

Dr. Pooja Jha Maity

Assistant Professor
Department of Botany
Hansraj College
University of Delhi
Delhi 110 007

E-mail: poojajhamaity@hrc.du.ac.in

Teaching experience at University of Delhi:

- **Assistant Professor** in the Department of Botany, **Hansraj College**, University of Delhi. (7th October 2022- till date)
- **Assistant Professor** in the Department of Botany, **Ramjas College**, University of Delhi. (5th January 2017- 6th October 2022)
- **Assistant Professor** in the Department of Botany, **Miranda House**, University of Delhi. (20th July 2016 – 19th November 2016)
- **Departmental Research Associate** in the **Department of Botany**, University of Delhi. (13th July 2015 – 12th July 2016)

Teaching experience at Stockholm University:

- Taught undergraduate students in **fall term 2013** at **Department of Ecology, Environment and Plant Sciences**, Stockholm University, SE-106 91 Stockholm, Sweden

Researcher Positions:

- **March 2013-April 2015:** Worked as post-doctoral fellow with Prof. Katharina Pawlowski at Department of Ecology, Environment and Plant Sciences, **Stockholm University**, SE-106 91 Stockholm, Sweden, on project: Regeneration and genetic transformation of the actinorhizal plant *Datisca glomerata*. (Financed by **Carl Tryggers Stiftelse**).
- **April 2012 – February 2013:** Worked as visiting research fellow with Prof. Sylvia Lindberg at Department of Ecology, Environment and Plant Sciences, **Stockholm University**, SE-106 91 Stockholm, Sweden, on projects:
 1. Adaptive mechanisms for cytosolic sodium homeostasis in wheat and faba bean.
 2. Influence of silicon on cadmium-uptake by wheat leaf protoplasts.

Academic qualifications:

Doctor of Philosophy (Botany): April 2006 - December 2011. **Degree awarded: January 2012.** Department of Botany, University of Delhi, Delhi 110 007, India.

Supervisor: Professor Vishnu Bhat

PhD thesis title: *In vitro* genetic manipulation of *Pennisetum glaucum* (L.) R. Br.

Master of Philosophy (Botany): September 2004 - March 2006 (Marks obtained: **78%**/1st Division). Department of Botany, University of Delhi, Delhi 110 007, India.

Supervisor: Professor Vishnu Bhat

Title: *In vitro* plant regeneration through somatic embryogenesis and direct shoot organogenesis in *Pennisetum glaucum* (L.) R. Br.

Master of Science (Plant Science): July 2002 - May 2004 (Marks obtained: **76%**/1st Division)
Department of Biosciences and Biotechnology, Banasthali Vidyapith, Rajasthan, India.

Bachelor of Science (Botany Hons.) July 1997- June 2001 (Marks obtained: **73%**/1st Division)
St. Columba's College, Vinoba Bhave University, Hazaribagh, Jharkhand, India

Fellowships and Awards:

Qualified 'National Eligibility Test' conducted by Council of Scientific and Industrial Research - University Grant Commission (CSIR-UGC; India) for CSIR Junior Research Fellowship and Lectureship in Life Sciences in June 2005

Awarded Junior Research Fellowship from CSIR (Jan 2006)

Awarded Senior Research Fellowship from CSIR (Feb 2008)

Publications

Published in journals:

1. Shashi, **Pooja Jha Maity** and Vishnu Bhat (2023) Efficient plantlet regeneration via somatic embryogenesis and shoot organogenesis in *Dichanthium annulatum* (Forssk.): a halophyte C4 apomictic forage crop. *Plant Biotechnology Reports* Vol 17, 615-624 <https://link.springer.com/article/10.1007/s11816-023-00864-3>
2. Marco Guedes Salgado, Irina V. Demina, **Pooja Jha Maity**, Anurupa Nagchowdhury, Andrea Caputo, Elizaveta Krol, Christoph Loderer, Günther Muth, Anke Becker and Katharina Pawlowski (2022) Legume NCRs and nodule-specific defensins of actinorhizal plants—Do they share a common origin? *PLoS ONE* 17(8): 1-24 e0268683. <https://doi.org/10.1371/journal.pone.0268683>
3. **Pooja Jha Maity** and Katharina Pawlowski (2021) Anthropogenic influences on the distribution of the Casuarina-Frankia symbiosis. *Symbiosis*: 84:353–367. <https://link.springer.com/article/10.1007/s13199-021-00765-5>
4. Irina V. Demina, **Pooja Jha Maity**, Anurupa Nagchowdhury, Jason L. P. Ng, Eric van der Graaff, Kirill N. Demchenko, Thomas Roitsch, Ulrike Mathesius and Katharina Pawlowski (2019). Accumulation of and Response to Auxins in Roots and Nodules of the Actinorhizal plant *Datisca glomerata* Compared to the Model Legume *Medicago truncatula*. **Frontiers in Plant Science**. 10: 1085 doi: 10.3389/fpls.2019.01085 <https://www.frontiersin.org/articles/10.3389/fpls.2019.01085/full>
5. Bharti Chaudhry, Suresh Kumar, Anupama Tiku and **Pooja Jha Maity** (2019). Micropropagation of a medicinally important plant: *Bacopa monnieri*. **Medicinal Plants** Vol. 11 (2): 177-182. <http://www.indianjournals.com/ijor.aspx?target=ijor:mpijpri&volume=11&issue=2&article=008>
6. Pankaj Kumar Agnihotri, **Pooja Jha Maity**, Krishna K. Dwivedi and Vishnu Bhat (2018). Isolation of *Nucellin* gene promoter from *Hordeum vulgare* and its

