

Monthly Descriptive Report of Programmes and Activities organized at Nehru Science Centre, Mumbai & its Satellite Units in August 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 09 online quizzes as per the following:

Date	Topic	No of participants
02.08.2022	Nuclear Energy	131
08.08.2022	Animal Science	915
09.08.2022	Bird World	1160
10.08.2022	Electronics	1139
11.08.2022	Energy	846
12.08.2022	Light & Sight	1047
13.08.2022	World Organ Donation Day	715
14.08.2022	Animal Science	924
15.08.2022	Innovations in India	650

75th online quiz in the series was also conducted on 15.08.2022.

FB live Science Demonstrations

04 online Science Demonstration shows were conducted through Facebook live programme on every Monday and Thursday throughout the month viz: 01.08.2022, 08.08.2022, 11.08.2022 and 15.08.2022. Experiments were based on various scientific topics like reflection of light, inertia, surface tension and static electricity. The programme was viewed by 2,646 virtual audiences. This way we completed 75 live demonstrations in one year.

Package Tour

During the month, 09 package tours were organized for about 817 students and teachers. They were given the guided tour of the galleries, Science Odyssey, Science on Sphere show and Science Shows were organized.

Science Festival - 75 years of India's Independence

To commemorate the Azadi ka Amrit Mahotsav (AKAM), a Science Festival was organized at the Centre during 10.08.2022 to 15.08.2022. Following programmes and activities were organized during this period:

(a) Science shows

24 Science shows were conducted from 10.08.2022 to 15.08.2022 for the school groups and visitors of the Centre. In all 1,683 students, teachers and visitors participated in these shows.

(b) Online science quizzes

From the series of 75 online quizzes which were conducted during the last year, the last 06 quizzes on the topics Nuclear Energy, Animal Science, Bird World, Electronics, Energy, Light and Sight, World Organ Donation Day, Animal Science & Innovations in India were organized from 01.08.2022 to 15.08.2022. The quizzes were open for all. In all 7,527 participants attempted these quizzes.

(c) Water Rocket demonstration

During the Festival 12 water rocket demonstrations were conducted for the students, teachers and general visitors. 695 participants enjoyed the rocket launching and also understood the underlying scientific concepts.

(d) Workshops

Following hands-on workshops were organized during the festival:

- **Make and Fly Paper Planes**

On 12.08.2022 make and fly paper planes workshop was organized. In all 63 students participated in the workshop and made 05 different types of Paper Gliders including Bat plane.

- **Drones**

Drones workshop was organized on 13.08.2022 at the Centre, wherein 68 participating students were given exposure to Principles of Flight. They also assembled and flew the drones with the help of Helium balloons. Shri Amit Modi and his team from Techshiksha, an NGO conducted the workshop.

- **Robotics and Artificial Intelligence**

89 students participated in the above workshop & learnt the basics of AI and constructed a Robot. The workshop was organized on 13.08.2022. Shri Amit Modi and his team from Techshiksha, an NGO conducted the workshop.

- **Learn through Fun for underprivileged students**

290 underprivileged students visited the Centre on 14.08.2022 & 15.08.2022. Along with the exposure to the different facilities of the Centre, a workshop on Learn through Fun was organized at the Centre. The students used the science kit given to them and enjoyed making simple science toys.

- **Online Workshop on ‘Trash to Treasure’ for Teachers**

On 14.08.2022 an online workshop on the topic ‘Trash to Treasure’ was organized for the secondary school teachers. The workshop was conducted by Dr. Anuradha Gupta, a Science Communicator, from Prithvi Innovations, Lucknow. Dr. Gupta explained how one can reduce the waste and convert it to treasure. 76 teachers throughout the country participated in the workshop.

- **Soap Bubbles workshop**

The workshop was conducted on 15.08.2022. Participants learnt the science and geometry of the soap bubbles through interesting and amazing hand-on activities. 46 students and parents participated in the workshop.

(e) Contests

- **Painting Contest**

Painting Contest was organized at the Centre on 14.08.2022 for students in 03 different categories. 278 students made the paintings on pre-announced topics.

