centre on 17.09.2024. Shri Rakesh Sharma, Hindi Officer, NIO Goa, served as the resource person for the workshop.

# • Competitions for Staff

To promote the usage of Hindi in daily activities, various competitions, including Poetry Recitation, Hindi Slogan Recitation, and Antakshari, were held for the staff on 20.09.2024.

# • Essay Writing Competition

An essay writing competition for higher secondary students was conducted on 25.09.2024, with the topic "Vikasit Bharat 2047 Ki Kalpana" (Vision of a Developed India in 2047). A total of 38 students participated in the competition.

# Swachhata Hi Sewa Campaign

As part of the Swachhata Hi Sewa Campaign 2024, the following programmes were organized during the preparatory phase from 16.09.2024 to 30.09.2024:

### Swachhata Pledge

The staff of the Centre took a Swachhata pledge, committing to maintain cleanliness in their surroundings.

# Cleanliness Drives

Daily cleanliness drives were conducted to ensure the Centre's premises remained clean and well-maintained.

### Spot Quiz

A spot quiz focused on the Swachh Bharat Abhiyan was held for visitors on 25.09.2024 and 27.09.2024, with a total participation of 90 members from the general public.

# • Street Play

A street play aimed at raising awareness about cleanliness was organized as an outreach activity at Miramar Beach. This performance was conducted by the students of Our Lady of the Rosary High School, Dona Paula, attracting approximately 256 members of the public.

# **Robotics Workshop**

A certificate course in Robotics Construction Level 1 commenced on 21.09.2024, organized in collaboration with Qurious Mind, Goa. This workshop will take place over five weeks, every Saturday and Sunday, with a total of 18 students registered for participation.

# **Exposure Visit for Underprivileged Children at the Centre**

In September, a complimentary visit was arranged for 57 underprivileged children. During their time at the Centre, they benefited from a guided tour of the galleries, a 3D show, and a Planetarium show. Science kits and refreshments were also provided for the students.

# **State Level Science Drama Competition**

In collaboration with the State Council of Education Research and Training, Goa, the Centre organized a State Level Science Drama Competition from 23.09.2024 to 26.09.2024. Students from across Goa performed on the theme "Science & Technology for the Benefit of Mankind." A total of 48 teams participated, with approximately 1,490 teachers, students, and parents attending the event.

# National Youth Festival: Zonal Level Thematic Project Competition

As part of the National Youth Festival, the Goa State Council for Science & Technology, along with the Department of Science, Technology & Waste Management, Directorate of Sports & Youth Affairs, and the Science Centre, organized a zonal-level thematic project competition on the theme "Innovation in Science & Technology" on 27.09.2024. This event targeted engineering, science college, and higher secondary school students throughout Goa. Shri Vilas Chaudhari, Project Coordinator at Goa Science Centre, was the Chief Guest at the prize distribution ceremony. Other dignitaries included Dr. Sachin Tendulkar, CEO of the Mineral Foundation of Goa; Dr. Mohan Girap, Scientist at the Goa State Pollution Control Board; Shri Sanjay Mulvi, Head of CIBA, Goa; and Smt. Brenda Fernandes, Member Secretary of the Goa State Council for Science & Technology, Saligao,

Goa. A total of 9 projects were showcased by students, attracting around 253 visitors to the exhibition.

#### **Mobile Science Exhibition**

The Centre conducted a mobile science exhibition in the Pernem taluka, visiting three schools throughout September. In addition to the science exhibition, various programs, including science demonstrations and science film shows, were held at each school. Overall, 1,120 students, teachers, and members of the general public attended the exhibition.

# **International Day of Scientific Culture**

In observance of the International Day of Scientific Culture, the Centre organized a Make & Take Science Toy session for general visitors on 28.09.2024. During this session, children learned how to create science toys using readily available materials, with a total participation of around 38 students.

