

Name: Dr. Saloni Bahri

#### **Department:** Botany

Current Designation: Professor

Email id: saloni.bahri@mirandahouse.ac.in

Orcid id: <u>https://orcid.org/0009-0005-9652-817X</u>

Academic Qualifications (reverse chronological order):

- Ph.D. Botany, Department of Botany, University of Delhi, Delhi (2000)
- M.Sc. Botany, Department of Botany, University of Delhi, Delhi (1994)
- B.Sc. (Hons.) Botany, Daulat Ram College, University of Delhi, Delhi (1992)

**Research Degree(s)** (reverse chronological order):

• Ph.D. Botany, Department of Botany, University of Delhi, Delhi (2000)

#### Field of Specialization under the Subject/Discipline:

- Research: Plant Tissue Culture
- Courses Taught: Reproductive Biology of Angiosperms, Microbiology, Cell Biology, Archegoniatae, Plant Metabolism, Economic Botany, Plant Biodiversity, and biology.

#### **Total Teaching Experience:** 20+ Years

#### Teaching at Miranda House since: 2006

#### **Honors and Awards**

- Awarded merit certificate for securing first position in B.Sc. (Hons.) Botany in Daulat Ram College, University of Delhi (1992).
- Awarded merit certificate for "Best All-Round Outgoing B.Sc. (Hons.) Botany student" (1992).
- Awarded National Scholarship for M.Sc. (1992-1994), University of Delhi.
- Qualified Graduate Aptitude Test in Engineering 1995.
- Awarded the Junior Research Fellowship under CAS, University of Delhi (1995-1997).
- Awarded the Senior Research Fellowship under CAS, University of Delhi for three years (1997-2000).
- 2001: Awarded Agricultural Scientists Recruitment Board (ICAR) National Eligibility Test certificate for Lectureship/ Assistant Professorship in the Professional subject Economic Botany.
- Awarded Australian Leadership Award Fellowship (ALAF) by AusAID, Australia for participation in leadership and professional development programme entitled Building Leadership Capacity in Undergraduate Science Teaching in India including Advancing Science by Enhancing Learning in the Laboratory (ASELL) National Science Workshop hosted by the University of Sydney, 02-17 April 2013.

List of Publications (reverse chronological order):

1. **Bahri, S.**, Bajaj, M., Agrawal, R., Sinha Roy, S., Sharma, Y. and Khurana, M. 2023. Impact of Azadirachtin on *in vitro* pollen germination of *Catharanthus roseus* (L.) G. Don. and *Clitoria ternatea* L International Journal of Multidisciplinary Research and Development. 10(12): 42-47. ISSN Online: 2349-4182 ISSN Print: 2349-5979



