

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

NEHRU SCIENCE CENTRE, MUMBAI

Vacation Creative Science Workshop

The Centre organized Vacation Creative Science Workshop from April to June 2024. The details of the programmes are as per following:

- **Science Sparkle Workshop (03 Batches) - 02.05.2024 to 04.05.2024, 27.05.2024 to 29.05.2024**
Participants in this workshop learnt the fundamentals of science while making simple science toys. A total of 87 students were part of this workshop.
- **Arduino Uno Workshop - 06.05.2024 to 08.05.2024**
Participants learnt about the Arduino platform, which consists of the Arduino Uno module as the hardware component and the Arduino Integrated Development Environment (IDE) as the software component. They learnt the programming and also learnt how to integrate different types of sensors with Arduino Uno. 10 students were part of this workshop.
- **Art and Craft Workshop - 09.05.2024 to 11.05.2024**
Participants made and painted paper helicopter, moving caterpillar, and paper puppet and paper robot. 14 students were part of this workshop.
- **Aeromodelling Workshop - 09.05.2024 to 11.05.2024, 16.05.2024 to 18.05.2024 & 21.05.2024 to 23.05.2024**
52 students participated in this workshop in which students were made aware of the basic principles of flight through the paper models of Styrofoam Glider, Paper Glider, Loop Glider and Russian Combat.
- **Model Rocketry Workshop - 09.05.2024 to 11.05.2024, 16.05.2024 to 18.05.2024 & 21.05.2024 to 23.05.2024**
03 batches of Model Rocketry were conducted during the month. Participants learnt about the basic underlying scientific principles in working of a Rocket. They learnt to make different parts of the rocket and also learnt about how to assemble those parts. They made and launched various models of chemically fueled water rockets following the model rocketeers' safety code. 58 students were part of these workshops.
- **Chemistry Workshop - 09.05.2024 to 11.05.2024**
Participants learnt about endothermic and exothermic reactions, acid-base reactions, chromatography, electroplating and many other hands-on experiments. 16 students were part of these workshops.
- **Astronomy Workshop - 16.05.2024 to 18.05.2024 & 21.05.2024 to 23.05.2024**
Participants learnt various information about our solar system during this workshop with many hands-on activities. The concepts like rotation and revolution of the earth and moon, sun-earth-moon system, phases of moon and eclipses were explained. Students made models to understand concepts like Earth's spin, precession, astrolabe star map, and phases of the moon, eclipses, orbital tilt, constellation viewer and scale model of the solar system. A special Science on Sphere and Sky Observation Session was also planned and executed as a part of the workshop. 28 students were part of these workshops.
- **Physics Workshop - 16.05.2024 to 18.05.2024**
Participants made simple science toys and did experiments through which they learnt many physics principles. 20 students were part of this workshop.
- **Biotechnology Workshop - 21.05.2024 to 23.05.2024**
In this 03 day workshop participants had the opportunity to gain hands-on experience with various biotech laboratory instruments such as the Laminar Air Flow Hood, Microbial Incubator, and Autoclave. They engaged in activities such as culturing bacteria from curd, performing Gram staining, and observing samples under microscopes, fostering an immersive learning experience in biotechnology. 13 students were part of this workshop.
- **Artificial Intelligence Workshop - 21.05.2024 to 23.05.2024**
The workshop educated students on AI theories and taught them Python programming to develop real-time applications such as face detection, face recognition, and gesture detection. A total of 18 students participated in the workshop.
- **3D Modelling & Printing Workshop - 15.05.2024 to 19.05.2024**

Under the guidance of an in-house expert, participants learned to create realistic objects and assets using specialized software. The workshop had 21 student participants.

- **Robotics Workshops – 06.05.2024 to 08.05.2024 & 09.05.2024 to 11.05.2024 (for Juniors) and 13.05.2024 to 15.05.2024 & 16.05.2024 to 18.05.2024 (for Seniors)**

- **For Juniors:** The Robotics Kit, designed for Junior students in Class 5 to 7, the program included projects such as assembling and programming a Smart Light that responded to its surroundings, constructing a Windmill to understand renewable energy, and designing a customizable Fan. These projects provided insights into intelligent lighting solutions, sustainable engineering practices, and the mechanics of functional machine design. 39 students were part of these workshop divided into two batches.
- **For Seniors:** The Robotics Kit, designed for Senior students in Class 8 to 10, included power sources, motor drivers, distance sensors, and light sensors, enabling students to create a variety of projects, such as obstacle avoiding, edge avoiding, and line following robots. The kit provided all necessary components to bring robotic creations to life, offering an engaging and educational experience. 32 students were part of this workshop divided into two batches.