# **DISTRICT SCIENCE CENTRE, DHARAMPUR**

# **Test Your Experimental Skills**

On 01.09.2024, the Innovation Hub at the Centre, in collaboration with the Bombay Association for Science Education (BASE) and Bayer Vapi Private Limited, conducted a practical skill-based assessment titled "Test Your Experiment Skills-2024 Level-1." This event targeted students from classes 8 to 12, who were required to perform various experiments in Physics, Chemistry, and Biology within a three-hour period. A total of 20 students from The Wesleyan English Medium Higher Secondary School, Vapi, participated, with 6 students successfully passing Level-1 and qualifying for Level-2, subsequently receiving certificates. Judges Dr. Dehin Bhagat, Prof. Hemil Patel, and Prof. Savan Patel from Shrimad Rajchandra Vidyapith Karanjaveri, Dharampur, provided valuable insights and played a critical role in the program. Total participants were 20 students.

#### **Nutrition Week Celebration**

The Innovation Hub of the Centre celebrated National Nutritional Week on 04.09.2024, under the theme "Nutritious Diets for Everyone." The event was attended by 35 girl students from Kedi School, Nagariya, and included a hands-on workshop led by Mrs. Rupal Shah, owner of Rupal's Kitchen, Valsad. The workshop focused on preparing nutritious foods while emphasizing the significance of a balanced diet. Junior Mentor Gayatri Bisht organized the session to ensure an engaging and educational experience for all participants. Total participants were 35 students.

# **Teachers' Training Program**

A state-level Resource Person Training Work Camp for Science Teachers was organized at the Centre from 02.09.2024 to 04.09.2024. This initiative was a collaboration among GCERT Gandhinagar, the District Institute of Education and Training, Valsad, and the Centre, targeting the syllabus and study results for standards 6 to 8 across all districts in Gujarat. A total of 103 expert teachers from various districts of Gujarat participated in the training. Notable experts, including Shri Kapildev Vasani, Shri Bhargav Thakkar, Shri Hirenbhai Vyas, and Smt. Truptiben Parekh, were present as resource persons. The training featured a Liquid Nitrogen Show conducted by Shri Pragnesh Rathod, Education Officer, alongside various experiments, activities, and demonstrations such as the 3D Show and Taramandal Show. Feedback from teachers indicated that the training equipped them with valuable skills and knowledge for future teacher training initiatives. Shri Mahendrabhai R. Patel, Principal of the District Institute of Education and Training, Valsad, provided continuous motivation and guidance throughout the training. Total participants were 103 teachers.

# **District Level National Science Seminar**

On 04.09.2024, the Centre organized the District Level National Science Seminar-2024, aimed at fostering student engagement with scientific topics and critical thinking. The seminar focused on the theme "Artificial Intelligence: Potentials & Concerns," and saw participation from 8 students representing various middle and high schools within the Valsad district. The gender distribution included 2 boys and 6 girls, reflecting an emphasis on inclusivity. Judging the seminar were Dr. Bhadresh Sudani, Assistant Professor at Government Engineering College, Valsad, and Rahul Shah, Junior Mentor at the Innovation Hub. Prince Dadani from St. Francis High School, Vapi, secured the first prize, while Dhara Patel from Kusum Vidyalaya, Valsad, was awarded second prize.

The event attracted 65 visitors, and Dr. Pankaj Desai from the District Institute of Education & Training graced the occasion as the chief guest. Total participants were 08 students.

# **Teachers' Training Program (Maths)**

A District-level Teacher's Training Program for Maths teachers was held at the Centre from 09.09.2024 to 11.09.2024. Organized in collaboration with GCERT Gandhinagar and the District Institute of Education and Training, Valsad, this program focused on the syllabus and study outcomes for standards 6 to 8 in Mathematics. The training included an interactive session on GeoGebra, facilitated by Shri Pragnesh Rathod, E.O. 'B'. A total of 48 teachers from different schools in the Valsad district attended and benefited from the program, which was supported by 4 expert trainers. Dr. Pankaj Desai from the District Institute of Education and Training played a pivotal role in organizing the workshop. Total participants were 48 teachers.