- characterization in *Arabidopsis thaliana*. **The International Journal of Plant Reproductive Biology** 10 (2):151-156. [http://ijprb.com/vol%2010%20\(2\)/8-pankaj%20kumar.pdf](http://ijprb.com/vol%2010%20(2)/8-pankaj%20kumar.pdf)
7. Sherif H. Morgan, Sylvia Lindberg, **Pooja Jha Maity**, Christoph-Martin Geilfus, Christoph Plieth, and Karl-Hermann Mühling. 2017. Calcium improves apoplasticcytosolic ion homeostasis in salt-stressed *Vicia faba* leaves. **Functional Plant Biology** 44:515-524. <http://www.publish.csiro.au/FP/FP15381>
 8. **Pooja Jha Maity**, Shashi, Vishvas M. Kulkarni and Vishnu Bhat (2016). Thidiazuron-induced multiple shoot regeneration and *in vitro* flowering in *Pennisetum glaucum* (L.) R. Br. **Phytomorphology** 66(1 & 2): 45-50. <http://ispm.co.in/6612/5.html>
 9. Maria Greger, Ahmad H. Kabir, Tommy Landberg, **Pooja Jha Maity**, Sylvia Lindberg (2016). Silicate reduces cadmium uptake into cells of wheat. **Environmental Pollution** 211: 90-97. <https://www.sciencedirect.com/science/article/pii/S0269749115302414>
 10. Sherif H. Morgan, **Pooja Jha Maity**, Christoph-Martin Geilfus, Sylvia Lindberg and Karl Hermann Mühling (2014). Leaf ion homeostasis and plasma membrane H⁺ATPase activity in *Vicia faba* change after extra calcium and potassium supply under salinity. **Plant Physiology and Biochemistry** 82: 244-253. <https://www.ncbi.nlm.nih.gov/pubmed/25010036/>
 11. **Pooja Jha**, Shashi, Anjana Rustagi, Pankaj Kumar Agnihotri, Vishvas M. Kulkarni and Vishnu Bhat (2011). Efficient *Agrobacterium*-mediated transformation of *Pennisetum glaucum* (L.) R. Br. using shoot apices as explant source. **Plant Cell Tissue and Organ Culture** 107: 501-512. <https://link.springer.com/article/10.1007/s11240-011-0001-0>
 12. **Pooja Jha**, Chandra Bhan Yadav, Vanamala Anjaiah and Vishnu Bhat (2009). *In-vitro* plant regeneration through somatic embryogenesis and direct shoot organogenesis in *Pennisetum glaucum* (L.) R. Br. **In vitro Cellular and Developmental Biology -Plant** 45: 145-154. <https://link.springer.com/article/10.1007/s11627-009-9198-6>
 13. Chandra Bhan Yadav, **Pooja Jha**, C Mahalakshmi, Vanamala Anjaiah and Vishnu Bhat (2009). Somatic embryogenesis and regeneration in apomictic and sexual genotypes of *Cenchrus ciliaris* from immature inflorescence explants. **Biologia Planatarum** 53: 603-609. <https://link.springer.com/article/10.1007/s10535-009-0111-2>
 14. Jyotirmoy Maity, **Pooja Jha Maity**, Satyakam Guha and Smriti Srivastava (2024) "Naturally occurring coumarin glycosides: A review" **accepted** in 'Trends in Carbohydrate Research'

Articles/Abstract in Proceedings:

1. Sunandini Singh and **Pooja Jha Maity**, 2024, Exploring the Therapeutic Potential of *Andrographis paniculata*. Proceeding of **Annual National Conference on "Advances in Plant Biology (APB-2024): Innovations & Strategies for Sustainable Agricultural Productivity for Viksit Bharat@2047"**. Organized by Department of Botany, Hansraj College, University of Delhi in collaboration with Mahatma Hansraj Malaviya Mission Teacher Training Centre (MH-MMTTC) 10th February 2024. pp.56
2. **Pooja Jha Maity**, Siddhant Pandey, Nitika Sehra, Nisha Choudhary, Suman Sharma,

