



DON BOSCO INSTITUTE OF TECHNOLOGY

Premier Automobiles Road, Kurla West, Mumbai - 400070



Department of Mechanical Engineering Report on – K12 Activity

Title: Fun with Science_Tyndall Effect

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. Cleto Pereira

Objectives:

- ❖ To introduce Tyndall Effect
- ❖ To explore Tyndall effect in various domains and its advantages and disadvantages
- ❖ To encourage critical thinking among the students

Outcomes:

- ❖ Comprehensive understanding of the concept of Tyndall effect
- ❖ Knowing the advantages and disadvantages of Tyndall effect
- ❖ Knowing the applications of Tyndall effect

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. Cleto 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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Tyndall Effect

Ankit Kshirsagar conducted this experiment. The experimental setup consisted of 3 glasses and a LASER. The first glass was a mixture of salt and water. The second glass was a mixture of chalk powder and water. The third glass consists of a mixture of water and milk.

The Tyndall Effect is the phenomenon where light is scattered in many directions by small particles or colloidal suspensions in a transparent medium, making the beam of light visible. Tyndall effect is more pronounced when the particles present are of a larger size. Hence, due to the large particle size of chalk powder, more scattering is observed when a LASER beam is made to pass through it.

In order to observe the phenomenon of light scattering, the students were eager to utilise the LASER device and send the beam through the solutions. This contributed to students' new understanding of this concept. Common examples of Tyndall effect were given to the students. The pupils 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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ISHRAE
Thane Chapter

Event Poster:

DON BOSCO INSTITUTE OF TECHNOLOGY
DEPARTMENT OF MECHANICAL ENGINEERING
ISHRAE STUDENT CHAPTER

presents

FUN WITH SCIENCE

$E=m.c^2$

for Students of
CES's MICHAEL HIGH SCHOOL

11th December 2023
2 pm to 4pm

Don Bosco Institute of Technology, Kurla

For more details contact
Omkar Ghole : 8108688942
K12 Chair



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ISHRAE
Thane Chapter

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. Cleto Pereira

Name of the Faculty: Prof. Cleto Pereira

Post of the Faculty: Faculty Coordinator