# **Teachers' Training Program (Science)**

The Centre conducted a District-level Teacher's Training Program for Science teachers from 12.09.2024 to 14.09.2024. This program was a joint initiative with GCERT Gandhinagar and the District Institute of Education and Training, Valsad, focusing on the syllabus and academic outcomes for standards 6 to 8 in Science. The training featured a Liquid Nitrogen show and a demonstration of the Stellarium Astronomy Software, led by Shri Pragnesh Rathod. Participation included 48 teachers from various schools in the Valsad district, supported by 4 expert trainers. Dr. Pankaj Desai from the District Institute of Education and Training played an essential role in the organization of this workshop. Total participants were 48 teachers.

# Ek Ped Maa ke Naam Campaign

The Centre organized a two-day event titled "Ek Ped Maa Ke Naam" on 12.09.2024 and 13.09.2024, aimed at promoting environmental conservation while paying tribute to the nurturing role of mothers. Shri Pragnesh Rathod, Education Officer 'B', highlighted the importance of tree plantation in addressing climate change and preserving biodiversity. The plantation drive was conducted across the Centre's campus and other selected community locations. The event concluded with participants pledging to plant at least one tree each year in honor of their mothers and to nurture the saplings they received. A total of 160 saplings were distributed, provided by the Range Forest Officer from the Social Forestry Department, Dharampur. This initiative saw participation from 100 Maths and Science teachers from the Valsad District, in collaboration with the District Institute of Education and Training, Valsad, and the staff of the Centre. Total participants were 100 teachers.

### **Engineer's Day**

On 15.09.2024, Engineer's Day was celebrated at the Centre under the theme "Engineering Solutions for a Sustainable World." The event attracted 197 students and teachers from Eklavya Model Residential School, Mota, Bardoli. Shri Pragnesh Rathod, Education Officer of DSCD, informed students about the Vidyarthi Vigyan Manthan (VVM) initiative. Following this, Rahul Shah, Junior Mentor of the Innovation Hub, conducted sessions on robotics and models. The program also featured a showcase of rocketry, a drone show, 3D printing, and a liquid nitrogen demonstration. Science demonstration lectures and public demonstrations were conducted by trainees Shivani Patel, Hetal Parmar, Kinjal Patel, and Suresh Bhoya from the Science Centre, Dharampur, which included experiments aimed at dispelling superstitions. Junior Mentor Gayatri Bisht further engaged students with lessons on mushroom exploration. The program culminated with a demonstration of model rocketry and a drone show for the students. Total participants: 197 students and teachers.

# हिंदी पखवाडा

केंद्र में 13.09.2024 से 27.09.2024 तक हिंदी पखवाड़ा मनाया गया। इस कार्यक्रम का उद्घाटन 13 सितंबर को किया गया, जिस में राजभाषा विभाग की प्रतिज्ञा जिले के विज्ञान केंद्र के कर्मचारियों द्वारा ली गई। इसके साथ ही, राजभाषा हिंदी पर नारा लेखन प्रतियोगिता का आयोजन भी किया गया। इस पखवाड़े के दौरान कई प्रतियोगिताएँ आयोजित की गईं, जिनमें पत्र लेखन, मुहावरा, हिंदी प्रश्नोत्तरी, हिंदी अनुवाद, हिंदी कविता पाठन और देशभिक्त गीत शामिल थे। इन सभी प्रतियोगिताओं में जिला विज्ञान केंद्र, धरमपुर के सभी कर्मचारियों ने उत्साहपूर्वक भाग लिया। कार्यक्रम के समापन समारोह में मुख्य अतिथि के रूप में डॉ. उत्तमभाई पटेल, प्रिंसिपल, वनराज विनयन एवं वाणिज्य महाविद्यालय

