

# DPMB STUDENTS VISIT NANAJI DESHMUKH PLANT PHENOMICS FACILITY, IARI

*Phenomics is that amalgam of the new-age technology and conventional knowledge which will upend the face of Biology.*

On May 25, 2023, Thursday, first year MSc. Plant Molecular Biology and Biotechnology students accompanied by Professor Akhilesh K. Tyagi, Professor Sanjay Kapoor and Dr. Amit Singh along with 3 PhD scholars visited the Nanaji Deshmukh Plant Phenomics Facility established at Indian Agricultural Research Institute, New Delhi. The tour was aimed at deepening the practical understanding of students pertaining to the dynamic and ever-evolving field of phenomics, which involves the phenotypic assessment of plant health in laboratory and field conditions.



The tour commenced with a video presentation to familiarize the attendees to the subject matter at hand, followed by a holistic tour of the facility including the instrumentation and operations, led by Dr. Dhandapani R. who shed light on the various processes invested in a comprehensive plant health check-up by use of AI technology and the scientific principles that go behind the same. The intrigued young minds brimmed with curiosity and were welcomed to ask questions, to which they attained satisfactory and thoroughgoing answers.

Finally, the team was invited to Dr. AK Singh's office, who is the acting director and principal scientist at IARI. He graced the room with a presentation in which he highlighted the challenges faced by farmers and plant breeders along with the efforts and approaches employed by the scientists to develop more resilient and productive crop varieties in the current ventures at IARI. This talk marked the culmination to the trip which impregnated the students with not only remarkable experiences and learnings, but also presented them with ample food for thought



**- Report by Nandini Killa**



## **Visit to Central Instrumentation Facility & BioNEST Facility University of Delhi South Campus**

The Department of Botany along with the Institution's Innovation Council (IIC) of Hansraj College organized a visit to the Central Instrumentation Facility & BioNEST Facility University of Delhi South Campus on Wednesday, November 9, 2022. The site visit was attended by 42 students from B.Sc.(H) Botany III<sup>rd</sup> year and Life Science (P) I<sup>st</sup> year. The objective of the visit was to introduce students to state-of-the-art instrumentation facilities within University of Delhi and ignite their minds towards a research oriented career. This visit was coordinated by Dr. Ridhi Khurana, Dr. Archana Singh and Dr. Sahil Mehta from the Department of Botany, Hansraj College.

The BioNEST is a Bio-incubator facility under the aegis of Department of Microbiology at University of Delhi South Campus. This incubator supports and mentors entrepreneurial scientists to foster technologies in formative stages by providing them with access to designated lab space and instrumentational facilities. Students were shown advanced microbiology tools and techniques – fermentation facility, culture rooms and chambers, sterile rooms, deep freezers, and molecular biology instruments.

The Central Instrumentation Facility of the University of Delhi South Campus is an advanced instrumentation facility designed to support and nurture the growing scientific demands of academicians. They have well-trained experts to handle and provide access to superior instruments for academic users. The students were taught the principles, functioning and usage of latest instruments like for Genomics – Genotyping, Sequencing, Real-Time qPCR, for Proteomics – LCMS, UPLC, CD Spectrophotometry, for Imaging – Confocal Microscopy, Scanning Electron Microscopy and Laser Dissection Microscopy, and Flow Cytometry.