- 2021, Induced Polyploidy: A promising tool in crop improvement. Proceeding of **International Conference on Genetics and Genomics Technologies for Crop Improvement: GGTCI-2021**. Organized by Department of Botany, Hansraj College, University of Delhi in association with International Wheat and Maize Improvement Centre (CIMMYT), Mexico. 1-3rd Aug 2021. pp.23
3. Shashi, **Pooja Jha Maity** & Vishnu Bhat, 2016, Direct plant regeneration from *in vitro* derived shoot apical meristems of apomictic *Dichanthium annulatum* and *Pennisetum pedicellatum*. Proceeding of National conference on **Plant Science Research: Looking Beyond 21st Century for Environmental & Agricultural Revolution**. Department of Botany, University of Delhi, Feb 5th -7th 2016, New Delh, pp.96
 4. Tommy Landberg, **Pooja Jha Maity**, Maria Greger & Sylvia Lindberg, 2014, Cadmium uptake in wheat protoplast is reduced by silicon. Proceeding of **6th International Conference on Silicon in Agriculture**, 26-30 August 2014, Stockholm Sweden. (Oral presentation no. 41) pp. 112
 5. **Pooja Jha**, V.M. Kulkarni, V.V. Bhavsar, H.T. Patil & Vishnu Bhat, 2008, *In vitro* plant regeneration via somatic embryogenesis, organogenesis and Agro- and biolistic transformation in Pearl millet [*Pennisetum glauum*]., Proceeding of 2nd International conference on “**Trends in cellular and molecular biology**”, held at School of Life Sciences, Jawaharlal Nehru University, New Delhi, India from January 5-7, pp. 86
 6. Shashi, **Pooja Jha**, C. Mahalakshmi & V.Bhat, 2008, *In vitro* plant regeneration through somatic embryogenesis in apomictic *Pennisetum pedicellatum* Trin., Golden Jubilee conference on “**Challenges and emerging strategies for improving plant productivity**”. 12-14 November, IARI, New Delhi, India. pp- 217
 7. **Pooja Jha**, Shashi, C Mahalakshmi & V Bhat, 2006, Somatic embryogenesis and *in vitro* plant regeneration in *Pennisetum glaucum*., Proceeding of national conference on “**Biodiversity related international conventions**”, held at INSA, New Delhi from March 8-10, 2006, pp. 178-179.
 8. R Sharma, JCM Rodrigues, T Okada, CB Yadav, **Pooja Jha**, C Mahalakshmi, Shashi, V Bhat & AMG Koltunow, 2007, Development of RNAi vector for MET1 gene from *Cenchrus ciliaris*, proceeding of 30th all India cell biology conference & conference on: **Molecules to compartments: cross-talked and networks** held at Delhi University convention hall from February 2-4, 2007, pp. 161.

Book Chapters

1. **Pooja Jha Maity** and Roma Rani (2019) Traditional Knowledge and Intellectual Property Rights. New Delhi, Ethnobotany, Volume 2 (by Dr. Suresh Kumar), Kojo Press. ISBN: 978-81-933805-5-0
2. Roma Rani and **Pooja Jha Maity** (2019) Role of Spices in Cancer Treatment. Ethnobotany, Volume 2 (by Dr. Suresh Kumar), Kojo Press. ISBN: 978-81-9338055-0
3. **Pooja Jha Maity** and Reetu Sharma (2023) FARMERS’ RIGHTS- INDIAN SCENARIO. Chapter no 14 in book **Crop Sustainability and Intellectual Property Rights**. Apple Academic Press. (2023)

Invited Lectures

1. **Role of Medicinal Plants in Boosting Immunity during This Pandemic** at BIOCON 2020 at Biyani Group of Colleges, India, on 17 December 2020.
2. **Sow the seeds of a career with Botany** at **KNOWLERIENCE online platform** (Education website) on 18 October 2020.
3. **In vitro genetic manipulation** at Department of Ecology, Environment and Plant Sciences, Stockholm University, SE-106 91, Stockholm, **Sweden on 06 March 2014.**
4. Oral Presentation on **topic IPR: Empowering the Indian Farmers** in the National Webinar on “Intellectual Property Right: Issues & Challenges” organized by Deen Dayal Upadhyaya College, University of Delhi, 24th- 25th September 2021.

Significant contributions:

1. **Convenor of Annual National Conference on “Advances in Plant Biology 2024”** organized by Dept. of Botany, Hansraj College, University of Delhi and Mahatma Hansraj Malaviya Mission Teacher Training Centre (MH-MMTTC), Hansraj College on 10th February 2024.
2. Programme-Incharge of One Week **International Online Faculty Development Programme** on “**Revolutionizing Agriculture: Novel Perspectives on Technological Innovation**” organised by Department of Botany and Mahatma Hansraj Malaviya Mission Teacher Training Centre (MH-MMTTC), Hansraj College, University of Delhi from 01.04.2024 to 6.04.2024.
3. **Co-ordinator** in one day program on **Unlocking Innovative Solutions: Open Access and Democratization of Knowledge for Climate Biodiversity and Sustainability** organised by Mahatma Hansraj Malaviya Mission Teacher Training Centre (MH-MMTTC), in collaboration with IQAC and IIC (Institution’s Innovation Council), Hansraj College, University of Delhi on 28.02.2024
4. **Co-ordinator** in **Two Weeks Online Training Programme on “NEP 2020 Orientation & Sensitization Programme”** under Malaviya Mission Teacher Training Programme (MM-TTP) of University Grants Commission (UGC) organised by Mahatma Hansraj Malaviya Mission Teacher Training Centre (MH-MMTTC), Hansraj College, University of Delhi on 15.01.2024 to 28.01.2024
5. Programme-Incharge of **One Week Workshop for Non-teaching Staff on ICT Tools and Artificial Intelligence** Organized By IQAC and Mahatma Hansraj Malaviya Mission Teacher Training Centre (MH-MMTTC), Hansraj College on 8.01.2024 to 12.01.2024
6. **Co-ordinator** in Seminar on **Organic Farming and its Significance** organized by MM-TTC and Hansraj College on 13.10.2023
7. **Convenor of the program on “India-Malta Burgeoning Relationship”** Organized by Hansraj College, University of Delhi and Confederation of Young Leaders on 29.09.2023
8. **Co-ordinator** in **Three –days Online Training Programme on Engaging Youth& Adolescents in Disaster Risk Management (DRM) & Climate Change Adaptation (CCA)** jointly organised by: University of Delhi, National Institute of Disaster Management, Ministry of Home Affairs, Govt. of India and Hansraj College (MHRFDC) on 26.07.2023 to 28.07.2023
9. Programme-Incharge of **One Week Workshop for Laboratory Staff on Laboratory Quality Management & Capacity Building** organized by Mahatma Hansraj Faculty Development Centre, Hansraj College from 17.07.2023 to 21.07.2023.
10. **International Programme Incharge** at Mahatma Hansraj Faculty Development Centre, Hansraj College from May 2023 to till date.
11. **Member of G-20 committee**, Hansraj College from January 2023 to October 2023.
12. Member of **Anti ragging committee**, Hansraj College from October 2022 to till date.
13. Member of Departmental Admission committee for Special Category Admissions at Hansraj College, 2022-23.

14. **Member of the organizing committee** of the **C20 Samajshala on “Education and Human Rights”** organized by Noble Citizen Foundation and Hansraj College, University of Delhi on 11th April 2023.
15. **Convenor** of webinar on **“How to improve your wellbeing”** organized by Hansraj College, University of Delhi on 6th April 2023.
16. **Member of the organizing committee** of the **“National Conference on Medicinal Plants: Frontier Areas of Research and Development”** organized by Dept. of Botany, Hansraj College, University of Delhi held on March 16-17, 2023
17. **Member of the organizing committee** of the **Discussion on “Budget 2023 for Amritkaal”** organized by The Economics Society, Hansraj College on 13th February 2023.
18. **Convenor** of **Y20 India Talks (Distinguished Panel Discussion and Brainstorming on: Future of Work: Industry 4.0, Innovation and 21st Century Skills)** organized by Y20 India, Confederation of Young Leaders and Hansraj College, University of Delhi on 24th January 2023.
19. **Co-convenor** of **1st Annual National Conference on “Advances in Plant Biology”** organized by Dept. of Botany, Hansraj College, University of Delhi on 9th December 2022.
20. **Convenor** of webinar on **“Bioentrepreneurship: Prospects, challenges and opportunities in India”** organized by Dept. of Botany, Hansraj College, University of Delhi on 26th November 2022.
21. **Member of the organizing team** of the **5th Annual National Conference on “Social Sciences in India’s Knowledge Tradition”** organized by Rashtriya Samaj Vigyan Parishad and Hansraj College, University of Delhi on 15th -17th October 2022.
22. **Contributed as Co-opted member** in **NAAC criteria 3 Committee, Hansraj College**, University of Delhi For NAAC cycle 2.
23. **Contributed as Co-opted member** in **NAAC criteria 5 Committee, Ramjas College**, University of Delhi.
24. Significant contribution in organizing **Annual Prize Distribution Function 2021-2022**, organized by Ramjas College, University of Delhi on 30th July 2022.
25. **Staff Advisor- The Ramjas Model United Nations society (2021-2022)**
26. **Student Mentorship Program, Ramjas College: 2020-2021 and 2021-2022**
27. **Co-convenor** of webinar on **“Nanoscale Study of Probiotic Bacteria”** organized by Ramjas College, University of Delhi held on 15th March 2022.
28. **Member of the organizing committee** of the **1st Alumni meet**, Department of Botany, Ramjas College on 25th June 2022.
29. **Member of the organizing committee** of a workshop on **Yoga and Meditation for Humanity** (On International Yoga Day) on 21st June 2022.
30. **Member of the organizing committee** of webinar on **Nutraceuticals for Human Wellness: Value added product from plant** organized Ramjas College, University of Delhi, Delhi on 20th April 2022
31. **Convenor** of webinar on **Sri Lankan Crisis: Its Implications on Food Security and Education (By Dr Thusitha)** organized by The Ramjas Model United Nations Society on 18th April 2022.
32. **Member of the organizing committee** of webinar on **Feeding the 10 billion: A genomics prospective** organized by Ramjas College on 11th April 2022.
33. **Event coordinator** for **IPR Awareness Program** organized by **NIPAM and Ramjas College** on 19th Jan 2022.
34. **Event coordinator** for a lecture of **Prof. Katharina Pawlowski under Bloom (- 14th Jan 2022)**.
35. **Member of the organizing committee** of **National Virtual Hands-On Workshop**

