

## Monthly Descriptive Report of Programmes and Activities organized at Nehru Science Centre, Mumbai & its Satellite Units in July 2022

### NEHRU SCIENCE CENTRE, MUMBAI

#### Azadi Ka Amrit Mahotsav- the 75 years of Independence - 75 Online Quizzes

As a part of Azadi Ka Amrit Mahotsav, Centre organized following series of programmes

#### Online Quizzes:

The Centre conducted **15** online quizzes as per the following:

Date	Topic	No of participants
July 3, 2022	Everyday Science	485
July 6, 2022	World Zoonoses Day	131
July 9, 2022	Plant Science	183
July 10, 2022	Food science	93
July 11, 2022	World Population Day	133
July 12, 2022	Electricity	124
July 13, 2022	Science of Fungus	134
July 14, 2022	Blood	189
July 15, 2022	Magnetism	165
July 19, 2022	Moon Landing Day	40
July 20, 2022	The Moon	121
July 21, 2022	Human Anatomy	471
July 24, 2022	Science Behind Films	107
July 25, 2022	Kitchen Science	288
July 28, 2022	World Nature Conservation Day	203

#### **FB live Science Demonstrations**

05 online Science Demonstration shows were conducted through Facebook live programme on every Monday and Thursday throughout the month viz: 4<sup>th</sup>, 11<sup>th</sup>, 18<sup>th</sup>, 21<sup>st</sup> and 25<sup>th</sup> July, 2022. Experiments based on various scientific topics like density, pressure, Newton's third laws, refraction, adhesive force etc. The programme was viewed by 5,637 virtual audiences.

#### **Sci-Birthday**

03 Sci-Birthday programmes were organized on 8<sup>th</sup>, 16<sup>th</sup> and 17<sup>th</sup> July, 2022 for 110 children. Children were engaged in hands on science activities, Science on a Sphere show & gallery visit.

#### **Sci-Mail**

Sci-mail, the quarterly membership newsletter was published, shared and uploaded on Social Media handles of the Centre. The post has been reached to 4,291 people.

#### **75 Chemistry Facts**

The Centre prepared in-house series of 2-3 minutes' duration video clips based on the interesting chemistry facts which we come across in our daily life. From June 1, 2022, in addition to previous months 30 videos 28 new videos were uploaded on Centre's all social media handles – Whatsapp groups, Instagram, Facebook page in the month of July. Reach for these video clips were 25,703.

#### **Innovation Hub Sessions**

The Centre started with a new batch at the Innovation Hub for July – September 2022 from 9<sup>th</sup> July 2022. In all 27 students registered for Integrated Science and 20 students registered for Robotics. Various session such as out-of-the-Box Thinking, improving thinking skills, Tod-Fod-Jod, Introduction to common traits of Innovators & 21<sup>st</sup> Century skills through wordmat and many other hands-on activities were organized for the members.

### **Package Tour**

Throughout the month, 10 package tours were conducted for 1,014 students and teachers. They were given the Guided tour to the galleries, Science Odyssey, Science on Sphere show and Science Shows.

### **Training Session**

A training session was organized in the Innovation Hub of the Centre on 1<sup>st</sup> June, 2022 for Education Trainees by Mrs. Manjula U. Yadav, Education Officer, Nehru Science Centre Mumbai.

The topic of the training was 'How to connect with people'. Training included various sub-topics such as demonstration, body stature, voice modulations, hand gestures and various other skills and traits required for effective presentation.

The training methodology was interactive as the Officer ensured that knowledge was not only disseminated but accurately perceived and understood by the trainees.

### **Kathak Wokrshop**

The Centre, on the occasion of the 83rd Birth Anniversary of Dr Puru Dadheech organized the Ashitih Utsav, a Kathak Workshop, in collaboration with the Sangeet Natak Akademi. The Akademi also exhibited its valuable publications on performing arts, particularly of India on 17 July 2022. Around 400 Kathak performers and aspirants participated in this workshop.

### **Webinar**

The Centre, jointly with S. R. Dalvi Foundation, organized an online Webinar on the topic 'Understanding Artificial Intelligence' on Saturday 23<sup>rd</sup> July, 2022 at 06:00 pm. The webinar was for teachers. Dr. Nayan Bheda, Digital Expert conducted this webinar live on Zoom and simultaneously it was streamed on Facebook page of the Centre with crossposting on the facebook page of NCSM. 2324 teachers joined on the Zoom platform and facebook reach was 1,518.

### **Popular Science Lectures**

Online Lecture was organized on the topic Nuclear Energy & Our Environment on 23<sup>rd</sup> July, 2022 at 04:30 by Dr. Chandra Mohan Nautiyal, Prog. Consultant, INSA, New Delhi & Former Scientist-in-Charge, C14 Lab, BSIP, Lucknow. A total of 1,085 participants watched the Facebook stream of the Lecture.

An Offline Lecture will be organized in the Auditorium of the Centre on the topic Nuclear Power an inevitable option by Shri A. K. Jain, Former Chief Engineer Corporate Communication, NPCIL on 30<sup>th</sup> July, 2022 at 11:00 am. Virtual visitors will be able to join on the Zoom platform and it will also be streamed on the Facebook page of the Centre. A total of 204 students have registered for the offline lecture and 188 participants have registered for the online Zoom Lecture respectively.