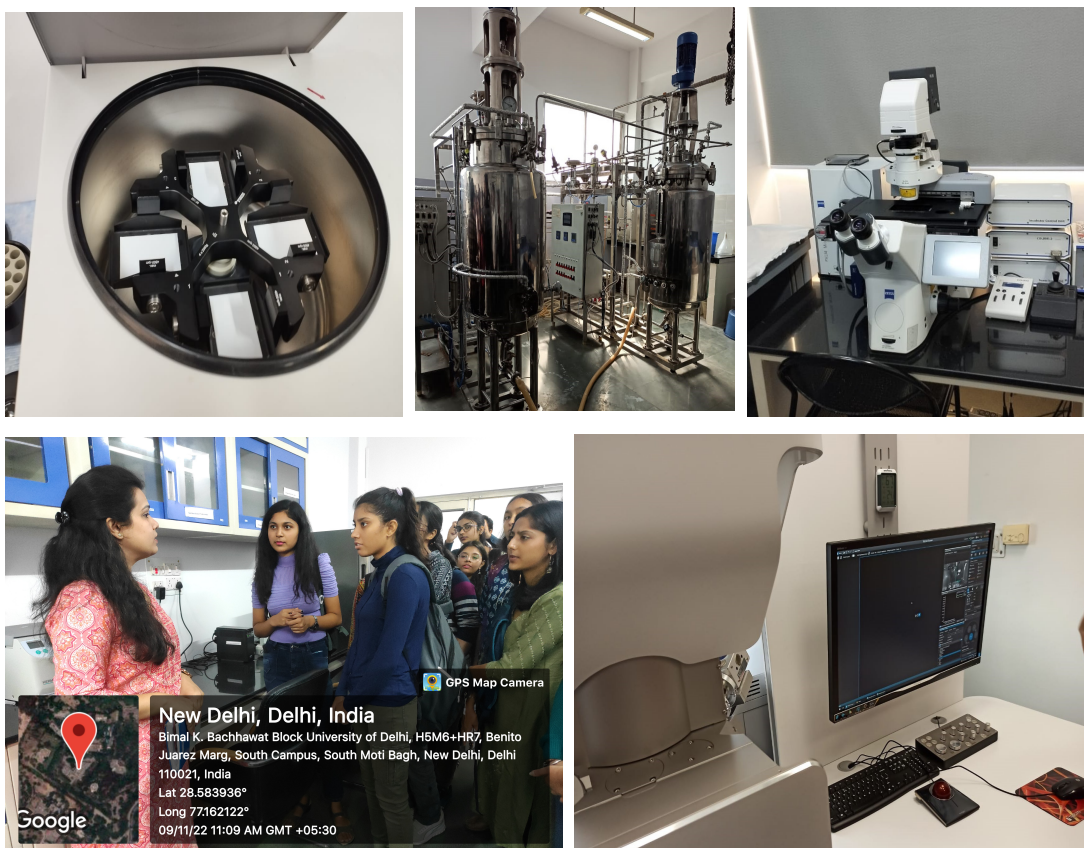
## List of Participants

List of students attended the visit to Central Instrumentation Facility and BioNEST Facility at  
University of Delhi South Campus  
on Wednesday, 9 November 2022