- **Science Ke Funday Workshop - 26.05.2024**

The event attracted 10 families (36 persons) to promote family engagement in science-related activities, creating a sense of wonder and enthusiasm for science. The event featured interactive exhibits, hands-on experiments, demonstrations, and all shows at the Centre, aiming to engage participants in educational and entertaining activities. These events aimed to bond families while exploring the fascinating world of science.

- **Soap Bubble workshop for Families**

13 families participated in the workshop, immersing themselves in a captivating exploration of the science behind soap bubble making. Amidst the sessions, participants reveled in the delightful amalgamation of chemistry, Physics and mathematics intricately woven into the art of creating mesmerizing soap bubbles. Through engaging activities and hands-on experiments, attendees delved into the fascinating principles governing bubble formation, discovering the hidden intricacies behind this seemingly simple yet enchanting phenomenon. The workshop not only provided a platform for enjoyment but also fostered a deeper understanding of the scientific concepts at play, igniting curiosity and enthusiasm among participants of all ages.

Innovation Hub-Integrated Science

Over the course of 4 comprehensive integrated science sessions, students were introduced to a diverse array of learning experiences spanning the realms of Biotechnology and Physics. In the Biotechnology session, participants delved into the intriguing antibiotic properties of copper metal and engaged in the meticulous technique of Gram staining for Lactobacillus bacteria. Furthermore, they gained invaluable hands-on experience with a variety of laboratory equipment, enriching their understanding of experimental methodologies.

In the Physics session, students embarked on practical explorations, crafting Pythagorean cups to explore the fascinating siphon effect. Additionally, they delved into activities centered around the phenomenon of sound, fostering a deeper appreciation for the principles governing acoustic phenomena. Through these engaging sessions, participants not only expanded their scientific knowledge but also honed their practical skills, paving the way for a holistic and enriching learning experience.

Astronomy Olympiad

The Centre held an Orientation Cum Selection Camp (OCSC) at the Nehru Science Centre in Mumbai from 15.05.2024 to 04.06.2024. 21 students were chosen for this camp based on their performance in the Indian National Junior Science Olympiad 2024. Out of the 21 selected students 20 students are currently attending the camp. These students will learn about many astronomical topics over their 23 days stay at the camp from renowned lecturers in the fields of astronomy and astrophysics. Students were taken on educational excursions to the Nehru Planetarium, Mumbai, Giant Meterwave Radio Telescope (GMRT) and National Centre for Radio Astrophysics (NCRA), Pune. Based on the combined test scores, each participant will be given a certificate of excellence, and the top three students will be chosen to represent India at the 3rd International Olympiad on Astronomy and Astrophysics for juniors (IOAA-Jr.) 2024, which will be held in Katmandu, Nepal from 03.10.2024 to 10.10.2024.

Online Game Design Workshop

The Centre orchestrated two Online Game Design Workshops in May, spanning from the 6th to the 8th for the first batch and the 27th to the 29th for the second. Nine eager participants, aged 12 and above, eagerly enrolled for these immersive sessions. The workshops provided a comprehensive exploration of Game Design Fundamentals alongside in-depth insights into 3D Visualization and Modeling techniques. Participants delved into the intricate mechanics of crafting captivating gaming experiences, gaining practical skills to manifest their

creative visions. These workshops served as invaluable platforms for enthusiasts to enhance their proficiency, empowering them to embark on their own gaming ventures with newfound expertise.

Zero Shadow Day

A Day Time Astronomy Event 'Zero Shadow Day' was organized at the Centre 15.05.2024. The participants initially attended a lecture explaining 'What is Zero Shadow?' by Shri Umesh Kumar, Director, Nehru Science Centre, Mumbai, followed by observation of Zero Shadow with different objects and also the Sunspots. Visitors enjoyed a 'Science on Sphere' show that explained about Solar System and characteristics of different planets. The participants then enjoyed the VR show on 'ISS Mission Walk' to experience the thrill of Space Exploration. 76 visitors were part of this commemoration.

