Tirumala Tirupati Devasthanams
శ్రీ వేంకటేశ్వర కళాశాల
Sri Venkateswara College
(University of Delhi)
NAAC Grade A+

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SRI VENKATESWARA COLLEGE
(UNIVERSITY OF DELHI)

EVENT REPORT

NAME OF THE EVENT: Educational Visit to School of Life Sciences, Jawahar Lal Nehru University			
DATE	**DEPARTMENT**	**COMMITTEE/SOCIETY**	**COORDINATORS' NAME**
2nd April 2025	Department of Botany	Department of Botany	Prof. Shukla Saluja Dr. Pamil Tayal
TIME	**VENUE**	**NUMBER OF PARTICIPANTS**	**NATURE: Outdoor/Indoor; online/offline/ hybrid**
09:00 am to 1:00 pm	School of Life Sciences, Jawahar Lal Nehru University	24	Outdoor; Offline
FINANCIAL SUPPORT/ ASSISTANCE (if any):	NIL		

BRIEF INFORMATION ABOUT THE ACTIVITY

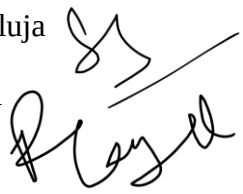
TOPIC/SUBJECT OF THE ACTIVITY	Educational Visit to School of Life Sciences, Jawahar Lal Nehru University.

OBJECTIVES	The primary objective of the study visit was to expose students to the cutting-edge instrumentation and central research facilities at one of India's premier research institutions. Also, to familiarize undergraduate students with high-end instrumentation used in biological sciences to bridge the gap between theoretical coursework and real-world research applications.
METHODOLOGY	The visit included an insightful interaction with Prof. Praveen Verma and Prof. Asish Nandi, distinguished plant biologist, who shared their research on plant-pathogen interaction studies and *Arabidopsis thaliana* mutants used to study plant immunity and stress responses.
INVITED SPEAKERS WITH AFFLIATION DETAILS (IF ANY)	**NA**
OUTCOMES	The visit left a lasting impression on the participants, with many students expressing a renewed interest in research and higher studies. The exposure to advanced facilities and direct interaction with senior researchers fostered inspiration, motivation, and clarity about career paths in the biological sciences. It provided a comprehensive understanding of the instrumentation used in contemporary biological research and allowed students to connect theoretical knowledge with real-world applications. Such visits are invaluable in shaping the academic and professional trajectories of young students.

PROOFS & DOCUMENTS ATTACHED (Tick mark the proofs attached):

1	2	3	4	5
Notice & Letters	Number of Participants & Name of participants ✓	Video	Photos ✓	Feedback Form &

✓		c li p		anal ysis
6 Ne ws clip wit h deta ils	7 Sample Copy of the Certificate	8 P o s t e r s / I n v it e s	9 Event report Atteste d by Event Coordi nator & IQAC Coordi nator	10 Any othe r doc ume nt

Departmental file no: SVC/BOT/2024-25/April 2025/Offline/ 06
IQAC File No: SVC/IQAC/BOT/2024-25/April 2025/Offline/ 06
Criterion No: II, V
NAME OF EVENT-IN-CHARGE & SIGNATURE: Prof. Shukla Saluja Dr. Pamil Tayal 

Note: Please fill in your own details in places with red font

For Reference

Criterio n I	Curricular Aspects (planning & Implementation)		Criterio n V	Student Support & Progression
Criterio n II	Teaching Learning & Evaluation		Criterio n VI	Governance, Leadership & Managemen t

Criterion III	Research, Innovations & Extension		Criterion VII	Institutional Values & Best Practices
Criterion IV	Learning Resources and Infrastructure			

Activity Report

Educational visits serve as a bridge between theoretical learning and practical experience, especially in disciplines such as biology and biotechnology where laboratory instrumentation, advanced techniques, and experimental models are critical to academic and research excellence. On 2nd April 2025, a group of B.Sc. (H) Botany third year students accompanied by two faculty members -Prof. Shukla Saluja and Dr. Pamil Tayal from Department of Botany, Sri Venkateswara college visited the School of Life Sciences (SLS) at Jawaharlal Nehru University (JNU), New Delhi. The primary objective of the study visit was to expose students to the cutting-edge instrumentation and central research facilities at one of India's premier research institutions. Also, to familiarize undergraduate students with high-end instrumentation used in biological sciences to bridge the gap between theoretical coursework and real-world research applications. The visit included an insightful interaction with Prof. Praveen Verma and Prof. Asish Nandi, distinguished plant biologist, who shared their research on plant-pathogen interaction studies and *Arabidopsis thaliana* mutants used to study plant immunity and stress responses.