- Bajaj, M., Bahri, S., Agrawal, R., Sinha Roy, S., Khurana, M. and Sharma, Y.2023. Evaluation of the cytotoxicity of the insecticide profen super by pollen germination assay. 8(12): 53-59. ISSN: 2455-541X.
- 3. **Bahri, S.**, Bajaj, M., Agrawal, R., Sinha Roy, S., Kanwar, B. and Kumari, S..2023. Impact of treatment with the insecticide Profen Super on roots of *Allium cepa* L. International Journal for Innovative Research in Multidisciplinary Field. 9(11): 123-131. ISSN(O): 2455-0620
- Bahri, S., Bajaj, M., Agrawal, R., Sinha Roy, S., Khurana, M. and Sharma, Y.2023. Effect of the Fungicide Bavistin on *in vitro* Germination of Pollen of *Catharanthus roseus* (L.) G. Don. and *Clitoria ternatea* L. International Journal of Advanced Research in Biological Sciences. 10(11): 49-58. ISSN: 2348-8069.
- 5. Bajaj, M., **Bahri, S.**, Agrawal, R., Sinha Roy, S., Kanwar, B. and Kumari, S.2023. Assessment of cytogenotoxicity of the insecticide indoxacarb by *Allium cepa* assay. International Journal of Botany Studies. 8(11): 20-25. ISSN: 2455-541X.
- Bajaj, M., Bahri, S., Sinha Roy, S., Khushi, K., Malhotra, A., Rao, G., Neelakshi and Makkar, Y.2023. Effect of NPK salts on *in vitro* root growth of *Allium cepa* L. International Journal for Innovative Research in Multidisciplinary Field. 9(10): 06-13. ISSN (O): 2455-0620.
- Bajaj, M., Bahri, S., Sinha Roy, S., Krishna, S. and Chaturvedi, S. 2023. Phytoestrogens of *Trifolium pratense* L. as therapeutics: A review. South Asian J Exp Biol [DOI: 10.38150/sajeb.13(4).p252-262] http://www.sajeb.org. 13 (4): 252-262. ISSN: 2230-9799.
- 8. Bajaj, M., **Bahri, S.**, Agrawal, R., Sinha Roy, S., Riya and Khanna, C. 2023. Cytotoxic and Genotoxic Effects of UV Irradiation on Root Meristem Cells of *Allium cepa* L. International Journal of Advanced Research. 11(09): 1214-1223. ISSN 2320-5407.
- Subramanyan, J., Bahri, S., Bushra, Singh, M., Prabha & Rashmi. 2023. A scanning electron microscopy study of pollen grains. International Journal of Advanced Research. 11(08), 248-257. ISSN: 2320-5407.
- 10. Subramanyan, J., **Bahri, S.,** Sinha Roy, S., Pragati, Soni, A., Middha, A., Rathor, S., Bhardwaj, S., Bhawana & Madhu. 2022. A study on anthocyanins. International Journal of All Research Education and Scientific Methods 10 (10): 933-940.
- Bahri, S., Bhatia, S.S., Moitra, S., Sharma, N., Bhatt, R., Borthakur, N.S., Agarwal, R. & Jain, D. 2016. Influence of silver nanoparticles on seedlings of *Vigna radiata* (L.) Wilczek. DU Journal of Undergraduate Research and Innovation, 2(1):142-148. ISSN 2395-2334.
- Bahri, S. & Moitra, S.2016. Plants: treasure house for pharmacologists. International Journal of Biotechnology and Biomedical Sciences (IJBBS), 2(1): 51- 52. pISSN: 2454- 4582,e-ISSN: 2454-7808. <u>https://www.krishisanskriti.org/ijbab.php?Id=431</u>
- Bahri, S. & Bhatia, S.S. 2015. Nano Pollution: A Pedagogical Strategy to Raise Awareness among Students. International Journal for Scientific Research & Development Published by I.J.S.R.D., India IJSRD/Conf/NCIL/2 015/017, 70- 71. ISSN online 2321-0613.
- 14. Sharma, S., Bhatia, S.S. & **Bahri, S.** 2015. The Mapping of Nanoparticles literature over the years. IJSRD/Conf/NCIL/2 015/046, 188- 190. ISSN (online) 2321-0613.
- 15. Bhatia, S. S., **Bahri, S.** & Moitra, S.2014. SiO<sub>2</sub> Nanoparticles: Effect on seedling biology. International Journal of Applied Engineering Research. 9(8): 935- 939. ISSN 0973- 4562.
- **16. Shahana, Saloni** and Gupta, S. C. 2002. Somatic embryogenesis in *Sesbania sesban* var. *bicolor*. Plant Cell, Tissue and Organ Culture. **69**: 289-292.

## **Chapters in Books**

- 1. Sinha Roy, S., **Bahri, S.,** Sundari Devi, L. & Moitra, S. 2023. Impact of particulate matter on the ecophysiology of plants. In: Ecophysiology of Tropical Plants-Recent trends and future perspectives. Routledge Taylor and Francis Group.
- 2. **Bahri, S.** & Sinha Roy, S. 2022. Potential role of nanotechnology in the wood industry to develop resistance against fungi. In: Myconanotechnology: Green Chemistry for Sustainable Development,



Chapter 13, pp. 322-331. ISSN (Online): 2452-0780, ISSN (Print): 2452-0772, ISBN (Print): 978-981-5051-37-7, Published by Bentham Science Publishers Pte. Ltd. Singapore.