- Tools Used in Biostatistics Research and Teaching.** 13- 14 August 2021.
36. **Member of the organizing committee** of Impact of Meditation on Physical and Mental Health. 28th July 2021
 37. **Member of the organizing committee** of Science webinar on “**Human Microbiome and Diseases: A Perspective**” organized by Ramjas College, University of Delhi held on 13th March 2021.
 38. **Member of the organizing committee** of webinar on “**Plant Biology: A journey from earth to space**” organized by Department of Botany, Ramjas College, University of Delhi held on 22nd-23rd May 2020
 39. **Co-convenor of National seminar on Recent Trends of Research in medicinal Plants and Applied Sciences** organized by Department of Botany, Ramjas College, University of Delhi held on 27th March 2019.
 40. **Co-convenor of Workshop on Scientific Writing & Oral Presentation** organized by Genesis & Department of Botany, Ramjas College, University of Delhi, 18th January, 2018.
 41. **Member of the organizing committee** of **INSPIRE** Science Internship Camp sponsored by Department of Science & Technology, Govt. of India, organized by Ramjas College, University of Delhi from 4-8 July, 2017.

Student related activity

- a. Co-ordinated ‘**National Youth Day Conclave: Hindutva Philosophy of Swami Vivekananda**’ organized by Pancham Dham and Hansraj College, University of Delhi on 11.01.2024
- b. Co-ordinated a one-day **workshop on ‘Free Verse Poetry’** under Kavyanjali – The Poetry Society, Hansraj College on 22.02.2024
- c. Co-ordinated a Seminar on ‘**Project Amrit**’ organized by Green Warriors Club, Hansraj College, in collaboration with the Sant Nirankari Charitable Foundation (SNCF) on 12.02.2024
- d. Co-ordinated **Legal Awareness Workshop on POSH: Gender Sensitization and POSH Act-** By Ms Sheetal Raghuvanshi, organized by Women Development Cell, Hansraj College on 05.03.2024
- e. Co-ordinated a Seminar On “**Post Graduate Programmes Available at Queen Mary University, London** and a lecture on ‘**The problem of managing unconscious bias**’ by Prof. Mike Noon. Organized by Hansraj College on 12.02.2024
- f. Co-ordinated a Seminar On “**5 Steps to U.S. Study,**” organized by Hansraj College on 16.02.2024
- g. Organized **Janjatiya Gaurav Divas** in Hansraj College, University of Delhi on 26.11.2023
- h. Convened ‘**Chandrayaan Utsav**’ organized by Hansraj College on 04.09.2023
- i. Visited Bharat Mandapam with Hansraj College students for **G-20 university connect program** on 26.09.2023
<https://www.facebook.com/share/v/xWU7zK4RqzMXPzbz/?mibextid=qi2Omg>
- j. Visited Rashtrapati Bhavan with students for the event ‘**Her Story- My story**’ (initiative, launched to spotlight the journeys of Padma women awardees) on 07.11.2023.
<https://www.facebook.com/share/r/gX5NpfSmNYkgUvWP/?mibextid=oFDknk>
- k. Co-ordinated seminar on Burning Issues of Legal Affairs organized by Hansraj College on 29.11.2023 https://www.youtube.com/watch?v=GMEHx_htV60
- l. Co-ordinated **Special Assembly For the live streaming of Chandrayaan-3 Landing** Organized by Hansraj College, University of Delhi on 23.08.2023
- m. Teacher convener of the **Vintago Society** and **Hult Prize Society** of Hansraj College
- n. **Took Counselling and Mentoring sessions** in College (Mentor- Mentee Programme)