The session started with the welcome address by the faculty coordinators of SLS; and overview of the School of Life Sciences (SLS), JNU. The beautiful campus surmounted by luxurious flora and fauna, is internationally renowned for its contributions to the fields of molecular biology, biochemistry, cell biology, plant science, immunology, and neurobiology. It houses multiple state-of-the-art laboratories and a Central Instrumentation Facility (CIF) that supports advanced research across multiple disciplines. The faculty members at SLS are engaged in interdisciplinary and translational research, with several holding prestigious fellowships and research grants from national and international funding agencies. The visit was designed to offer a holistic view of academic research infrastructure and practical learning in life sciences. Students were demonstrated with the various instruments used in research at the Central Instrumentation Facility at SLS; is a cornerstone for both in-house and collaborative research. It supports a wide range of advanced techniques used in molecular biology, biochemistry, genomics, proteomics, and imaging.

The facility houses a variety of sophisticated equipment such as -

a. Confocal Laser Scanning Microscope - Students were introduced to the working principles of confocal microscopy, including optical sectioning, fluorescence imaging, and live-cell imaging. Demonstrations showed how confocal microscopy helps visualize cellular structures and protein localization in high resolution.

b. Flow Cytometer - The flow cytometry section focused on how cell populations are analysed based on fluorescence and light-scattering properties. The instrument's applications in immunophenotyping, apoptosis analysis, and cell cycle studies were also discussed.

c. High-Performance Liquid Chromatography (HPLC) - The group learned how HPLC is employed for separating, identifying, and quantifying compounds. The importance of mobile and stationary phases, retention time, and detector sensitivity was explained through hands-on visualization of ongoing analyses.

d. Real-Time PCR (qPCR) Machines - A brief demonstration of qPCR included the use of fluorescent dyes and probes, and how real-time amplification data are interpreted in gene expression analysis and diagnostics.

e. Spectrophotometers and NanoDrop Instruments - These instruments were shown in the context of nucleic acid quantification and protein assays. Students appreciated how small-volume analysis plays a key role in modern molecular biology.

f. Gel Documentation System - The visualization of agarose and polyacrylamide gels post-electrophoresis was shown using gel documentation systems. Students learned how molecular markers are used for estimating fragment sizes.

The CIF tour was highly informative and ignited the students' curiosity about how theoretical concepts they study in the classroom are applied in actual research.

One of the most enriching parts of the visit was the opportunity to engage with Prof. Asish Nandi, a well-respected researcher in the field of plant immunity and stress responses. Prof. Nandi specializes in understanding how plants defend themselves against biotic and abiotic stresses. His lab primarily uses *Arabidopsis thaliana*, a small flowering plant widely recognized as a model organism in plant genetics and molecular biology. He demonstrated the significance of *Arabidopsis* in plant research, genetic and molecular tools used to create and analyze mutant lines and key signalling pathways involved in pathogen defense (e.g., salicylic acid, jasmonic acid pathways). Students were shown several mutant lines of Arabidopsis; such as Disease-resistant mutants that exhibited enhanced immunity due to overexpression of specific genes, Susceptible mutants lacking key regulatory genes and reporter gene lines expressing GFP-tagged proteins for visualization. Prof. Nandi demonstrated how these plants are grown under controlled conditions, phenotyped, and used in pathogen challenge experiments. The level of engagement from the students was remarkable, with many asking questions about future applications in agriculture and biotechnology. Faculty members from both institutions also engaged in academic discussions and explored opportunities

for future collaboration. The session ended with a reflection activity where students were encouraged to share their insights, takeaways, and ideas for further exploration based on the day's experiences.

The visit left a lasting impression on the participants, with many students expressing a renewed interest in research and higher studies. The exposure to advanced facilities and direct interaction with senior researchers fostered inspiration, motivation, and clarity about career paths in the biological sciences. It provided a comprehensive understanding of the instrumentation used in contemporary biological research and allowed students to connect theoretical knowledge with real-world applications. Such visits are invaluable in shaping the academic and professional trajectories of young students.