VR Space Walk Workshop

A Virtual Reality (VR) Space Walk seminar took place at the Center on 24.05.2024. The event was attended by 29 registered participants, who received explanations on Augmented Reality (AR), Virtual Reality (VR), the historical development of VR, and distinctions between basic and advanced AI. A special VR experience featuring a Space Walk on the International Space Station (ISS) was showcased to the attendees.

National Technology Day

As a part of commemoration of National Technology Day, the Centre organized a lecture in hybrid mode by Shri Uday Kashelkar, Senior Executive Engineer, Nuclear Power Corporation of Indian Limited, Mumbai. The topic of the lecture was 'Atom: A source of clean energy for green Future'. The lecture focused on the discussion of various energy sources, emphasizing the role of nuclear fission from uranium as a clean, sustainable energy source. The talk highlighted renewable energy's importance in reducing CO2 emissions, nuclear reactor types (BWR and PWR), and outlined safety measures against radiation. It also addressed India's carbon neutrality goals by 2070 and discussed the minimal waste produced by nuclear energy compared to coal. A total of 157 public attended the lecture in offline mode and the lecture received 296 views on the Social media handles.

Commemoration International Museum Day

The Centre commemorated International Museum Day, a global event celebrated annually on 18.05.2024. Following programmes were organized as a part of this commemoration:

- **Written Quiz**
A Written Quiz on the topic 'Museums in India' was organized in the Auditorium of the Centre for the participants. The Quiz covered basic questions related to Museums in India. 25 students were part of the Written Quiz event.
- **Make and Take workshop**
A Make and Take workshop was organized for the visitors of the Centre, basic science toys were made by the visitors under the guidance. 251 such visitors participated in the workshop.
- **Chalte-Chalte Quiz**
A Chalte-Chalte Quiz was organized in the premises of the Centre and questions related to Museums in India were asked to 375 visitors of the Centre.
- **Science Demonstration Lecture**
A Liquid Nitrogen show was organized for the 165 people as a part of Science Demonstration Lecture.
- **My Own Collection**
 - Curated by **Shri Abhay Phatak**, the exhibition showcased a remarkable collection of rare travel memorabilia and water bottle labels and pouches of Tomato Ketchup, offering visitors an intriguing glimpse into diverse cultures and global destinations
 - Another such stall by **Shri Ulhas Nilkanth Chogale**, featured postal stamps from the pre-independence era and stamps from around the world.

This unique display allowed attendees to explore the rich history of travel, showcasing the evolution and significance of travel artifacts and enriching their understanding of worldwide journeys and experiences. A total of 4,355 Visitors

Training session on CPR

The Centre on 21.05.2024 organized a training session on 'Cardiopulmonary Resuscitation' (CPR) in collaboration with 'Revive Heart Foundation' iCARE, Holy Family Hospital, Mumbai. It was attended by more than 153 participants with demonstration of 'How to give CPR' in emergency case. The session was well appreciated by the participants.

Online Workshops

- **Kitchen Chemistry**
Organized on 21.05.2024, via Zoom, the workshop saw participation of 15 students. The covered topics included experiments on secret writing, diffusion, natural acid-base indicators, chemical volcanoes, and other topics.
- **Soap Bubble Workshop**
Organized on 23.05.2024, via Zoom, the workshop saw participation of 09 students. The participants learnt about blowing bubbles of various sizes and forms. They also learnt the science and Mathematics of the soap bubbles.
- **Aeromodelling**
Organized on 24.05.2024, via Zoom, the workshop saw participation of 19 students. The students were made aware of the basic principles of flight through the paper models of Harrier, Dart plane and bat plane, 3 Styrofoam glider, 3 paper glider were also made by the participants.
- **Astronomy**
Organized on 25.05.2024, via Zoom, the workshop saw participation of 21 students. The workshop fascinated participants with phenomena like moon phases, eclipses, and viewing stars, planets, and constellations. The workshop provided detailed explanations for the occurrence of these phenomena's and included hands-on models for better understanding. Additionally, participants explored the light spectrum and learned about rocket propulsion
- **Science Sparkle**
Organized on 26.05.2024, via Zoom, the workshop saw participation of 31 students. Participants in this workshop learnt the fundamentals of science while making simple science toys

World No Tobacco Day

On 31.05.2022 the observed World No Tobacco Day (WNTD). The theme of this year is "Protecting Children from Tobacco Industry Interference"

The Centre in collaboration with Tata Memorial Centre, Nair Dental Hospital, Mumbai and Action Council Against Tobacco, India has announced following events to spread awareness about this day:

