

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

NEHRU SCIENCE CENTRE, MUMBAI

Package Tour

During this month 263 package tours were organized for 23,361 students and teachers. They were given Guided tour of the galleries, Science Odyssey, and Science on Sphere show. Science Shows were also organized for them.

Aviation Day

The Centre in collaboration with the Aeronautical Society of India, Mumbai Branch and Indian Women Pilots Association organized Aviation Day on 10.12.2022 to commemorate Bharat Ratna Shri JRD Tata's first flight. 03 contests - Aviation Quiz, Essay and Elocution Contests were organized. Unlike previous two years, the programme was physically conducted at the Centre this year. Students were given welcome kit after registration.

- **Aviation Quiz**

164 students from 48 schools all over Mumbai and surrounding regions registered for the preliminary elimination round of quiz. Top 05 teams were selected for the final verbal round which was conducted on the same day. The School of the Winning team was awarded the Boeing Rotating Shield. The best Girls team was given prizes and was awarded with Indian Women Pilots' Association (IWPA) trophy.

- **Elocution Contest**

Elocution contest on 02 topics Growth of Aviation from Atmanirbhar Bharat Mission and The Role of Artificial Intelligence in Civil Aviation was organized for school students. 47 students registered for the preliminary round of Elocution contest from which 05 students were selected for the final round. The Institute/ School of the winning participant was awarded Airbus Rotating Shield. Best Girl participant was awarded Indian Women Pilots' Association (IWPA) trophy.

- **Essay Contest**

Essay Contest on 02 topics Drones in the sky will challenge the airspace and Challenges facing Air India after acquisition by TATA Group was organized for 16 registered students. The Institute/ School of the winning participant was awarded JRD TATA Memorial Trust Rotating Shield.

- **Demonstration of Drone**

Demonstration of Drone flying at the Centre by Aman Aviations was one of the main attractions of the programme. The demonstrator explained about working of Drones, its uses, types and its various features. The session was more of interactive type where-in questions from students were answered by the demonstrator.

A total of 227 participants, 52 teachers and 36 parents were present for the event. 20 members from AeSI-Mumbai, Indian Women's Pilot Association (IWPA) and a Team from Thakur Institute of Aviation Technology was also present at the event. Chief Guest for the programme was Mr. R. K. Patra who is an Aviation Journalist covering global aviation industry since -1986. He is the Editor-in-Chief of STAT Media Group which publishes numerous publications on Transport industries including Aviation which caters to the global audience.

National Mathematics Day

National Mathematics Day is commemorated every year on the occasion of the Birth Anniversary of genius Mathematician Srinivasa Ramanujan. This year the Centre organized various programmes and activities from 20.12.2022 to 24.12.2022 in hybrid mode. The event was catalyzed and supported by National Council for Science & Technology Communication (NCSTC), DST, Govt. of India and Rajiv Gandhi Science and Technology Commission, Govt. of Maharashtra.

- **20.12.2022 - Workshop "Fun with Math's"**

A workshop was organized for the school children of std. 6 - 8. Various hands-on activities on learning geometry, mathematics puzzles etc. were done during the workshop. 72 participants from local schools took part in the event. All the participants received participation certificates

- **21.12.2022 - Offline Popular Lecture**

A lecture by Prof. Anish Ghosh, Faculty of School of Mathematics, TIFR, Mumbai & Shanti Swarup Bhatnagar Awardee 2021 gave a lecture on the topic "From Arithmetic to Chaos". The lecture was conducted in the Auditorium of the Centre. A total of 160 students attended this Offline lecture. The lecture was also attended by 62 students through Zoom-meeting link, and 366 viewers have seen it so far through FB live.

- **21.12.2022 – Quiz Contest at the Centre**

A Math Quiz contest was organized at the Centre on the topic of Puzzles & Riddles. A total of 30 students participated in this Contest. Top 03 scorers were awarded during the valedictory event held on 24.12.2022.

- **22.12.2022 & 23.12.2022 – Exhibition on Mathematical Toys & Chalte-Chalte on the spot Quiz**

The Centre organized Exhibition of Mathematical Toys and Puzzles for visitors of the Centre. Around 10-12 puzzles and mathematical hands-on activities were kept for the visitors to interact with. Exhibits "All road leads to Rome", "Brahma's discs", "Galton-Board", "Conic section", "Value of Pi" etc. were on display. 2165 visitors visited this exhibition and took part in the Chalte-Chalte On the spot Quiz where they were asked Math's related questions and prizes were given for correct answers. Puzzle-solving contests were also organized for visitors which included wooden block puzzles, tangram puzzles, Brahma's tower, geometrical shape puzzles etc. Visitors also enjoyed playing on the life-size mathematical board-game.

- **22.12.2022 - Online Popular Lecture**

An online lecture by Prof. Kalyan Chakraborty, Director, Kerala School of Mathematics, Kozhikode was organized via Zoom-meeting. The topic of the Lecture was "A couple of Gems from Ramanujan's Garden". A total of 160 students attended the lecture in the Auditorium and 703 viewers have seen the stream on Facebook.

- **24.12.2022 - Popular Lecture**

A Popular Lecture was organized for Math Lovers. Prof. Meena Mahajan from The Institute of Mathematical Sciences, Chennai was invited to deliver the lecture. The topic of the lecture was "Compute, compute, compute – how hard can it get?" A total of 414 students attended this event physically and 703 viewers have seen the stream so far on Facebook.

4175 general visitors including students and teachers from invited schools participated in various activities. They also visited special exhibition of mathematics toys, puzzles, and games and participated in hands-on activities specially designed for Make and Take workshop.

International Symposium on Metalions 2022 (30.11.2022 and 01.12.2022)

The Centre in collaboration with International Association of DentoMaxilloFacial Radiology (IADMFR), Asian Academy of Oral and Maxillo Facial Radiology (AAOMFR), Society of Cancer Research and Communication, Mumbai organized the 17th International Symposium on Metalions. The theme of this years' Symposium was 'Recent Advances in Oral Medicines & Radiology, Environmental and Public Health'. On the last day of the event around 152 participants joined the programme from 12 countries, 06 continents.

Mobile Science Exhibition

The Centre organized a Mobile Science Exhibition (MSE) 'Health and Hygiene' in the govt. schools of thane and Palghar districts. Apart from the exhibition, SDL & film shows were also organized during the month.

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Innovation Hub Sessions

Following session were conducted for 36 members of the Innovation Hub:

Hand-on Activities from toys to trash, Exposure to 3D printing technology, a session on 'Know the Innovators' and Lecture by Prof. Meena Mahajan from the Institute of Mathematical Sciences, Chennai. The topic of the lecture was "Compute, compute, compute – how hard can it get?" All the students were given participation certificates.