### **Moon Landing Day celebration 2022**

The Centre commemorated 'Moon Landing Day' on 19<sup>th</sup> & 20<sup>th</sup> July, 2022 by organizing several online & offline programmes and activities for students and general public.

### **Quiz Contest:**

The Online Quiz contest on the topic "Moon" was conducted on 19<sup>th</sup> July 2022 in online mode. The contest was open for all. Total 40 participants took part in Quiz.

### **Chalte Chalte:**

On the spot quiz 'Chalte Chalte' was organized for the visitors of the Science Centre. The visitors were asked questions based on the theme "Amazing facts about the moon". visitors who gave the correct answers were given prizes. This quiz was conducted on 19<sup>th</sup> & 20<sup>th</sup> of July 2022. 69 Visitors participated in the event.

### **Science On Sphere:**

The Centre organized a Science on Sphere Show for visitors on the topic "Moon". 70 Visitors participated in the event.

### **Science Film Show:**

The Centre organized film show for visitors on the topic "Moon". The title of the film was Passage to the Moon & Moon within reach. This was a paid programme. 132 Visitors participated in the events.

## **RAMAN SCIENCE CENTRE, NAGPUR**

### **Workshop on 'Virtual Reality & Augmented Reality'**

Raman Science Centre & Planetarium, Nagpur in active collaboration with St. Vincent Pallotti College of Engineering & Technology, Nagpur & Scopik Education Private Ltd, Chennai organised a Hands-on Workshop on 'Virtual Reality & Augmented Reality' for High Schools & Jr College students on Sunday, 10 July 2022. 128 students in different batches participated in the programme.

### **World Population Day**

To raise awareness about global population issues among the children, the World Population Day was observed at Raman Science Centre Nagpur on July 11, 2022. An online quiz on population related issues was organised on 11 July 2022 from 4.00 pm to 4.20 pm. 32 students from all over the country participated in the quiz.

### **Moon Landing Day**

Moon landing day was celebrated at Raman Science Centre & Planetarium, Nagpur on 20th July 2022 by organizing following programmes.

### **Popular Science Lecture:**

A Popular Science Lecture on 'Space Technology for Exploring Moon' was delivered by Dr. G. Sreenivasan, Scientist S. G. and Dy. General Manager, Regional Remote Sensing Centre, ISRO, Nagpur. Dr. Sreenivasan explained about different moon missions and their achievements for exploring the moon. 135 students, teachers and parents from various schools attended the lecture.

### **Science on Sphere show on 'Moon':**

Special Science on Sphere show on 'Moon' was conducted on the occasion of Moon landing Day. Special features of moon like invisible portion from the earth, tranquility base a site of landing of Apollo 11 and landing of first human etc. were explained in the show. 75 students and teachers viewed the special show.

### **Online Quiz on Moon:**

An Online Quiz on Moon was also conducted during the programme. 85 students from across the country participated in online quiz programme.

### **Facebook Live Science Demonstration**

03 online Science Demonstration shows were conducted through Facebook live programme on every Thursday during the month viz: 14, 21, and 28 July 2022. Experiments based on various scientific topics including cloud formation, Electrolysis of NaCl solution, Centrifugal force etc. The programme was viewed by 450+ virtual audiences.

### **Science Demonstration Lecture and Science Film Festival programme**

Special Science Demonstration Lecture and Science Film Festival programme is organised for the school groups visiting science centre from 17th July 2022 onwards. Science Demonstration lectures on topics 'Colourful Chemistry, Fun with Physics and Matter at

Low Temperature' etc were conducted along with screening of syllabus based selected science films. 743 students from various schools participated in the programme.

## **REGIONAL SCIENCE CENTRE, BHOPAL**

### **KVS Principals' Meet:**

The Centre organised a Principals' Meet of the Kendriya Vidyalaya Sangathan (KVS) schools of Bhopal region on 11th July, 2022 in hybrid mode (both online and offline) with an aim to popularize the activities of the Centre amongst the KV fraternity of Bhopal region. The Meet was chaired by Shri Somit Shrivastava, Dy Commissioner, Kendriya Vidyalaya Sangathan, Bhopal Region. At the outset, Shri Saket Singh Kaurav, PC, RSC, Bhopal briefed the participants about various educational activities to be organised by the Centre round the year especially for students. Shri Somit Shrivastava, Dy Commissioner, Kendriya Vidyalaya Sangathan, Bhopal Region requested the participants to take advantage of the various facilities offered by RSC, Bhopal by enrolling their students in large numbers in these programmes. The participants also put forth their suggestions for streamlining the activities of the Centre for enhancing students' participation in various programmes. A total 2 teachers in offline mode and 40 teachers in online mode participated in the programme.