- **Online Quiz Contest**
A Quiz on Tobacco will be organized on 31.05.2024. The theme of the Quiz is 'Protecting Children from Tobacco Industry Interference'. A total of 88 number of students solved the quiz.
- **Online Popular Science Lectures**
On 30.05.2024, the Center hosted an Online Popular Science Lecture titled 'Protecting Children from Tobacco Industry Interference'. The session began at 4:00 pm, with Ms. Parish Majumder, a Medical Social Worker at TMC, introducing the speakers. Dr. Subita Patil, Secretary of ACT-India, delivered an overview of the theme, followed by a lecture by Dr. Dinesh Daftary, Chairperson of ACT-India and Former Professor at Nair Hospital Dental College, Mumbai, focusing on children and tobacco use, along with oral cavity hygiene. A total of 79 online visitors were part of the lecture and 609 online viewers have watched the lecture to date (31.05.2024)
- **Online Popular Science Lectures**
The Centre has scheduled an Online Popular Science Lecture on the topic 'Tobacco Menace among Adolescent, the paradigm shift' on 31.05.2024. A total of 74 students have registered for this event till now (31.05.2024).

RAMAN SCIENCE CENTRE, NAGPUR

Vacation Creative Science Workshops

Vacation Creative Science Workshops were conducted in 07 disciplines at the Centre in the month of April and May 2024. In all 14 batches were conducted in which 300 students participated & 1,992 kits were fabricated during the workshop. The details are as under: -

Discipline	Period	No. of Students	Titles of projects	No. of Projects	Total no. of Projects completed
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Astronomy I & II	29 April to 4 May 2024	33	<ol style="list-style-type: none"> 1. Sun Earth Moon Model 2. Phases of Moon 3. Power of Spin 4. Simple Telescope 5. Balloon Cart 6. Constellation Projector 	6	378
	6 – 11 May 2024	30			
Model Rocketry I & II	29 April to 4 May 2024	30	<ol style="list-style-type: none"> 1. Balloon Fan 2. Balloon driven Cart 3. Clinometer 4. Rocket stage I 5. Rocket Stage II 	5	300
	6 – 11 May 2024	30			
Aero modeling I & II	29 April to 4 May 2024	13	<ol style="list-style-type: none"> 1. Paper Glider 1 2. Roto-copter 3. Thermocol Glider I 4. Thermocol Glider II 5. Thermocol Glider III 	5	170
	6 – 11 May 2024	21			
Sci-Toy Making Workshop I & II	29 April to 4 May 2024	24	<ol style="list-style-type: none"> 1. Bird in a Cage 2. Sound Sandwich 3. Shimmering Bird 4. Newton's Disc 5. Climbing butterfly 6. Balancing bird, 7. Vibrating snake 8. Flying toy 9. Magnus Cups 10. Vibro bot 11. Static Ele. Butterfly 12. Constellation Viewer 	12	540
	6 – 11 May 2024	21			
Creative Science I & II	29 April to 4 May 2024	19	<ol style="list-style-type: none"> 1. Soap Making 2. Slime Ball 3. Electroplating 4. Crystal Garden 5. Flower Dissection 	8	304

	6 – 11 May 2024	19	6. Onion Cell Observation 7. Periscope 8. Kaleidoscope		
Robotics – I & II	6 to 11 May 2024 & 13 – 18 May 2024	15	1. RPM Calculator 2. Line follower robo 3. Colour sensing 4. Motor speed controller	05	155
		16	5. Ultrasonic distance measurement		
Electronics I & II	6 to 11 May 2024	14	1. 5 v regulated Power supply 2. Timer 555 3. Astable multivibrator	05	145
	13 – 18 May 2024	15	4. Automatic street light 5. Clap Switch		

National Technology Day (11 May)

National Technology Day was celebrated at the Centre on 11.05.2024. Shri Manu Thandra, Scientific Officer, Atomic Mineral Directorate, Central Region, Nagpur delivered lecture on theme 'Nuclear Power - Clean, Green & Safe'. 120 students and parents attended the lecture.