2022-23, 2023-24

- o. **Yuva Samvad Sabha** (Extension activity) organized by Rashtra Jagran Abhiyan and Hansraj College on 23.01.2023
- p. **Visit to Global Millets (Shree Anna) Conference/ Exhibition** (Study visit) to Indian Agriculture Research Institute (IARI) Campus, PUSA, New Delh on 18.03.2023 to 19.03.2023.
- q. **National Technology Day 2023** (Extension activity) organized by Indraprastha Vigyan Bharati and Hansraj College on 11.05.2023
- r. **Yuva Samvad – Bharat@2047** (Extension activity), organized by Nehru Yuva Kendra, Central Delhi and Hansraj college on 15.05.2023.
- s. **Sensitization Programme On Disaster And Climate Change**(Extension activity) organized by Indian Universities and Institutions Network (IUINDRR-NIDM), National Institute of Disaster Management Ministry of Home Affairs, Govt. of India and University of Delhi on 16.05.2023
- t. **How to Improve your Wellbeing** (Extension activity) organized by Quantum Success International and Hansraj College on 06.04.2023
- u. Staf Advisor **-The Ramjas Model United Nations society (2021-2022)**
- v. Member of Student Faculty Committee (SFC) of the Department of Botany, Ramjas College for the academic session 2020-2021.
- w. Member of Gender Forum, Ramjas College for the academic session 2020-2021, 20212022.
- x. Member of Departmental COVID-19 Task Group (Department of Botany), Ramjas College, 2020-2021, 2021-2022.
- y. Participated as judge in “Mega Digital HR Konclave 2020” School of Industrial Technology (KIIT), Bhubaneswar, Odisha)
- z. Judge in painting competition and Think and Link event organized by GENESIS 2022.
- aa. Judge in inter college painting competition organized by BLOOM 2022.
- bb. Invited Judge in **Inter School Talent Fair- 2015**, organized by Queen Mary’s School, Northend, Delhi on 7th August 2015.
- cc. **Supervised one M.Sc student for her 6 months dissertation work** (at Department of Ecology, Environment and Plant Sciences) in Stockholm University, SE-106 91 Stockholm, Sweden, during my post-doctoral position in 2014.

Research experience

1. Worked on standardization of micropropagation of a medicinally important plant: ***Bacopa monnieri***.
2. Worked on standardization of **plant regeneration and *Agrobacterium rhizogenes* mediated genetic transformation** of the actinorhizal plant ***Datisca glomerata***. Various promoter::GUS fusion constructs were used for transformation in order to examine their regulation in the establishment of a root nodule symbiosis.
3. Worked on the **Cadmium-uptake** in wheat leaf protoplast in the presence and absence of Silicon and found that Silicate reduces Cadmium uptake at the cellular level.
4. Studied apoplasmic and cytosolic ion homeostasis in salt-stressed *Vicia faba* leaf protoplast and the effect of Calcium on it.
5. Worked on **standardization of tissue culture protocols in *Pennisetum glaucum*** and achieved successful regeneration through
 1. Somatic embryogenesis using immature inflorescences shoot tips and seeds as explant source.
 2. Direct shoot organogenesis (multiple shoot induction) using shoot tips as explant.
6. **Skilled on tissue culture** of *Pennisetum pedicellatum*, *Dichanthium annulatum* and

Cenchrus ciliaris.

7. Experienced of using **gene gun-mediated transformation** of *Pennisetum glaucum*.
8. **Optimized a rapid and highly efficient *Agrobacterium tunefaciens*-mediated transformation system** (using strain EHA105 with binary vector pCAMBIA1301) in pearl millet (*Pennisetum glaucum*) genotype 843B for the production of transgenics.
9. **Developed transgenic pearl millet** containing the *AhSIPR10* gene which showed enhanced tolerance towards various abiotic and biotic stress tolerance.

Workshop/ FDPs/ Training attended

1. One Week **International Online Faculty Development Programme** on “**Revolutionizing Agriculture: Novel Perspectives on Technological Innovation**” organised by Department of Botany and Mahatma Hansraj Malaviya Mission Teacher Training Centre (MH-MMTTC), Hansraj College, University of Delhi from 01.04.2024 to 6.04.2024.
2. Successfully completed the **Two Weeks Online Training Programme on “NEP 2020 Orientation & Sensitization Programme”** under Malaviya Mission Teacher Training Programme (MM-TTP) of University Grants Commission (UGC) organised by Mahatma Hansraj Malaviya Mission Teacher Training Centre (MH-MMTTC), Hansraj College, University of Delhi on 16.12.2023 to 30.12.2023
3. **One Week (Online) Faculty Development Programme on “Environmental Pollution and abatement”** organised by Nagaland University in collaboration with Mahatma Hansraj Faculty Development Centre Hansraj College, University of Delhi on 4.09.2023 to 9.09.2023.
4. Participated in One Day (Online) Workshop on “**Planning, Conducting and Writing up of Small Research Projects**” (28th July, 2023) organised by Institution Innovation Council & Research Development Cell, Hansraj College in collaboration with Mahatma Hansraj Faculty Development Centre Hansraj College, University of Delhi on 28.07.2023
5. Participated in **One Day Workshop on “Mushroom Cultivation and Post-harvest Management”** organised by BOTANIQUE (The Botanical Society), Hansraj College, University of Delhi in collaboration with Mahatma Hansraj Faculty Development Centre Hansraj College, University of Delhi on 25.10.2023
6. Participated in lecture cum interactive session on “**Funding Schemes for teachers in Higher Education**” organized by Kirori Mal College on 09.03.2024
7. **One Week Faculty Development Programme on “Sericulture”** organized by Mahatma Hansraj Faculty Development Centre (MHRFDC), Hansraj College, University of Delhi from 22.06.2023 to 27.06.2023
8. Attended **one month “Faculty Induction Programme”** organized by Mahatma Hansraj Faculty Development Centre (MHRFDC), Hansraj College, University of Delhi from 1st December to 30th December, 2022.
9. Attended **6-Day Workshop on Microbes for sustainable and Resilient Future** Organized by Delhi University Botanical Society, Department of Botany, University of Delhi from 06.12.2021 to 11.12.2021.
10. Attended **workshop on ‘CRISPR- Mediated Plant Genome Editing’** organized by Shivaji College, University of Delhi, The Golbal Plant Council, ICAR- National Rice Research Institute, Cuttack and SFT University, Gurugram, on 27th September 2021 to 1st October 2021.
11. Attended two weeks (online) **Inter disciplinary Faculty Development Programme on ‘MOOC’s, E-Content Development, Research Methodology and Statistical Tools in Open Education World’** organised by Kalandi College, University of Delhi in collaboration with Mahatma Hansraj Faculty Development Centre (MHRFDC), Hansraj College, on 3rd August 2021 to 17th August 2021.
12. Attended one week (online) **Interdisciplinary Faculty Development Programme on “Intellectual Property Rights”** organised by IQAC, Hansraj College, University of