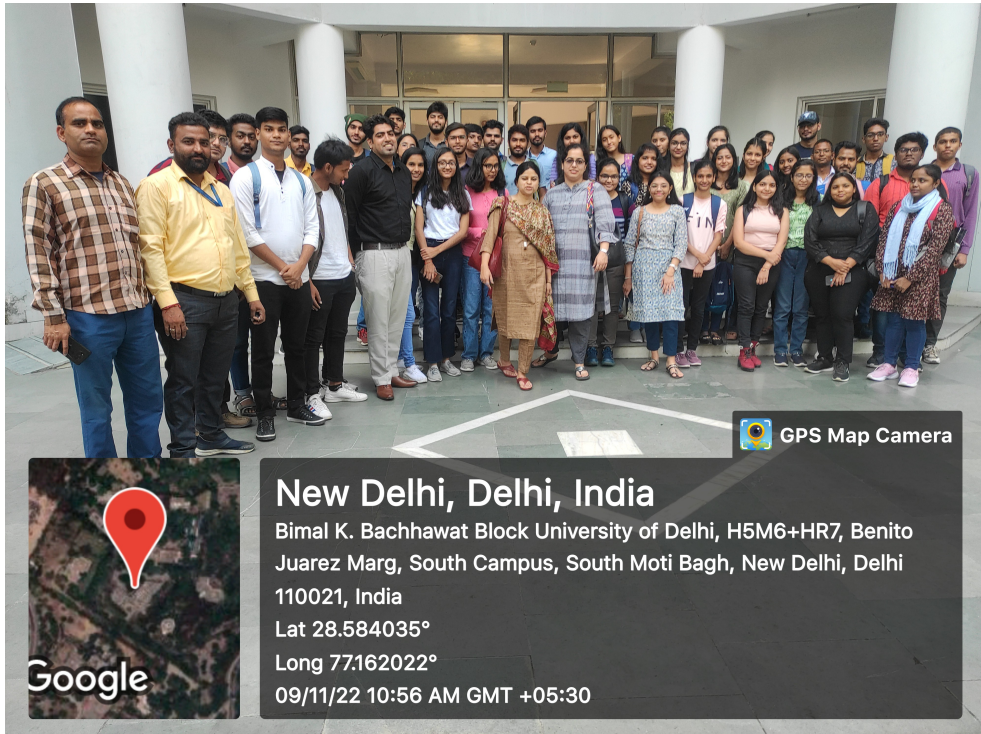
S.No.	Name	Course	Contact No.	Roll No.
1	Siddarth	B.Sc.(H) Botany III Year	7230964140	13210
2	Shivang	B.Sc.(H) Botany III Year	8538944486	13180
3	Tarun	B.Sc.(H) Botany III Year	8287196785	13250
4	Tannu Yadav	B.Sc.(H) Botany III Year	9350064641	13242
5	Sonam	B.Sc.(H) Botany III Year	8930632808	13191
6	Kanika	B.Sc.(H) Botany III Year	6230331867	13185
7	Kavali Vijender	B.Sc.(H) Botany III Year	8185973629	13202
8	Vikram	B.Sc.(P) Life Science I Year	8051873131	9248
9	Sneha Longani	B.Sc.(P) Life Science I Year	7683084485	9210
10	Nagma Malik	B.Sc.(P) Life Science I Year	9910450800	9240
11	Deepali Gautam	B.Sc.(P) Life Science I Year	7683084485	9257
12	Nikhilesh Maity	B.Sc.(P) Life Science I Year	7209584875	9261
13	Ashish Kumar	B.Sc.(P) Life Science I Year	8114559993	9220
14	Adarsh Pandey	B.Sc.(P) Life Science I Year	9305485928	9229
15	Jyotirmoy Paul	B.Sc.(P) Life Science I Year	9002847653	9228
16	Abhishek Singh	B.Sc.(P) Life Science I Year	8303378890	9273
17	Vinay Kumar	B.Sc.(P) Life Science I Year	9650445069	9236
18	Akhand Pratap Kamal	B.Sc.(P) Life Science I Year	8701774259	9222
19	Vineet Kumar Singh	B.Sc.(P) Life Science I Year	9354187199	9209
20	Ayush Galyan	B.Sc.(P) Life Science I Year	9773661438	9242
21	Vanshika Gupta	B.Sc.(P) Life Science I Year	8368434084	9232
22	Asmi Rawal	B.Sc.(P) Life Science I Year	9667648078	9204
23	Sanghmitra Anand	B.Sc.(P) Life Science I Year	8126195265	9262
24	Suvom Barik	B.Sc.(P) Life Science I Year	9810328709	
25	Pratyasha Gautam	B.Sc.(P) Life Science I Year	9718636371	9263
26	Deeksha Singh	B.Sc.(P) Life Science I Year	9717852804	9244
27	Anushka Saraswat	B.Sc.(P) Life Science I Year	7906526875	9226
28	Chhavi Gupta	B.Sc.(P) Life Science I Year	9654635547	9207

29	Sanjana Sharma	B.Sc.(P) Life Science I Year	8638384955	9219
30	Akansha Bhati	B.Sc.(P) Life Science I Year	9910146557	9264
31	Pammy Soren	B.Sc.(P) Life Science I Year	7644068599	9201
32	Simar Malhotra	B.Sc.(P) Life Science I Year	9368404060	9216
33	Anjali Srivastava	B.Sc.(P) Life Science I Year	8303568594	9214
34	Kriti Singh	B.Sc.(P) Life Science I Year	7895983853	9208
35	Komal Goyal	B.Sc.(P) Life Science I Year	9368548364	9230
36	Kirti Kumari	B.Sc.(P) Life Science I Year	8587872015	9205
37	Hansi	B.Sc.(P) Life Science I Year	8700029176	9253
38	Nitin Prabhat	B.Sc.(P) Life Science I Year	8533843125	9225
39	Harshvardhan Singh	B.Sc.(P) Life Science I Year	7014854440	9259
40	Aniket Chakravarti	B.Sc.(P) Life Science I Year	7217607978	9258
41	Ankit Kumar	B.Sc.(P) Life Science I Year	7838974198	9213
42	Sarthak Verma	B.Sc.(P) Life Science I Year	9899937782	9246

Photographs of this memorable and insightful visit are enclosed herewith.















