

Premier Automobiles Road, Kurla West, Mumbai - 400070



Department of Mechanical Engineering Report on – K12 Activity

Title: Fun with Science_Capillary Action Date: 11th December 2023 Time: 2:00 PM to 4:30 PM Venue: MMC Lab – Mechanical, Don Bosco Institute of Technology, Kurla

Target Audience: Students of St. Micheal school

No. of Participants Present: 30

Resource Person: Ms. Samina

Organization of Recourse Person: CES's Michael High School, Kurla Organizing Department / Committee / Authority: ISHRAE DBIT Student Chapter Faculty Coordinator: Prof. Cleta Pereira

Objectives:

- \clubsuit To introduce the phenomenon of capillary action
- * To explore capillary action in various domains and its advantages and disadvantages
- ✤ To encourage critical thinking among the students

Outcomes:

- $\boldsymbol{\bigstar}$ Comprehensive understanding of the concept of capillary action
- Knowing the advantages and disadvantages of capillary action
- Knowing the applications of capillary action

Detailed Report:

"Fun with Science", a K12 activity was held on 11th December 2023 at 2.00 PM. The activity was conducted by ISHRAE DBIT Student Chapter and ISHRAE faculty Advisor, Prof. Cleta Pereira. The activity was conducted offline for the students of CES's Michael High School, Kurla. The activities performed by the council members was to interact with students and make them understand about science concepts. So, to make the session interesting for the students we the ISHRAE DBIT Chapter student council came up with an intriguing way to make the learning more fun and interactive.

Jaee Hindalekar (Woman in ISHRAE) started the event by introducing the students about team conducting activities.

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Capillary Action

Vilas Kodam commenced this activity with the help of an experimental setup. The setup consisted of 2 glasses, one filled with regular water and the second filled with a mixture of water and ink. The 2 glasses were connected with the help of a rolled piece of tissue.

Capillary action is the ability of a liquid to flow in narrow spaces without the assistance of, or against, external forces like gravity. This phenomenon is particularly noticeable in small tubes, capillaries, and porous materials, such as soil and plant tissues. The interaction between the liquid and the surface of the material causes capillary action. Vilas Kodam explained to the students that this process is essential to plants and is employed in many everyday tasks. Pupils were motivated to discuss what they already knew about the topic, which created an interesting learning environment. The students were allowed to closely observe the experimental setup. We concluded the activity by taking group photos.

Snapshot of the Event:



Geotagged Photos:





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Event Poster:





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List of ISHRAE attendees for the event.

Sr. No.	Name	Position
1	Sahil Jadhav	Secretary
2	Vilas Kodam	Co K12 chair
3	Ankit Kshirsagar	Sports chair
4	Jaee Hindalekar	Environment chair
5	Rahi Prajapati	Chapter working committee
6	Vedika Mathews	Sub-Chapter working committee
7	Amogh Solanki	ISHRAE member
8	Sanjay Gundeti	ISHRAE member

Report Prepared By: Vedika Mathews

Name of the Student: Vedika Mathews

Post of the student: Sub-Chapter Working

Committee

Report Approved By: Prof. Cleta Pereira Name of the Faculty: Prof. Cleta Pereira Post of the Faculty: Faculty Coordinator