- Delhi in collaboration with Mahatma Hansraj Faculty Development Centre Hansraj College, held on 10th February to 17th February 2021.
13. Attended one week **Faculty Development Programme on “E-content Generation and Managing Online Teaching”** organized by Sri Aurobindo College, University of Delhi in collaboration with Mahatma Hansraj Faculty Development Centre (MHRFDC), Hansraj College, on 11th Dec to 17th Dec 2020.
 14. **Workshop on Creating Awareness on Intellectual Property**, organized by Ramjas College, University of Delhi and Confederation of Indian Industry held on 4th September 2019.
 15. Two day **National Workshop on Intellectual Property Rights**, organized by Deen Dayal Upadhyaya College, University of Delhi held on 22-23 August, 2019.
 16. Attended two days **Faculty Development Programme on Agriculture, Health and Society**, on 15th and 16th March, 2019; organized by Mahatma Hansraj Faculty Development Centre, Hansraj College, University of Delhi, Delhi.
 17. Actively participated in **Outreach Program (Hands-on training on Various Scientific Aspects Related to Biology)** to Amar Singh Inter College Lakhaoti, Bulandshahr, Uttar Pradesh, held on 6th March 2019.
 18. Attended the workshop on **Intellectual Property Rights: Its Genesis, Significance and Compliance**, on 13th and 14th September 2018 at Institute of Home Economics, University of Delhi, Delhi
 19. **Workshop on Scientific Writing & Oral Presentation** organized by Genesis & Department of Botany, Ramjas College, University of Delhi, 18th January, 2018.
 20. Attended **Faculty Development Workshop on “Ecology: Modern Perspectives”**, held on December 12-13, 2016 at Dept. of Botany, Hansraj College, University of Delhi.
 21. Actively participated in two day workshop **“Training the Trainers: IPR Workshop”**, held on August 10-11, 2016 at Ramjas College, University of Delhi.
 22. Actively participated in **2nd Plant Proteomics Workshop/Training Program** held at Department of Botany, University of Delhi, Delhi 110 007, during 21st -26th December 2015.
 23. Participated in National workshop on **“Medicinal Botany and Drug Discovery”**, held on January 30-31, 2017 at Dept. of Botany, Ramjas College, University of Delhi.
 24. Actively participated in **CSIR sponsored CIMAP’s Winter School on “Recent Techniques in Structural and Functional Genomics”** held at CIMAP (Central Institute of Medicinal and Aromatic Plants), Lucknow, India, during 1st -10th December 2007.
 25. Actively participated in one day **“Workshop on Bioinformatics”** organized by the Department of Computer Science, University of Delhi, Delhi, India, on 28th September, 2007.
 26. Actively participated in **workshop on Bioinformatics for Molecular Biotechnology** held at The NIIT Institute of Information Technology (TNI) Delhi, India, from 26th – 31st December 2006.

