The First Science Museum and Planetarium of the CSIR

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THE Council of Scientific and Industrial Research (CSIR) India is a research and development (R&D) organisation established as an autonomous body by the Government of India in 1942. It promotes scientific knowledge, boosts industrialisation, and stimulates economic growth. With headquarters in New Delhi, CSIR is now one of the largest publicly funded R&D organisations globally. In 1947, CSIR established four institutions, one of which was the National Physical Laboratory (NPL), which is relevant to our narrative. Initially, NPL functioned at the Department of Physics of the University of Delhi for three years. In 1950, it moved to its permanent institution building at Pusa in New Delhi.

The CSIR, a large network of laboratories engaged in industrial and basic research, was also instrumental in initiating the science communication and popularisation movement in the country. In 1956, it opened a modest Science Museum and, in 1959, a small Planetarium on the NPL premises. Unfortunately, the first endeavour of the CSIR did not last long due to certain reasons.

Commencement of the Project

India has maintained a long-standing partnership with the United Nations Educational, Scientific and Cultural Organization (UNESCO). As a founding member of UNESCO, India has actively collaborated to implement its various projects. In 1956, UNESCO held its Ninth Biennial General Conference in New Delhi from 5 November to 5 December at the invitation of the Indian government. The country reports from India presented at the conference revealed that CSIR had initiated a science popularisation programme by then.

In the mid-1950s, CSIR explored UNESCO's Technical Assistance Programme to benefit the science museum. The programme aimed to aid member countries through three primary channels: (a) Fellowships are offered to individuals from one country to visit another to learn about improved techniques; (b) Experts from one country visit another to advise and train professionals in various fields; and (c) Limited exchange of equipment and supplies.

As part of this programme, CSIR sent NPL's Scientific Officer, responsible for setting up the science museum abroad on deputation for three months, to study reputed science and technology museums and planetariums. Additionally, CSIR invited an expert from the Science Museum London to NPL for three months to guide the establishment of the science museum. The NPL received a variety of objects and artefacts from the Science Museum, London.

In late 1955, Dr KS Krishnan appointed Shri Ramanatha Subramanian as a Scientific Officer at NPL for the science museum project. Shri Subramanian was allotted an area in NPL to establish the science museum. The museum initially aimed to showcase the research and development activities of the National Laboratories of CSIR. As such, thirty exhibits were set up to highlight the activities of leading Indian laboratories. Some of the topics covered in the gallery included time measurements through the ages, electronics development, glass technology, microscopes and binoculars, economic minerals and ores, crystallography, weather and climate, among others.

Besides, the Science Museum, London gifted a variety of items for display, such as hourglasses (sand-clocks), early spring-driven clocks, a replica of Joule's heat experiment, early Edison phonographs, early vacuum pumps, and Pratt & Whitney aero-engines. The then Prime Minister Pandit Jawaharlal Nehru transferred several objects he had received as gifts while visiting museums abroad. These included minerals, ores, and a fine quartz crystal conglomeration, with dozens of quartz units presenting clear-cut faces.

In 1956, UNESCO organised a significant "India and Science" exhibition in New Delhi to coincide with the General Conference. It showcased two UNESCO travelling science exhibitions: "Energy and its Transformation" and "Our Senses and the Knowledge of the World." Recognising the value of these exhibitions, the NPL acquired both for display in their upcoming science museum.

Guidance from an Expert

Drawing inspiration from well-established science museums became essential to properly showcase the extensive collection of objects, artefacts, and exhibits at the NPL museum. So, on invitation from Prof. Maneklal Sankalchand Thacker, Director General of CSIR, in early 1957, Mr William Thomas O'Dea, a Senior Keeper of the Science Museum London, visited NPL for three months under a UNESCO assignment to guide Shri Subramanian in setting up the science museum properly.

Mr O'Dea, an electrical engineer, had been part of the Science Museum in London since 1929, and the museum community worldwide consulted him for advice related to science museums for many years. Upon arrival, he expressed his opinion that the NPL Science Museum should aim to ignite scientific interest and encourage visitors to engage with scientific exhibits actively. He stressed that modern museums had moved away from the traditional concept of science museums solely as repositories of artefacts. Following his suggestions, Shri Subramanian and his team reorganised the display of existing objects and artefacts in the hall. O'Dea also suggested the development of new working exhibits to transform the "nucleus museum" into an educational