International Museum Day (18 – 19 May)

The Centre in collaboration with NGO Chanda-Vaibhav, celebrated International Museum Day by organizing various programmes such as an Exhibition on 'Collections make connections' – display of precious collections by the people of Nagpur. The exhibition was inaugurated by Air Marshal P. P .Khandekar, AVSM (Rtd.), Indian Air Force, Maintenance Command Hqr., Nagpur on 18.05.2024. 30 participants exhibited their collection during 18.05.2024 & 19.05.2024. An open house quiz on 'Museums of the World' was conducted for 70 students and visitors. In all 3,600 visitors visited the exhibition.

International Museum Day at Science City, Kolkata (18 – 19 May – outreach)

The Centre actively participated in the International Museum Expo 2024 organised at Science City, Kolkata during the celebration of International Museum Day on 18.05.2024 and 19.05.2024. The Centre was crucial in making arrangements for various panel discussions conducted during Museum Expo.

Test Your Experimental Skills - Level 1 (19 May)

11th Experimental Skill Test was conducted at Raman Science Centre and Planetarium, Nagpur in collaboration with Bombay Association for Science Education, (BASE) Mumbai on 19.05.2024. 09 students (Std 8 to 12) enrolled for 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 during 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 & performance in solving in the Questions, the students who scored 75% and above marks awarded Certificate. Mast. Yash Kolhe, Ms Ramyata matey, Ms Ashta Dangore & mas Manthan Saharae from std X, Mont Fort School, Nagpur who were the winners of last Experimental Skill Test, awarded with the Certificate. This time 9 students attempted the Test & 2 students were eligible to get the certificate.

Zero Shadow Day

Rare event of Zero Shadow was observed on 26.05.2024 at the Centre. 76 students and their parents, visitors rushed to the spot where various equipments were arranged to visualize the Zero Shadow. The reason for casting zero shadow by the sunlight on this special day was explained using an Earth Globe instrument.

Teachers Training Programme (Outreach)

As an expert in science education the Centre collaborated with Delhi Public School in organising Teachers Training Programme for 90 Teachers at Delhi Public School, Greater Noida on 15.05.2024. Imparted training for the active teaching – learning process in science education by conducting various experiments based on Physics, Chemistry and Biology during full day training sessions. In addition, hands-on science demonstrations were arranged for the teachers on various topics of science.

REGIONAL SCIENCE CENTRE BHOPAL

Innovation Hub Programmes

Innovation Hub of the Centre organised 04 Orientation sessions on topics such as Rubber Band Car, Roll and Walk, Fun with Physics and LEGO Train during the month of May 2024. A total of 19 students participated in all these sessions. Besides this, one Tod Fod Jod session was also conducted. A total of 07 participants participated in this session.

Celebration of National Technology Day 2024

With a goal to create awareness on the impact and applications of Artificial Intelligence (AI) in our daily life, the Regional Science Centre, Bhopal, in collaboration with the Dept. of Data Science and Engineering, IISER, Bhopal organized a series of programmes focusing on AI to mark the celebration of National Technology Day on 11.05.2024, in its premises. The programme was unveiled with an Inaugural Talk by Shri Umesh Kumar, Director, Nehru Science Centre, Mumbai on online mode on the topic 'Importance of National Technology Day'. This was followed by another Inaugural Talk on the physical mode by Dr. Tanmay Basu, HOD & Assistant Professor, Dept. of Data Science and Engineering, IISER, Bhopal on the topic 'AI for Viksit Bharat'. As a part of the programme, a Demonstration of Technology on the topic 'Artificial Intelligence for the Society' by the IISER team headed by Dr. Vinod Kurmi, an 'Interactive Session on the topic 'Artificial Intelligence Behind ChatGPT' by Dr. Jashabanta Patro, Asst. Professor, Dept. of Data Sciences and Engineering, IISER, Bhopal were also organised. Around 300 participants including school/college students, parents, teachers and housewives participated in all these programmes. Further, a Workshop on 'AI Hands-on Session' was conducted by Dr. Vinod Kurmi, and his team of research fellows in which a total of 42 students from different institutions in Bhopal took part. Certificates of Participation were given away to all the participants who participated in the Workshop.