## **PMB GUEST LECTURE**

University of Delhi South Campus



**WEDNESDAY**

**Feb 01, 2023**

**11:00 AM**

**@Biotech Audi**

**Dr. Sudhanshu Sekhar Das**

**Business Consultant (Patent Agent), Anaqua**

**PMB and DU Centenary Workshop  
on IPR and its Protection**



Topic	Time (start)	Time (end)	Total Duration	Notes
Patenting in Biotechnology	11:00 AM	12:00 PM	60	(a) How to Patent Biotechnology Invention (b) Patent law & Patent Filing Process (c) Patent Information Mining: the basis and how to do patent searches in
Lunch Break	12:00 PM	02:00 PM	120	
Hands on Workshop on how to do patent searches (determining patentability searches) on your own technologies for <b>M.Sc. 2<sup>nd</sup> year students</b>	02:00 PM	03:20 PM	80	An exploration of free Patent databases of many regions (United States (USPTO), European Patent Office (ESPACENET), India (INPASS), and WIPO (PATENSCOPE)), Conducting a patentability search in plant biotechnology domain
Break	3:20 PM	3:30 PM	10	
Hands on Workshop on how to do patent searches (determining patentability searches) on your own technologies for M.Sc. 2nd year students for <b>M.Sc. 1<sup>st</sup> year students</b>	3:30 PM	4:50 PM	80	An exploration of free Patent databases of many regions (United States (USPTO), European Patent Office (ESPACENET), India (INPASS), and WIPO (PATENSCOPE)), Conducting a patentability search in plant biotechnology domain Novelty & Inventive Step assessment for



## DPMB GUEST LECTURE Feb 01, 2023

"PMB and DU Centenary Workshop on IPR and its Protection" by Dr. Sudhanshu Sekhar Das

S.NO.	NAME	AFFILIATION/DEPARTMENT	SIGNATURE
1.	K.V.S.K. Arjun	PMB- student M.Sc.(CP)	
2.	Ashwani	PMB - student M.Sc.(F)	
3.	Dr. Vibha Verma	PMB - RA in SK lab	
4.	Shinom Shomoy	PMB - Ph.D student	
5.	Sheena Shah	PMB - Student MSc (F)	
6.	Rinki	PMB - Student Msc. (f)	
7.	Muskaan Johnson	PMB - Student MSc. (F)	
8.	Milinda Lahiri	PMB - Student M.Sc. (F)	
9.	Naypreet Daler	PMB → Internship in SKALAB	
10.	Anvitha K.U	PMB → Dissertation student (SKA lab)	
11.	Jasmin mural	PMB → → Dissertation (SKA Lab)	
12.	Nikunj Bhandari	PMB → PhD student	
13.	Jaspreet Kaur	PMB - student MSc I st year	
14.	Chhavi Bhandari	PMB - student MSc. I st year	
15.	AMAN KUMAR SINGH	PMB - Student MSc I st year	
16.	ADITYA KUMAR	PMB - Student M.Sc. I year	
17.	SUNNY	PMBB - student M.Sc. 1 st yr.	
18.	H. Kaur	PMBB - Student MSc 1 st year	
19.	PRASHANSA SHARMA	PMBB - M.Sc. 1 st yr	
20.	Nandini Killa	PMBB - M.Sc. (prev. year)	
21.	Jayati	PMBB - M.Sc (prev. year)	
22.	Kshama	PMBB - M.Sc. (1 st year)	
23.	Ankita kumari	PMBB - M.Sc (1 st year)	
24.	Neha Chauhan	PMBB - M.Sc. (1 st year)	
25.	Ruchi Soren	PMBB - M.Sc (1 st year)	
26.	Abhilasha Singh	PMBB - M.Sc (1 st year)	
27.	Ankita Prusty	PMB Ph.D. (Thesis submitted)	