धरमपुर ने भाग लिया । उन्होंने हिंदी दिवस के महत्व और कार्यालय में राजभाषा को बढ़ावा देने के उपायों पर महत्वपूर्ण सुझाव दिए । समापन कार्यक्रम में सभी प्रतिभागियों को प्रमाण पत्र प्रदान किए गए और विजेताओं को पुरस्कार दिए गए । कुल प्रतिभागियों की संख्या: सभी कर्मचारी ।

#### Swachhata Pakhwada 4.0

The Swachhata Pakhwada themed "Swabhav Swachhta, Sanskaar Swachhta" is being observed at the Centre from 17.09.2024 to 02.10.2024. The details of the events are as follows: The staff took a Swachhta Pledge. On 25.09.2024, a Mobile Science Exhibition focused on health and cleanliness was organized at Dharampur Nagarpalika High School as part of the Swachhta Hi Seva 4.0 celebration. The event was inaugurated by the Honorable Shri Arvindbhai Patelji, MLA of Dharampur, who lit the ceremonial lamp. Among the attendees were officials from the Dharampur Municipality, Mr. Neelambhai Patel (Brand Ambassador of Dharampur Nagarpalika for the Swachhta Hi Seva program, Lokmangal Charitable Trust, Khoba), School Principal Smt. Hetalben Parmar, and staff from the District Science Centre. During the event, a cleanliness pledge was taken, where Shri Arvindbhai Patelji urged students to dedicate 100 hours annually to cleanliness initiatives, thereby motivating the community to engage in the Swachhta Hi Seva campaign. The program saw participation from over 750 students, teachers, and villagers. Additionally, the District Science Centre, Dharampur, conducted an initiative focusing on creating innovative and sustainable "Best Out of Waste" models using scrap electrical, mechanical, and carpentry materials. This initiative aimed to foster creativity and promote eco-friendly practices by converting various waste materials into functional and decorative products.

# Participation at Robofest 2024

The robotics competition "Robofest 2024" was held by Sarvajanik College of Engineering and Technology (SCET), Surat on 20th and 21st September 2024. Students from the Innovation Hub, DSCD, including Patel Kanaiya Jitendrabhai, Patel Dhvanil Pankajbhai, Shaikh Sahib Jiyauddin, and Patel Yash, participated in two competitions: Death Race and RoboRiot. A total of 60 teams from various colleges and schools participated, with the Innovation Hub students achieving 1st place in Death Race and 2nd place in RoboRiot.

# **3D Printing Session**

On 27.09.2024, a 3D Printing session was organized at the Innovation Hub, DSCD, for students from Shri Sadguru Kabir Aadivasi Kanya Gurukul, Fadvel, taluka Chikhali, district Navsari. The session introduced underprivileged students to the concepts of 3D Printing, additive manufacturing, and the processes involved. The participants also had the opportunity to view various innovative 3D printed models created at the Innovation Hub.

# **International Day of Scientific Culture**

The Centre celebrated the 5<sup>th</sup> edition of the International Day of Scientific Culture on 28.09.2024 by organizing a popular science lecture on "Indian Contributions to Science," delivered by Dr. Bhadresh Sudani, Assistant Professor at GEC Valsad. The event also featured activities such as "Science vs Miracle," a Liquid Nitrogen Show, and a 3D printing session. A total of 64 students (29 male, 35 female) from Dharampur Nagarpalika High School participated in the program.

#### Vidyarthi Vigyan Manthan (VVM)

The Centre (DSCD) has been actively promoting Vidyarthi Vigyan Manthan (VVM), a national science talent search initiative aimed at nurturing and identifying scientific aptitude among students. An online VVM Guidance program was conducted with 50 math teachers (Master Trainers in Maths) from primary schools in Valsad District. Pri. Mansukh Nariya, the Outreach State Coordinator for VVM, was invited as a guest speaker. He introduced the VIBHA initiative and provided guidance through a PowerPoint presentation, encouraging teachers to involve students in VVM. VVM brochures were distributed to teachers during the program. Total number of participants: 50 teachers.

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