Sophia College (Autonomous), Mumbai

Physics Departmental Report 2020 - 2021

Departmental Activity:

1. Students participated in an online '**Night Sky Observation'** on 21st November, 2020 at 7.00 pm to 8.00 pm organized by Nehru Science Centre, Mumbai.

2. Students participated in an online '**Live Sky Observation with Mars'** on 8th December, 2020 at 7.00 pm to 7.30 pm organized by Nehru Science Centre, Mumbai.

3. Students participated in an online live web cast of the '**Great Conjunction of Jupiter and Saturn'** on 21st December, 2020 at 6.00 pm onwards organized by Nehru Science Centre, Mumbai.

4. The Department organized a Nobel **Oration** on 5th February, 2021 at 5.00 pm on 'Nobel Prize in Physics 2020: of compact objects and black holes' by Dr. Jasjeet Singh Bagla, Indian Institute of Science Education and Research, Mohali supported by DBT Star Status.

5. Students participated in **online Science Day Activity** by preparing 'Cartoon Strip' on 'Inspiring Stories of Indian Scientists' on 27th February, 2021.

Participation in Activities by Faculty:

1. Attended 2-day webinar on 'Introduction to Research Designs – from Theory to Practice' on 29th April 2020 and 30th April 2020 organized by IQAC, Elphinstone College, Mumbai.

2. Attending Faculty Development Programme on Online Classes and co-creating MOOCs from 20th April to 6th May 2020 organized by Ramanujan College, teaching Learning Centre (PMMMNMTT, MHRD)

3. Attended 3-day Online FDP on 'How to take your College Session Online' organized by Mumbai University, Lala Lajpatrai College of Commerce and Economics & North Storm Academy on 30th April, 1st May and 2nd May.

4. Attended National level Webinar on 'Making Faculties Technology Ready' on 2nd May 2020 organized by IQAC, Cosmopolitan's Valia College of Commerce and Arts.

5. Attended a five-day Workshop on "Following Components: Introduction to Animation, Creation of Animated object and characters, Creation of Interactive

Animation and Evaluation" on 14th May to 18th May 2020 by Universal Teachers Academy, Puducherry, India.

6. Attended Two Day National Workshop on "Nanomaterials on Human Safety and Environment" on 15th – 16th May 2020 by K.M.E Society's G.M. Momin Women's College, Mumbai.

7. Attended Online Workshop on "Introduction to Research Based Pedagogical Tools (RBPT)" from 18th May – 23rd May 2020 by Pandit Madan Mohan Malviya National Mission on Teachers and Teaching, IISER Pune and Wilson College, Mumbai.

8. Attending Two-week workshop for Teaching and Non-Teaching on "From e – Learning to e – Training: A Comprehensive Guide for all your Administrative work" from 25th May to 5th June 2020 organized by Ramanujan College, teaching Learning Centre (PMMMNMTT, MHRD).

9. Attending five-day FDP on "Evolution from Offline to Online Teaching" from 30th May – 3rd June 2020 by Satish Pradhan Dnyanasadhana College, Thane, Internal Quality Assurance Cell and Faculty Development Program Committee in association with Department of Information technology, University of Mumbai, Yashwantrao Chavan Maharashtra Open University, Nashik (Regional Centre, Mumbai) & Microsoft.

10. Participated in the IQAC Annual Conference 2020 – 21 'Autonomy – The Path Ahead' from 16th to 18th February 2021 organized by Sophia College (Autonomous), Mumbai.

11. Participated in the talk "Academic Research and Career" held on 27th February 2021, on the occasion of XIth Quest Wider than the Sky, National Science Day celebration, organized by Sophia College (Autonomous), Mumbai

12. Actively participated in the 'International Women's Day' celebration '21st Century Generation Equality' on 8th March 2021 organized by Sophia Centre for Women's Studies and Development and St. Xavier's Institute of Education in collaboration with The Russian Centre for Science and Culture.

Learnt how to use the following software during the above sessions, which will help in online teaching:

    a. Google Classroom
    b. Google docs
    c. Google forms

d. Google sites

e. Zoom

f. Open broadcaster software to prepare videos of study material.

g. Open Shot Video Editor to edit the video before upload it on social media.

h. Uploading videos on YouTube

i. Visualization tools like Live charts using live.amcharts.com and drawing tools like draw.io

j. Creating mindmaps using MindMaps software

k. Renderforest for animated videos of study material.

l. Create MOOCs using EduNext.

m. Learn Talent LMS software for live class

n. For seamless Assessment learnt softwares like: Socrative, Kahoot, Class maker etc.

o. Creation of Animated PP

p. Digital Signature etc

Published research article 'Information Communication Technology – The wireless learning for Specially Challenged Students' in book titled "**Disability is not Inability: Shift Paradigm from Charity to Rights",** ISBN No. 978 – 81 – 7880 – 877 – 2, 2021

Worked actively in Exam committee, Science Day Committee, EXSP committee, Staff Activity Committee, Add on Course Committee, Admission Committee.