International Museum Day

With a goal to create an awareness on the role of museums as tools of education and research and as mirrors of societal progress, The Centre in collaboration with the Geological Survey of India, State Unit, Madhya Pradesh, Bhopal celebrated the International Museum Day on 18.05.2024. As a part of the programme, an exhibition entitled 'Geo Heritage Sites of MP' showcasing glimpses of some of the unique sites of geological interest of MP like Bhedaghat-Lameta Ghat, Bhimbhetka rock shelter, Chambal ravines, Dhala Meteorite impact structure, Ghughua National Fossil Park and Majhgawan diamond mine etc. was organised. The exhibition also showcased rare mineral samples, rock specimens and fossils found in MP. The exhibition was opened to the public by Shri Subhrasuchi Sarkar, Dy. Director, GSI, State Unit, MP. Further, in the evening, Astro Night Tourism programme was organized in collaboration with Indira Gandhi Rashtriya Manav Sangrahalaya, Bhopal on the premises of IGRMS, Bhopal from 6.00 PM to 8.30 PM wherein telescopic observation of some visible heavenly bodies was conducted. A total of 664 visitors visited the exhibition and 300 people including students, teachers, parents and housewives participated in the Astro Night Tourism programme.

Vacation Creative Science Workshop -2024

The Centre organized the Vacation Creative Science Workshop in 8 disciplines from 02.05.2024 to 31.05.2024. The disciplines were: Model Rocketry, Math & Astronomy, Ship Building, Aeromodelling, Colourful Chemistry, Learning with Arduino, Arts & Crafts (Juniors & Seniors) and the Study of Sunspots. As a part of the programme, fun-filled activities were conducted and working models were developed with all the raw materials and guidance and support provided by this Centre. The completed

kits were permanently given away to the participants for use at home. Certificates of Participation were also provided to the participants. A total of 78 students participated in various sessions of the programme.

Outreach programme at IISER, Bhopal

On 19.05.2024, the Centre organized a Supercool Show featuring Liquid Nitrogen for the participants of the Vidyarthi Vigyan Manthan (VVM) National Camp Program at the Indian Institute of Science Education & Research (IISER), Bhopal. The event saw the participation of 500 students who were part of the final VVM program. The Supercool Show was a highlight of the National Camp, offering an engaging and educational experience to the students.

GOA SCIENCE CENTRE & PLANETARIUM, PANAJI

Zero Shadow Day

The Center observed Zero Shadow Day on 02.05.2024 by making special arrangement to see the rare phenomena of Zero Shadow. Around 189 students, teachers and general public witness and participated in the activities conducted related to Zero Shadow.

National Technology Day

The Centre celebrated the National Technology Day 2024 on 11.05.2024 to 12.05.2024 details of the program as below:

- **Online Technology Quiz** was conducted for the students of class VIIIth to Xth standard on 11.05.2024 between 04.00pm to 04.30pm. Total 123 students participated in the quiz.
- **Science Toy Making Session** was organized for the kids visiting the centre to foster curiosity and sparkle interest in science. Total 23 students participated in the session.
- **Bio Technology Workshop** was organized for the GSC and innovation Hub members in which DNA isolation activity was carried out by the students. Total 16 students participated in the workshop.
- **Popular Science Lecture** on topic "The All-Pervasive Phenomena of AI & ML in Real Life" was delivered by Shri Prasad Rangnekar, A technology professional and consultant on 11.05.2024. The plecture was organized in collaboration with Vigyan Parishad, Goa. Total 69 people attended the lecture.

Outreach Activity

As an outreach activity the centre organized Liquid Nitrogen Show and Science Toy Making Activity for the summer camp students of Neo Kids, Bicholim on 11.05.2024. Total 79 students along with volunteers attended the program.

Sci-Birthday Celebration

The Sci-Birthday was celebrated on 11.05.2024. During the celebration, the birthday guests were given a guided tour to the galleries, 3D show, Planetarium show, Science Toy Making session & Science demonstration. Total 25 kids attended the birthday. Also sci-birthday on 29.05.2024 is booked for 25 kids.

Creative Science Workshop

As a part of Vacation Creative Abilities Activity, an activity oriented Creative Science Workshop was conducted for the students in respective discipline.

- **Eureka: Young Scientist**
The workshop was organized from 13.05.2024 to 17.05.2024 for the students of class Vth to VIth standard in which total 9 students participated.
- **Basic workshop on Arduino**

The workshop was organized from 13.05.2024 to 17.05.2024 for the students of class VIIIst to Xth standard highlighting basic components of arduino board, installing arduino IDE and doing some simple projects. Total 6 students participated.