- 3. Sharma, S.; **Bahri, S.** & Bhatia, V. 2021. IPR: Challenges from Indian Perspective. In: Intellectual Property Rights: Challenges & Prospects, Divya Singh and Pooja Baweja (Eds.), Imperial Publications, Mumbai, pp. 78-83. ISBN:978-81-949439-8-3
- 4. **Bahri, S.** & Roy, Sinha Roy, S. 2021. Copyright and its Significance. In: Intellectual Property Rights: Challenges & Prospects, Divya Singh and Pooja Baweja (Eds.), Imperial Publications, Mumbai, pp. 30-34. ISBN:978-81-949439-8-3
- 5. Moitra, S., **Bahri, S.** & Sinha Roy, S. 2018. My city, my Delhi-biomedical waste. In: Environment and Sustainable Development A Geographical Appraisal (ed S. Sahdev and M. Kumar). Concept Publishing Company Pvt. Ltd., New Delhi, pp. 18-24.ISBN 13:978-93-5125-189-7.
- Bahri, S., Subramanyan, J., Akilandeshwari, P. A., Devi, K., Kashiv, P., Jha, P., Yadav, S. & Chandra Sekhar, J.S.D.A. 2018. Morphogenetic studies on cowpea cotyledons. In: Introduction to Challenges and Strategies to Improve Crop Productivity in Changing Environment, Ansari, M.W., Kumar, S., Kaula, B. C. & Wattal, R. K. (ed), Enriched Publications Pvt. Ltd, Delhi, pp.161-168 (ISBN No. 978-81-934634-9-9).
- Bahri, S., Moitra, S., Sekhri, S. & Ruhal, S.2016. Biodiesel Challenge: Microalgae, a Potential Source, In: Environmental Concerns of 21st Century: Indian and Global Context; Volume II; Editors: Sanjay Kumar, Dr. Masroor Ahmed Beg & Dr. Md. Tariq Sayeed, Book Age Series; Delhi/India; pp. 1-8. 978-93- 83281- 65-7.
- Moitra,, S., Bahri, S. & Bhatia, S. S. 2015.Effect of ZnO Nanoparticles on in vitro seedling biology. In: Nanotechnology: Novel Perspectives and Prospects. Singh, B., Kaushik, A., Mehta, S.K. & Tripathi, S. K.(Editors), Kapoor, S. & Agrawal, S.K, (Associate Editors), McGraw Hill Education (India) Private Limited; New Delhi, 2015; pp.541- 547. Print Edition: ISBN(13): 978-93- 392-2109-6 ISBN(10): 93-392- 2109-5 E-book Edition: ISBN: (13): 978- 93-392- 2182-9 ISBN (10): 93- 392-2182-6.
- Bhatia, S. S., Bahri, S. & Moitra, S. 2014. Increase in the pharmaceutical potential of Sorghum bicolor and Vigna radiata by nanoparticles ZnO and SiO<sub>2</sub>. In: Pharmaceutically Important Plants. Sangeetha, R. (Editor), Grabs Educational Charitable Trust; Chennai, Tamil Nadu, India, pp. 42-53. ISBN No. 978- 81- 929313- 2-6.
- Singh, Mahendra; Sharma, A. K.; Shahana, Saloni and Dhillon, B.S. 2004. Plant Genetic Resources Management in Relation to Mode of Sexual Reproduction. In: Plant Genetic Resource Management. Editors: Dhillon, B.S.; Tyagi, R.K.; Lal, Arjun and Saxena, S. Narosa Publishing House, New Delhi, pp. 297-317.
- Shahana, Saloni and Gupta, S. C. 2000. Somatic embryogenesis in a leguminous tree- Acacia senegal (L.) Willd. In : Somatic Embryogenesis in Woody Plants. Vol. 6. editors : Jain, S.M.; Gupta, P.K. and Newton, R.J. Kluwer Academic Publishers, Dordrecht, pp. 539-552.

## Papers in Conference Proceedings

- Choudhary, N., Malik, P., Saini, K., Bhatia, S.S., Bahri, S., Ingole, P.P., Pandey, S., Agarwal, R., Baruah, S., Sekhri, S., Sharma, K. & amp; Ruhal, S. 2016. Synthesis of copper nanoparticles (Cu, Cu<sub>2</sub>O, CuO) and characterization by UV-Visible Spectroscopy and powder X-ray diffraction. In: Proceedings National Conference in Chemistry (NCC 2016) organized by Department of Chemistry, Shyam Lal College, University of Delhi, Delhi, 07-08 April 2016, pp. 168-173, ISBN: 9789385824012.
- 2. **Bahri, S.**, Moitra, S., Sekhri, S. and Ruhal, S. 2016. Application of green technology in waste water treatment. In: Proceedings National Seminar on Water and Air Quality in Urban Ecosystem, New Delhi, 22 March 2016, pp. 26-28 (ISBN:978-93-5267-493-0).