S. NO.	NAME	AFFILIATION / DEPT.	SIGNATURE
28.	Inderjit Kaur	DPMB, UDSC	Inderjit
29.	Yastika Dhirga	DPMB	Yastika
30.	lisha khungan	Ph.D; DPMB	lisha
31.	Rinchinla	DPMB	Rinchinla
32.	Ringyao Iajo	DPMB	Ringyao
33.	Veena Sicha	CIF	Veena
34.	RAHUL	Ph.D, DPMB	Rahul
35.	Monika	Ph.D DPMB	Monika
36.	Soma Ghosh	Ph.D. Scholar, DPMB	Ghosh
37.	Sneha Pathak	M.Sc.(F), DPMB	Sneha
38.	Ankit Kumar	M.Sc(F), DPMB	Ankit
39.	Diksha Bishr	Ph.D. DPMB	Diksha
40.	Manpreet Kaur	M.Sc (1 <sup>st</sup> year) DPMB	Manpreet
41.	Sonam Pahuja	Ph.D., DPMB	Sonam
42.	Bhaukna	M.Sc.(F), DPMB	Bhaukna
43.	Nikita Gupta	"	Nikita
44.	Amit	Ph.D	Amit
45.	Baiden	Ph.D	Baiden
46.	Kamal Kumar	Asst. Prof., DPMB	Kamal
47.	Amit Kumar Singh	Asst. Prof. DPMB	Amit
48.	Surekha K. Agarwal	Prof., DPMB	Surekha
49.	Arun Kumar Sharma	Professor DPMB	Arun
50.	Anil Grover	Professor DPMB	Anil
51.	Sajay Kapoor	Professor DPMB	Sajay



## DPMB WORKSHOP

Feb 01, 2023

## Batch I M.Sc. Final year students.

S.No	Name	Affiliation	Signature
1	Ashwani Kumar	PMB department	Ashwani
2	Milinda Lahiri	PMB - M.Sc. (F)	Milinda Lahiri
3	Nikita Gupta	PMB - M.Sc. (F)	Nikita Gupta
4	Muskaan Johnson	PMB - M.Sc. (F)	Muskaan
5	Rinki	PMB - M.Sc. (F)	Rinki
6	Sheena Sheh	PMB - M.Sc. (F)	Sheena
7	K.V.S.K. Arjun	PMB - M.Sc. (F)	Arjun
8	Bhavana	PMB - M.Sc. (F)	Bhavana
9	Ankit Kumar	PMB - M.Sc. (F)	Ankit
10	Smritha Pathak	M.Sc. (F) PMBB	Smritha

## Batch II M.Sc. First year students

1.	H. Vamsi	PMB - M.Sc. first year	H. Vamsi
2.	SUNNY	PMB - M.Sc. FIRST YR.	Sunny
3.	Chhavi Bhardwaj	PMB - M.Sc. FIRST YR.	Chhavi Bhardwaj
4.	Jaspreet Kaur	PMB M.Sc. First year	Jaspreet Kaur
5.	Kshama	PMB M.Sc. First year	Kshama
6.	Ankita	PMB - M.Sc. First Year	Ankita
7.	Ruchi	PMB - M.Sc. First Year	Ruchi
8.	Aditya Kumar	PMBB - M.Sc. First Year	Aditya Kumar
9.	Prashansa Sharma	PMBB - M.Sc. 1st yr	Prashansa Sharma
10.	Manpreet Kaur	PMBB - M.Sc. 1 <sup>st</sup> year	Manpreet Kaur
11.	Neha Chauhan	PMBB - M.Sc. 1 <sup>st</sup> year	Neha
12.	AMAN KUMAR SINGH	PMBB - M.Sc. 1 <sup>st</sup> year	Amankumar Singh
13.	Nandini Killa	PMBB - M.Sc. 1st year	Nandini
14.	Jayati	PMBB - M.Sc. 1st year	Jayati





