

Departmental Report (2023 - 2024)

Preliminary information

I Department profile: Dr. Meeta Saxena, Head of Physics Department

II Courses/Papers taught:

F.Y.B. Sc.				
Theory (Semester 1)				
Sr. No.	Course Code	Title of Paper	Credits	Status
1	SPHY111MN	Everyday Physics	2	NEP
2	SPHY111MNP	Everyday Physics (Practical)	2	NEP
3	SVSC109	Basic Instrumentation Techniques in Research	2	NEP
4	SVSC110	Digital Electronics & its applications	2	NEP
5	IKS108	Nanotechnology in Ancient India	2	NEP
6	OE102A	Electricity from Biosystem	2	NEP
7	OE102B	Laser & its application	2	NEP
Theory (Semester 2)				
1	SPHY122MN	Fundamentals of Electronics, Electricity and Applied Physics	2	NEP
2	SPHY122MNP	Fundamentals of Electronics, Electricity and Applied Physics (Practical)	2	NEP
3	SSEC209	Instrumentation & Circuit Design	2	NEP
4	SSEC210	Semiconductor Devices and Amplifier	2	NEP
5	OE202A	Electricity from Biosystem	2	NEP
6	OE202B	Laser & its application	2	NEP

III BOS composition:

Name	Designation
Dr. Meeta Saxena, Head of department	Chairperson
Prof. Shekhar Deodhar, Head of Physics Department, Wilson College, Mumbai	University Representative
Dr. Pravin More, Prof, Department of Physics, Dr. Homi Bhabha State University, Nano Material Application Laboratory, Mumbai	Subject Expert (outside Parent University)
Dr. Pranesh Sen Gupta, Head Surface & Diffusion Study Section, Material Science Division, BARC, Mumbai	Industry Professional
Dr. Pushpinder Bhatia, Principal, Guru Nanak College of Arts, Science & Commerce, Mumbai	Senior Teacher (other member of faculty)
Dr. P. M Dongre, Principal, Arts, Commerce & Science, Senior College (Grant – in – aid), Satral, Ta. Rahuri, Dist Ahamadnagar & Director, Research and Innovation, Pravara Rural Education Society, Loni.	Senior Teacher (other member of faculty)
Ms. Iqra Khatri	Postgraduate meritorious alumnus

IV Dates of BOS meetings: 28th October 2023 & 16th March 2024

Report

Please note that the following are the pointers to facilitate report writing. Feel free to alter the sequence of the items. Write about the ones applicable to the department for the given academic year (AY 2023-24) and ignore what is NOT applicable. Please ADD relevant points, if not included in the list.

One or two photographs per event would suffice.

1. Activities Conducted by the department:

- Title of the activity/event: 'No Shadow Day'
- Date (from & to): 18th August 2023
- Number of staff members involved: 01
- Number of students involved: @ 06

Geotagged Photographs (please include photographs even if they are not geotagged)



2. Activities Conducted by the department:

- Title of the activity/event: 'Mehndi Competition' on Physics
- Date (from & to): 22nd December 2023
- Number of staff members involved: 01
- Number of students involved: @ 05



2. (a) Field trips done by the department, should include:

- Name of the place: Nehru Science Centre
- Date (from & to): 11st December 2023
- Number of staff members involved: 02
- Number of students involved: 20
- Geotagged Photographs (please include photographs even if they are not geotagged)



3. Special pedagogical tools used, other than the lecture method:

a) Activity based learning:





<https://docs.google.com/document/d/1RmPsj5df7SfLjXTIp1j6lV7Kun410k9/edit?usp=sharing&oid=112781318335877768091&rtpof=true&sd=true>

c) Activity based learning:



<https://docs.google.com/document/d/1dytHUELcsUA14vhcP6P7otZnO5Apfrwc/edit?usp=sharing&oid=112781318335877768091&rtpof=true&sd=true>

d. Activity based learning:



<https://docs.google.com/document/d/1m14e7pa4c4ugz9tUXgnm5TL-nTbkT1vz/edit?usp=sharing&oid=112781318335877768091&rtpof=true&sd=true>

4. Any special programs conducted for either /both slow learners and advanced learners.

a) Science Day celebration: Outreach activity





<https://docs.google.com/document/d/15lavTgTwLTjjwnXL29JE4s49Orbk9SpD/edit?usp=sharing&oid=112781318335877768091&rtpof=true&sd=true>

5. Mentor Mentee programs conducted by the department: yes

6. Research Papers Presented: Research article published:

1) Oral presentation on 'Laser Beam Irradiation on Doped Polyblends' in the International Conference held on 26th & 27th May 2023.

2) Published an article on 'Laser Beam Irradiation on Doped Polyblends' in Peer Reviewed & UGC Listed Journal No. 47023 Galaxy Link – ISSN 2319 – 8508 with Impact factor 7.878.

3) International publication on 'Effect of radiation on optical, electrical and structural characterization on MNA doped PS: PVC polyblend' in International Halich Congress on multidisciplinary scientific research VII, January 23 – 25, 1460 – 1467.

4) Oral presentation on 'Radiation induced conductivity in Doped PS: PVC polyblend' in 9th Ankara International Congress on Scientific Research held on 26 to 29th December 2023.

5) Published research article on 'Sustainable Future: A Fuel from Plastic Waste' in Sophia Lucid - February 14, Volume III, Issue – 1, Pg. 150 – 161, 2024.

7. Research Grants Received: Nil

8. Research Guide for PhD students: Nil

9. National or International awards/fellowships received: Nil

10. Department/ lecturers having research projects funded by Government (include RUSA), Non-Government agencies, college during the year: Nil

11. Workshops/seminars/ Conferences conducted during the year: Nil

12. Workshops/seminars/ Conferences conducted on Intellectual Property Rights (IPR), during the year: Nil

13. Workshops/seminars/ Conferences conducted on Gender related issues (IPR), during the year: Nil

14. Extension activities carried out in the neighborhood sensitizing students to social issues for their holistic development: Nil

15. E-content development: Nil

16. Capacity Development and Skill Enhancement activities organized for improving students' capabilities; like Soft Skills, Language and Communication Skills, Life Skills (Yoga, Physical fitness, Health and Hygiene) & Awareness of Trends in Technology.

17. Guidance/coaching for competitive examinations and career counselling offered to students.

Invited to conduct Special lecture for MSc students (Material Science):

Date: 27th April 2024

Duration: 9.00 am to 11.00 am (Will share the data)