### **Celebrating the Release of First Images of James Webb Space Telescope (JWST):**

The Centre celebrated the Release of the First Images of James Webb Space Telescope by organising a series of programmes on 12th July, 2022 in its premises in both online and offline modes. As a part of the programme, an interactive session with Dr Hashima Hasan, Dy Programme Scientist, JWST, NASA HQ, USA was conducted both on online and offline modes wherein Shri Saket Singh Kaurav, PC, RSCB initiated and moderated the discussion, A total of 500 participants participated in the programme. This was followed by a Question & Answer session on JWST wherein Shri Saket Singh Kaurav, PC, RSCB responded to some queries of the participants on JWST. A total of 150 students from different local schools and colleges participated in the programme. An Open House Quiz was also organised among the students present to test their conceptual grasp over JWST and prizes were awarded to the successful participants of the programme. A total of 150 participants participated in the programme. This was followed by the live telecast of the release of the first JWST images from NASA which was watched by 200 viewers present at the Centre.

### **Online Lecture on the Life & Work of Stephen Hawking**

The Centre organized an online Popular Lecture on the topic 'Close Encounters in Space & Time with Prof Stephen Hawking' on July 15, 2022. Mr Peter Guzzardi, Editor of the best-seller book 'A Brief History of Time' authored by Prof Hawking recounted his days and times with the noted astrophysicist. The programme was live-streamed through the official YouTube channel of the Centre. A total of 650 viewers viewed the programme.

### **Celebration of Moon Landing Day**

The Centre celebrated the Moon Landing Day on 20th July, 2022 to commemorate the landmark occasion of moon landing by humanity in 1969 through the historic Apollo-11 mission sent by NASA. An Open House Quiz on the topic 'Moon : Marvels & Mysteries' was conducted amongst the students of local schools to mark the occasion. At the outset, Shri Saket Singh Kaurav, Project Coordinator of the Centre, briefed the audience regarding the importance of the occasion and the role that the cosmos plays in shaping our daily lives on the Earth. He further interacted with the audience and took several questions from them for clarification at the end of the session. He also gave away the prizes to the successful participants of the quiz on the completion of the programme. A total of 50 participants including students, teachers, parents and house-wives participated in the programme.

Visit of Street Vendors and their family members to the Centre under the Sawnidhi Mahotsav initiated by the Central Government

The Centre in collaboration with BMC, Bhopal organized an exposure visit to the Centre for the street vendors and their family members, on July 27, 2022. This visit was organized under the Swanidhi Mahotsav which was a part of the Central Government's Swanidhi Yojna. A total of 95 visitors including escorts visited the Centre and took advantage of the different facilities available at the Centre.

## **GOA SCIENCE CENTRE AND PLANETARIUM, PANAJI**

### **3rd Anniversary Celebration of Innovation Hub**

As a part of 3rd Anniversary celebration of Innovation Hub, the Centre organized following programs:

Orientation session of Innovation Hub was organized for the students of Govt. High School, Morle-Sattari, Goa. The students were given guided tour of Innovation Hub along with 3D printing demonstration. Students also prepared slime using the given chemicals.

A workshop on Explore the Microscopic World was organized for Innovation Hub members where the members explored the various microscopic worlds through microscope. 10 members participated in this programme.

### **World Population Day**

The Centre in collaboration with State Family Welfare Bureau, Directorate of Health Services, Govt. of Goa celebrated the World Population Day from 8th to 11th July, 2022. Details of the programs are as below:

**Elocution Competition** was organized for the students of class VIIIth to Xth standard on 8th July, 2022. The topic for the elocution competition was 'Effect of overpopulation on development and nature'. Total 72 students participated in the program.

**Essay Writing Competition** on the topic 'Rise in Population: A major Problem in India' was organized for the Higher Secondary School Students on 9th July 2022. Total 44 students registered for the competition.

A **Popular Science Lecture** on the topic 'Adopt family planning measures and write a new chapter of progress' was delivered by Dr. Rajendra Borkar, Chief Medical Officer, State Family Welfare Bureau, Directorate of Health Services, Govt. of Goa on 11th July 2022 in the auditorium of Centre. Total 137 audiences attended the lecture.

The Valedictory and Prize Distribution function was held on 11th July 2022. Dr. Rupa Naik, Deputy Director, Public Health, Directorate of Health Services, Govt. of Goa was the Chief Guest of the function while Dr. Kalpana Mahatme, Deputy Director, National Vector Borne Disease Control Program, Directorate of Health Services was the Guest of honor. During the function winners of the various competitions were awarded prizes.

### **Moon Landing Day**

The Centre in collaboration with Association of Friends of Astronomy organized an Astronomy Seminar on July 20, 2022 for the students of class VIIth to IXth standard. Total 15 students participated in the seminar.

### **Exposure Visit to Underprivileged Children in Goa Science Centre.**

Free visit to total 758 Underprivileged children was arranged in July month. 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.

## **DISTRICT SCIENCE CENTRE, DHARAMPUR**

### **World Population Day celebration**

World Population Day was observed on theme “A world of 8 billion: Towards a resilient future for all – Harnessing opportunities and ensuring rights and choices for all” at the Centre by organizing Online quiz on 11<sup>th</sup> July, 2022. A total of 54 Students participated in this event.