

Report on the conduct of Technical Lecture and Live Demonstration during the Occurrence of Zero Shadow Day – 2024 on 22.08.2024 at Dr. AKSC&P

Puducherry Council for Science and Technology organised the Technical Lecture and Live Demonstration programme on the occurrence of **Zero Shadow Day** on 22.08.2024 at Dr. Abdul Kalam Science Centre and Planetarium, Puducherry. 105 Students from Maruthi Senior Secondary School, Lawspet, Puducherry were participated and benefited by the Programme.

The programme was conducted with technical lecture and live demonstration wherein Dr. R. Madivanane, Professor & Head of Department of Physics, Bharathidhasan Govt. College for Women, Puducherry delivered talk on the topic “**Shadow Play**” and live demonstration to the students along with Selvi A. Hemavathy, Vice President, Pondicherry Science Forum, Puducherry. The Resource Persons narrated about concept and occurrence of Zero Shadow Day. Zero Shadow Day is a fascinating phenomenon that occurs when the sun is positioned directly overhead, causing objects on the Earth's surface to cast no shadows. On this day, the sun's rays fall vertically, creating a unique optical effect where objects seem to blend seamlessly with their surroundings. He explained Zero Shadow Day occurrences happen twice a year, during the summer and winter solstices. On these moments, the sun's rays falls exactly perpendicular to the Earth's surface at specific latitudes, leading to the absence of shadows. These latitudes are determined by the Tropics of Cancer and Capricorn, which mark the northernmost and southernmost points where this phenomenon can be observed.

On 22.08.2024 at 12.14 P.M, the sun came directly overhead in our region (Puducherry). Due to which students saw their shadow disappearing for a few moments. Students got practical knowledge about this in Dr. Abdul Kalam Science Centre and Planetarium, Puducherry through Live Demonstration of the occurrence by placing Glass Sheets and Charts. At the end of the programme LiFE Mission Pledge was taken to the students. Staff of Dr. Abdul Kalam Science Centre and Planetarium made elaborate arrangements for the smooth conduct of the program.

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PHOTOS DURING THE ZERO SHADOW DAY PROGRAMME ON 22.08.2024