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PERMISSION FOR ORGANIZATION OF EVENTS

NOTE: 1.Please ensure a pre booking of the venue before getting the permission letter signed.
2. A copy of this duly filled form signed by the TIC/ Convener, IQAC Coordinator and Principal shall be submitted to ICT and/or Caretaker for necessary action.
3. Please ensure that the completion certificate of the event is physically signed by the Convener of the event, IQAC Coordinator and Principal after the event report is made.

EVENT DETAILS

1. Name of the Department/Society/Association: BOTANY
2. Name of the TIC and/or Convenor: Prof./Dr./Mr./Ms. PROF SHUKLA SALUJA
3. Proposed Title of the Event: Local Lab visit (Delhi/JNU)
4. Nature of Event: Seminar/Conference/Symposium/Workshop/FDP/Public or Community outreach/ Skill enhancement/others (Please specify) Lab visit
5. Participants: Student-centric /Faculty/ Other stakeholders (Please specify) Student centric
6. Event Type: Offline/Online/Hybrid; Indoor/Outdoor
7. Collaborating Agency /Organization (If any): –
8. Tentative List of Speakers with affiliations: –
9. Date & Time (from – to): 2.4.2025 (9:30 am)
10. Financial Assistance/ Funding received (if any) (Please specify amount): –
11. Proposed Budget (please attach details in a separate enclosure): –

12. Faculty responsible for Geo Tagged Pictures ..... Dr. Parul Tayal .....

13. Faculty responsible for Event Report ..... Dr. Parul Tayal .....

14. ICT support required, if any (ICT Lab, Laptop, LCD projector)

15. Caretaker support required (tables, chairs, public addressing system, sanitation, manpower assistance)

16. Venue requirement (Seminar hall/ Ground/others) .....

Shukla Taluja
TIC/Convenor
Date: 18.3.2025

Forwarded
Potdar
19.3.25

For official purpose

Comments (If any)

