

Expert Lecture and workshop

Date: 12 August 2019

Venue: Auditorium, Ismail Yusuf College and Senior Physics Laboratory

Organizers: Department of Physics

Overview

The one-day workshop on "Learning Physics through Demonstrations" aimed to enhance understanding and interest in physics among educators and students through hands-on demonstrations. The workshop was organized by Department of Physics and attended by 72 participants.

Objectives

1. **Enhance Understanding:** To deepen participants' understanding of physics concepts through practical demonstrations.
2. **Promote Engagement:** To foster interest and engagement in physics through interactive learning experiences.
3. **Skill Development:** To equip educators with effective demonstration techniques for teaching physics concepts.

Highlights of the Workshop

Session 1: Introduction to Demonstration-Based Learning

The workshop began with an introduction to the importance of demonstration-based learning in physics education. The facilitators emphasized how hands-on experiences can make abstract concepts more tangible and memorable for students.

Session 2: Practical Demonstrations

Participants engaged in a series of practical demonstrations covering various topics in physics such as:

- **Mechanics:** Demonstrations on Newton's laws of motion using simple setups involving pulleys, inclined planes, and collision experiments.
- **Optics:** Experiments illustrating principles of reflection, refraction, and polarization using lenses, mirrors, and light sources.
- **Electricity and Magnetism:** Activities showcasing electromagnetic induction, circuits, and magnetic fields.

Each demonstration was accompanied by explanations of the underlying physics principles and discussions on how to effectively integrate these activities into classroom teaching.

Session 3: Interactive Workshops

Participants were divided into groups to create their own demonstration setups based on given physics concepts. This session encouraged collaboration and creativity among educators, who shared their ideas and received feedback from peers and facilitators.

Session 4: Application in Teaching

The final session focused on strategies for incorporating demonstration-based learning into the regular curriculum. Participants discussed potential challenges and solutions, as well as resources available to support ongoing implementation of these methods in their classrooms.

Conclusion

The workshop concluded with a reflection on the importance of hands-on learning experiences in physics education. Participants expressed enthusiasm about the practical strategies and ideas gained during the workshop, noting their intention to apply these techniques to enhance student engagement and understanding in their own teaching practice.

Overall, the workshop on "Learning Physics through Demonstrations" successfully achieved its objectives of providing educators with practical tools and techniques to make physics learning more interactive and accessible. Participants left with renewed enthusiasm and a commitment to fostering a deeper appreciation for physics among their students.

Feedback: Participants provided positive feedback on the interactive nature of the workshop and expressed a desire for more such practical sessions in the future.

Recommendations: It was recommended that follow-up sessions or online resources be provided to support educators in further developing their skills in demonstration-based teaching.

This workshop not only empowered educators with new teaching methodologies but also reinforced the importance of experiential learning in the field of physics education.




Head of Physics Department
Government of Maharashtra's
Ismail Yusuf College of
Arts, Science & Commerce,
Jogeshwari (East), Mumbai-400 060.

Department of Physics conducted one day Workshop on Learning Physics through Demonstrations and guest Lecture on 12 August 2019 by Shri B.D. Chakradev (HOD, Physics Department, CHM College, Ulhasnagar, Maharashtra 421003)

Total 72 students and staff attended guest lecture




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W. L. L.



GOVERNMENT OF MAHARASHTRA
ISMAIL YUSUF COLLEGE OF ARTS, SCIENCE AND COMMERCE
Jogeshwari (E), Mumbai: 400060

Date:-01/08/2019

Department of Physics

Notice

We are pleased to inform you that the Department of physics has organized an Expert Lecture and workshop on Learning physics through demonstration on 12th August 2019 in auditorium at 9:00 am.

(HOD Physics)

Head of Physics Department
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Jogeshwari (East), Mumbai-400 060.

DATE: 12/08/2019

ATTENDANCE

EVENT: Work shop

NO. OF STUDENT: 72 and staff attended

SR. No.	NAME OF THE STUDENT	signature
1	Dr. RAVINDRA KALESH	
2	Mr. PRAVIN RATHOD	
3	Mr. ASHISH BHAINA	
4	Mr. Shardendu Tripathy	
5	Mr. Sarvesh Shinde	<i>S.S.</i>
6	Miss Arpana Sandimani	<i>A.S.</i>
7	SHAH VIGHNESH KISHOR	P
8	SHAIKH BADRUDDIN SHAMSUDDIN	P
9	SHAIKH HUDA SIRAJULHAQ	P
10	QAZI ANWAR ABDUL GAFFAR	P
11	SINGH SHIVAM RANJEET	P
12	SINGH SNEHA SANTOSH	P
13	VISHWAKARMA RAHUL VINOD	P
14	YADAV AMAN RADHESHYAM	P
15	SAYED MUZAFFAR ISHAQUE	P
16	YADAV SANKET SAJIVAN	P
17	SAHU JAI JAI RAM KUMAR BAIDYANATH	P
18	AHIRE AJAY RAMCHANDRA	P
19	SAYYED ADIL NAWAZ MOHD ASRAFIL	P
20	SHAIKH NAMEERA AMEEN	P
21	KHAN SABA PARVEEN ABDUL WAHAB	P
22	TRIPATHI SHIVAM ANIL	P
23	PANDIT UPENDRA AMIRI	P
24	JAIWAR AARTI RAMCHANDRA	P
25	ZAID ANSARI	P
26	SHOIBA ANSARI	P
27	ATUL YADAV	P
28	ANSARI UZMA BANO HABI BURREHMAN	P
29	MISHRA NILESH RAMASHANKAR	P
30	VICKEY GUPTA	P
31	SIDDESH SANGONDKAR	P
32	MORE VAIDEHI SURESH	P
33	PATEL RUKAIYA IQBAL	P
34	GUPTA SHWATI VIRENDRA	P
35	ANSARI SHARIF MOHAMMAD AKRAM	P
36	DALAVI KRUSHNA SUBHASH	P
37	NALAWADE KAJAL SURESH	P
38	SAYYED SHARMIN AZGAR	P
39	ABDUL SHAIKH	P
40	SIRAJ AHMED	P
41	FARHEEN KHAN	P
42	YADAV POOJA MUNNA	P
43	KHAN HENA MOHD BASIT ALI	P
44	ANSARI SANA ABBAS	P

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 Science & Commerce,
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