- **Rangoli Contest**

29 participants registered for the Rangoli contest. The topics were Science / Technology / Environment. The participants beautifully presented the topics through their Rangoli art. The contest was organized on 13.08.2022.

- **Chalte – Chalte (On the Spot quiz)**

Chalte - Chalte (on the Spot quiz) was organized for the visitors of the Centre. The questions were based on the scientific achievements of India in post-independence period. 283 visitors participated in the contest. The quizzes were conducted on 13.08.2022 & 14.08.2022.

(f) Videos on Amazing Chemistry facts

Starting from 01.06.2022 to 15.08.2022, that is for 75 days, daily 1 video clip explaining amazing Chemistry fact associated to our everyday life was posted on the social media handles of the Centre. 05 of these videos were posted during

10.08.2022 to 14.08.2022 as a part of Science Festival. The reach for these 05 videos was 4894.

Remembering Dr. Vikram Sarabhai

The Centre in collaboration with Space Geeks and Indian Space Industries Exhibitors organized an online Popular Science Lecture on the topic 'Scientific Ballooning in India' on 12.08.2022 to commemorate the birth anniversary of Dr. Vikram Sarabhai, the Father of the Indian Space Programme. Prof. Devendra Ojha, Senior Professor and Chairperson, TIFR Balloon Facility Committee, Tata Institute of Fundamental Research, Mumbai delivered the lecture on the Zoom platform. The lecture was streamed on the Facebook page of the Centre as well. 96 participants attended the lecture on the zoom and Facebook reach of the lecture was 1069.

NPCIL Programmes on Nuclear Energy- Clean & Green Energy

The Centre in collaboration with Nuclear Power Corporation of India Limited (NPCIL) has organized various Popular Science Lectures and Quiz Contest. The Lectures were organized in online and offline mode.

Elocution Contest, Painting Contest, Slogan Writing Contest were also organized and the number of entries received were 25, 77 and 44 respectively.

· Popular Science Lectures

The Centre organized a Popular Science Lecture on the topic 'Public Concerns about Nuclear Power - Perceptions V/s Realities' in Hybrid mode on 06.08.2022 at 11:00 am. The lecture was delivered by Shri S. K. Malhotra, Secretary, Indian Nuclear Society. A total of 280 students attended the offline lecture held in the Auditorium of the Centre, 230 participants joined on Zoom platform and 710 participants watched the Facebook stream of the Lecture. The programme was organized in collaboration with NPCIL, Mumbai

· Awareness campaign on Nuclear Power: Clean Energy & Green Energy

The Centre in collaboration with the Nuclear Power Corporation of India Limited organised a special awareness campaign on Nuclear Power: Clean Energy & Green Energy as part of Azadi ka Amrit Mahotsav and the iconic week of NPCIL.

· In conversation with Dr. A. P. Jayaraman, Nuclear Scientist

As a part of this, an interaction with the Nuclear Scientist – Dr. A. P. Jayaraman was organised on 27.08.2022 at 11:30 am under the title – In conversation with Dr. A. P. Jayaraman, who is a Former Nuclear Scientist of BARC and Chairman, National Centre for Science Communicators. He is also a member of the Scientific Committee – PCST Network. In this interactive session, Director, NSC, Mumbai discussed several questions related to nuclear power, its greenness, effects on climate change and air quality, management of waste generation in producing

nuclear power, nuclear accidents happened so far and fail-safe method used in construction of nuclear power. A number of myths related with nuclear power generation, use of land, radiation emission from NPPs and many other fears were dispelled during the interaction. Dr. Jayaraman nicely and effectively answered all the questions which included some questions from the audience as well. More than 60 people participated in the online interaction. Issues like carbon footprints, land footprints and the costs effectiveness of Nuclear Power generation were also discussed in this session

Panel Discussion on “The New Education Policy-Impact on Elementary Education to Higher Education

Shri Umesh Kumar Rustagi, Director, NSC, Mumbai was invited by Nav Bharat & MIT-ADT University for a panel discussion on the topic “The New Education Policy-Impact on Elementary Education to Higher Education”. The event was held on 28.08.2022 at Hotel Orchid International, Vile Parle, Mumbai. About 150 people attend the panel discussion.