Criteria 2, 5

IQAC Coordinator
Date: 19/3/2025

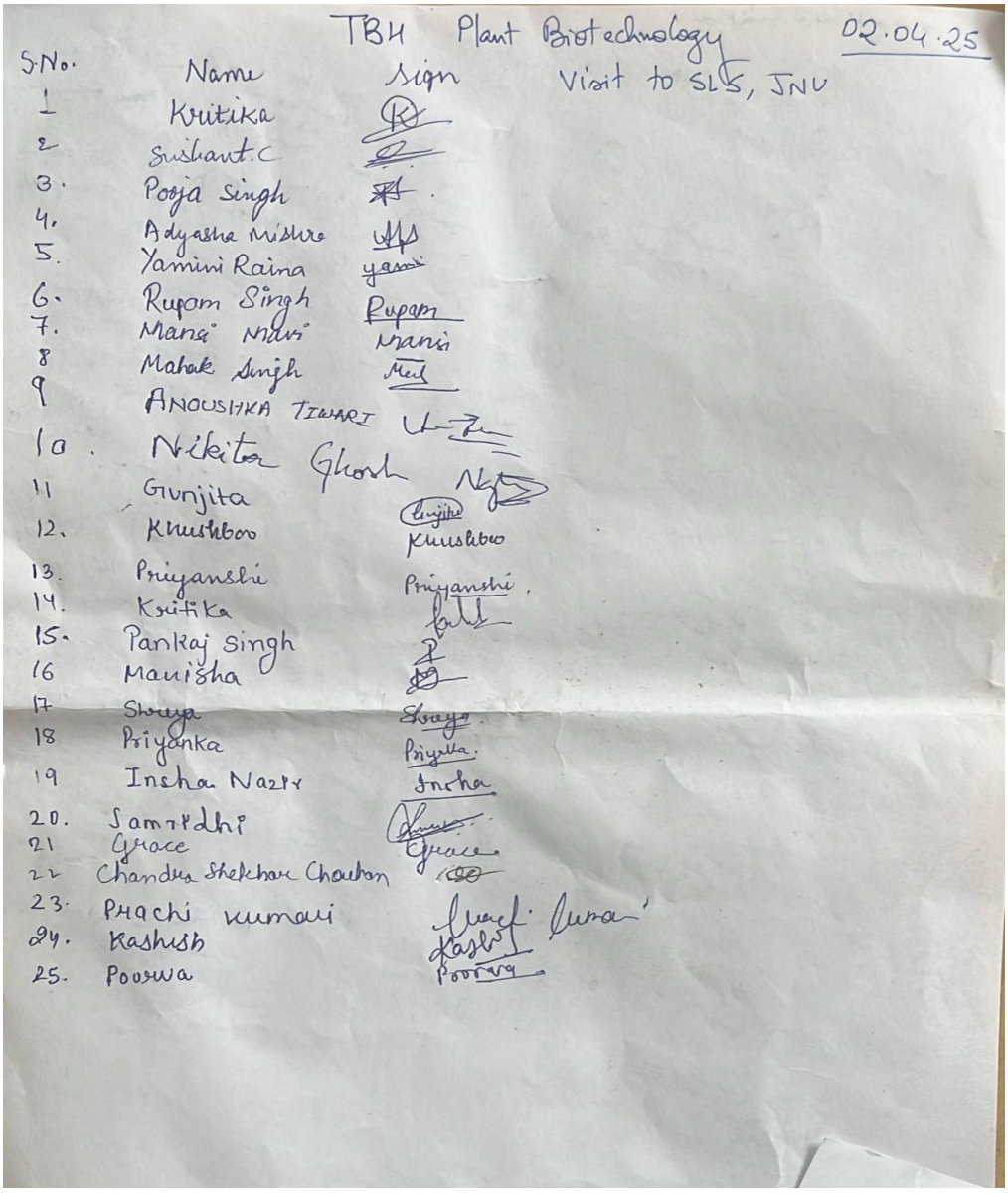
Principal
Date: 19/3/25

Plan of Visit

Time	Activity Description
9:30 AM	Welcome and Introduction
10:00 AM	Brief Discussion about the Institute
10:30 AM	Scientific Lecture by Prof Asish Nandi
11:30 AM	High Tea
12:00 Noon	Interactive tour of Research Facilities and labs

Reporting time for Visitors – 9:00 AM

Students Attendance



TBH Plant Biotechnology 02.04.25

Visit to SLS, JNU

S.No.	Name	Sign
1	Kritika	
2	Sushant.C	
3.	Pooja Singh	
4.	Adyasha Mishra	
5.	Yamini Raina	
6.	Rupam Singh	
7.	Mansi Mishra	
8	Mahak Singh	
9	ANOUSHKA TIWARI	
10.	Nikita Ghosh	
11	Gunjita	
12.	Khushboo	
13.	Priyanshi	
14.	Kritika	
15.	Pankaj Singh	
16	Manisha	
17	Shreya	
18	Priyanka	
19	Insha Nazir	
20.	Samridhi	
21	Grace	
22	Chandra Shekhar Chauhan	
23.	Prachi kumari	
24.	Kashish	
25.	Poorva	

Geo-Tagged Photographs


GPS Map Camera
New Delhi,Delhi,India
Benito Juarez Marg, JNU Campus Area, New Delhi, Delhi 110067, India
Lat 28.539814, Long 77.165953
04/02/2025 11:28 AM GMT+05:30
Note : Captured by GPS Map Camera


GPS Map Camera
New Delhi,Delhi,India
Benito Juarez Marg, JNU Campus Area, New Delhi, Delhi 110067, India
Lat 28.540716, Long 77.166372
04/02/2025 12:55 PM GMT+05:30
Note : Captured by GPS Map Camera
Maps


GPS Map Camera
New Delhi,Delhi,India
Benito Juarez Marg, JNU Campus Area, New Delhi, Delhi 110067, India
Lat 28.540209, Long 77.165878
04/02/2025 11:15 AM GMT+05:30
Note : Captured by GPS Map Camera

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समापन प्रमाण पत्र
COMPLETION CERTIFICATE

यह प्रमाणित किया जाता है कि **"जवाहरलाल नेहरू विश्वविद्यालय के स्कूल ऑफ लाइफ साइंसेज का शैक्षिक भ्रमण"** को **02/04/२०२५** को **9 बजे अपराह्न से 1 बजे अपराह्न** तक **वनस्पति विज्ञान** विभाग द्वारा **ऑफ़लाइन माध्यम** में सफलतापूर्वक आयोजित किया गया और इस कार्यक्रम की रिपोर्ट अभिलेख के लिए आंतरिक गुणवत्ता आश्वासन प्रकोष्ठ (IQAC) को जमा कर दी गई है।

This is to certify that the **"Educational visit to School of Life Sciences, Jawaharlal Nehru University"** was successfully conducted on **02/04/2025** from **9 am to 1 pm** by Prof. Shukla Sahya and Dr. Sunil Tayal of **Department of Botany** in the **Offline mode** and its event report has been submitted to IQAC for records.

Event-in-Charge

IQAC Coordinator

Principal