Conferences and Symposia attended

1. **Presented paper** in the **National Education Conclave on “Protection of Traditional Knowledge”** organized by Hansraj College, University of Delhi on 23-24 March 2023 at Vigyan Bhawan, New Delhi.
2. **Presented Poster and attended 6th Annual International E- Conference of Indian Network for Soil Contamination Research (INSCR)** Organized by Department of Zoology (DU), Acharya Narendra Dev College (DU), Deen Dayal Upadhyaya College

- (DU), Gargi College (DU), Kirori Mal College (DU), PG Department of Zoology (MU), Maitreyi College (DU), Ramjas College (DU), Sri Venkateswara College (DU), C.M.P. College (AU), SGTB Khalsa College (DU), COCAS (PU) & PhiXgen Pvt. Ltd., Gurugram from 15.11.2021 to 18.11.2021.
3. **Presented Poster** and attended **International Conference on Genetics and Genomics Technologies for Crop Improvement: GGTCI-2021** organized by Department of Botany, Hansraj College, University of Delhi in association with International Wheat and Maize Improvement Centre (CIMMYT), Mexico. From 01.08.2021 to 03.08.21
 4. Participated in the **national conference** on “**Realms of Plant Diversity: Explorations with Novel Perspective**”, organized in virtual mode by Department of Botany, Maitreyi College, on August 24, 2021.
 5. Attended the National Seminar on “**Innovation and Opportunities in Marine Bioresources & Biotechnology**” Organized by Marine Biotechnology Laboratory Department of Botany, University of Delhi & Cluster Innovation Centre (CIC), University of Delhi, held on 21st August, 2021 in virtual mode.
 6. Attended webinar series on **Intellectual Property Rights: creating value from intellect, innovation and invention**”, organized by the Department of Botany, Maitreyi College, held from April 20 to April 24, 2021
 7. Attended **Global Bio-India Summit 2019**, organized by Department of Biotechnology and BIRAC (Biotechnology Industry Research Assistance Council), held on 21st -23rd November 2019 at Aerocity, New Delhi.
 8. **National Seminar on Recent Trends of Research in Medicinal Botany**, organized by Ramjas College, University of Delhi held on 4th- 5th October 2019.
 9. **National seminar on Recent Trends of Research in medicinal Plants and Applied Sciences**, organized by Department of Botany, Ramjas College, University of Delhi held on 27th March 2019
 10. **Conclave on Biodiversity for everyone’s life**. 31st August 2018, Miranda House, University of Delhi, Delhi.
 11. **2nd Science Film Festival**. 28th and 29th August 2018, Ramjas College, University of Delhi, Delhi.
 12. Attended the Awareness Program on **Intellectual Property Rights (IPR)**, jointly organized by **Federation of Indian Chambers of Commerce & Industry (FICCI), Indian Patent Office, Government of India and University of Delhi**, on 15th September 2017 at University of Delhi, Delhi.
 13. **27th Annual Conference of the Indian Association for Angiosperm Taxonomy & International Symposium on Plant Systematics: Priorities and Challenges**. November 10-12, 2017, Department of Botany, University of Delhi, Delhi, India.
 14. National conference on **Pharmacognosy: Scope of Phytochemically Unexplored Medicinal Plants**. Jan 12, 2017, Department of Botany, Zakir Hussain College, University of Delhi, New Delhi.
 15. **INSPIRE Science Internship** Camp sponsored by Department of Science & Technology, Govt. of India, organized by Ramjas College, University of Delhi from 4-8 July, 2017.
 16. National conference on **Plant Science Research: Looking Beyond 21st Century for Environmental & Agricultural Revolution**. Feb 5th -7th 2016, Department of Botany, University of Delhi, New Delhi,
 17. National symposium on **Germplasm to Genes: Harnessing Biotechnology for food security and Health**. August 9-11, 2015, National Agricultural Science Centre, IARI, New Delhi.
 18. National seminar on **Biotechnology in sustainable agriculture and environmental**

- management.** November 7-8, 2008, Department of Botany, University of Rajasthan, Jaipur, Rajasthan, India.
19. 2nd International conference on **Trends in cellular and molecular biology**, January 5-7, 2008, School of life sciences Jawaharlal Nehru University, New Delhi, India.
 20. National symposium on **Science of life: the new horizon**, November 21-23, 2007, Miranda House, University of Delhi, New Delhi.
 21. National seminar on **Current trends in plant sciences**, February 15-16, 2007, Department of Botany, University of Delhi, New Delhi, India.
 22. International Conference on **Applied Phycology “Algae in Biotechnology and Environment”** February 14-15, 2006, Department of Botany, University of Delhi, New Delhi, India.
 23. National conference on **Biodiversity related international conventions: Role of Indian scientific community**, March 8-10, 2006, held at INSA, New Delhi, India.
 24. National seminar on **Relevance of Botany in the conservation and improvement of plants**, February 8-9, 2006, Department of Botany, University of Delhi, New Delhi, India.
 25. Conference on New **Development in rapeseed-mustard**, January 21, 2006, MRPC, New Delhi, India.
 26. National seminar on **Genetically modified organisms – biosafety aspects**, March 10-11, 2005, Department of Botany, University of Delhi, New Delhi, India.

National, International Webinar attended Online in 2020- 2021: 30

References:

Prof. Vishnu Bhat

Department of Botany
University of Delhi
Delhi 110 007, India
Phone: 9868470120
Email: bhatv64@rediffmail.com

Professor Katharina Pawlowski

Department of Ecology, Environment and
Plant Sciences
Stockholm University
SE-106 91 Stockholm,
Sweden
Phone +468163772
Email: katharina.pawlowski@su.se