International Museum Day

Goa Science Centre celebrated the International Museum day by organizing exhibition on My Own Collection and popular science lecture. Details as below:

- **My Own Collection Exhibition**
An exhibition on My Own Collection was inaugurated by Dr MM Ramesh Kumar, Former Scientist from National Institute of Oceanography, Goa on 16.05.2024 wherein 24 participants displayed their hobby collections like stamps. Coins, etc. The exhibition was open for the public upto 18.05.2024 and around 1,649 visitors witness the exhibition.
- **Popular Science Lecture** on 'Goan Culture through Philately' was delivered by Dr Ramesh Kumar on 16.05.2024. Total 146 audiences were present for the lecture.

DISTRICT SCIENCE CENTRE, DHARAMPUR

World Thalassaemia Day.

World Thalassaemia Day was observed at Innovation Hub, of the Centre on 08.05.2024. In which total 56 students from skill development centre, Dharampur participated. Junior mentor Gayatri Bisht explained students about genetic counseling and disease management. The initiative emphasized early diagnosis, prevention, and community awareness, making it a valuable educational experience.

National Technology Day

On National Technology Day, 11.05.2024 Innovation Hub, of the Centre, hosted a ChatGPT session for students. The event featured interactive discussions on AI technology, its applications, and future potential by junior mentor Rahul Shah. Junior mentor Gayatri Bisht demonstrated Gamma. AI a tool used to make presentation. The session highlighted AI's role in making presentation, fostering a deeper understanding of. In total 12 students participated in the session. Open House Quiz on "Technology in Daily Life" was also organized. 40 students & General Visitors participated in the quiz competition.

International Museum Day

International Museum Day was celebrated on theme "Museums for Education and Research" on 18.05.2024 at the Centre. Nitrogen Show- Fun at Low Temperature was also organized for students and general visitors. Around 60 students and general visitors have attended the show. Wax Candle Crafting activity was also held in which 09 students learned to make wax decorative candles. Centre announced free entry for the 659 visitors. Guided tour was also done for the teachers & general visitors. Special Sky observation program was organized at the Centre. Celestial objects like Moon, Bee hive cluster M44 & Constellation were seen during the program by 11 visitors.

Integrated Science

Innovation Hub, of the Centre organized Integrated Science activities from 22.05.2024 to 24.05.2024 and programme. Total 06 students participated in the workshop and developed 9 projects. In chemistry students learned about basics knowledge of pH through hands on activity, solid phase double displacement reaction, immiscible to miscible liquids and compressed air concept. In biology they practiced dissection of flower, differentiation of dicot and monocot and microscopic view of stomata cell. In physics student made Newton's cradle and Benham disc on their own, they also learned about mass, oscillation and momentum by activities.

Special Sky Observation Program

Special Sky Observation Program was held on 12.05.2024 at Parkland Society, Vapi. Moon, M44, Sirius were seen through Celestron CPC 800 telescope. In all total 100 visitors participated in the programme.

Career Guidance Seminar

The Centre organized Career Guidance Seminar in association with Ganpat University for the students of Class 10 and Class 12 on 12.05.2024. On this occasion, Shri Arvindbhai Patel, MLA Dharampur was present. Dr. Sanjeev Acharya, Principal, Ganpat University – Faculty of Pharmacy, Mr. Ketan Gupta, Sr. Manager – Center for Excellence gave a seminar on the subject. In which he gave detailed information about marine studies, pure science, management studies and various courses, in addition, he gave information about 3D-printing and unicorn startups as well as marketing strategies. Students and parents of Dharampur and surrounding villages took advantage of this seminar. Personal counseling was also organized with the students and parents under this seminar.

Orientation workshop for teachers.

02 batches of Orientation workshop for teachers were organized during 18.05.2024 to 28.05.2024 at the Centre in collaboration with Dr. K. R. Shroff Foundation, Ahmedabad, Lokmangalam Charitable Trust, Khoba. In all 55 teachers participated in the workshop. Guided tour and demonstration lecture and session on astronomy was organized during the Programme.

VCAC Aero Modeling

A workshop on Aeromodelling was conducted for the student's form 25.05.2024 to 27.05.2024. During the workshop, participants developed different models of gliders of different size and material and successfully tested. In all 9 students participated in the workshop and developed 4 projects.

VCAC Model Rocketry

Model Rocketry workshop was organized during 28.05.2024 to 30.05.2024 at Innovation Hub, of the Centre. During the workshop, students prepared model of water rocket and paper rocket. They have tested and launched the rockets successfully. In all 9 students participated and developed 3 models in this workshop.

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