- Choudhary, N., Malik, P., Saini, K., Bhatia, S.S., Bahri, S., Ingole, P.P., Pandey, S., Agarwal, R., Baruah, S., 2016. Synthesis of copper nanoparticles (Cu, Cu<sub>2</sub>O, CuO) and characterization by UV-Visible Spectroscopy and powder X-ray diffraction. National Conference in Chemistry (NCC 2016) organized by Department of Chemistry, Shyam Lal College, University of Delhi, Delhi, ISBN: 9789385824012, 07-08 April 2016, pp. 168-173.
- 4. **Bahri, S**., Bhatia, S.S. & Moitra, S. 2015. Effect of nanoparticles on environment and human health. Proceedings of the National Conference on Climate Change: Impacts, Adaptation, Mitigation Scenario and Future Challenges in Indian Perspective, Department of Botany, Deen Dayal Upadhyaya College. Tripathi, S., Devi, R.S., Kumar, S. & Jolli, V. (Editors), ISBN: 978-93-5235-335-4, pp. 143-146.
- Bhatia, S. S., Bahri, S. & Moitra, S. 2014. An interdisciplinary pedagogical approach to develop a module for phytoregulatory profile of nanoparticles. Proceedings National Conference on Striving & Thriving Towards Diffusion of Student-driven Research in Science and Technology for Inspired Learning, Authorspress. Maharaja Agrasen College, University of Delhi, 16-17 Oct 2014, ISBN No. 978-81-7273-958-4., pp. 316-320.
- 6. **Bahri, S.,** Bhatia, S.S., Sehgal, A., Moitra, S. & Mann, N. 2013. Phytoregulatory profile of ZnO nanoparticles. Proceedings of International Conference on Nanotechnology: Fundamentals and Applications. Toronto, Ontario, Canada, August 12-14, 2013, ISBN:978-1-927877-00-5
- Sehgal, A., Moitra, S., Bahri, S., Bhatia, S.S. & Mann, N.2013. Effect of ZnO Nanoparticles on the seed germination and seedling biology of *Polypleurum stylosum* (Podostemaceae). Proceedings of International Conference on Nanotechnology: Fundamentals and Applications. Toronto, Ontario, Canada, August 12-14, 2013, ISBN:978-1-927877-00-5

## Convenor/Coordinator of the Short-term Online/Offline Courses Organized

- Three months Certificate Course on "Sustainable Pathways to Environment, Society and Governance (ESG)" organized by Centre for Environmental Studies and Disaster Management, Miranda House, University of Delhi from 27 September 2023 to 26 December 2023.
- Short-term online course on Visualization and Analysis of Complex Networks in Biology,22 January-26 February 2022.
- Member, organizing committee for Two-week Online Certificate Course Community Outreach Programme: Together We Can organized by UBA Cell, Miranda House, 24 August-05 September 2020.
- Short-term online course on Understanding our Environment for undergraduate science students of the University of Delhi, 10-25 July 2020.

## Presentations in Conferences, Symposia and Seminars

- Sakshi Sejal, Ananya Rawat, Simran Jit, Saloni Bahri, Sujata Sengupta and Sharda M. Sonkar. 2024.
  Poster presentation on Analysis of compost generated in campus at 1<sup>st</sup> International Interdisciplinary Science Congress-Young Scholar's Meet (HSC-2024) organized by Centre for Interdisciplinary Research in Basic Sciences, Jamia Millia Islamia, New Delhi, India 09 October 2024.
- Simran Jit, **Saloni Bahri**, Sujata Sengupta, Sharda M Sonkar. 2024. Oral presentation on Characterization and analysis of compost generated in campus at Two-day International Conference Contemporary Perspectives on Strategies for Conservation of Biodiversity and Realizing Sustainable Development Goals 2024 organized by Department of Botany & Horticulture, PRGC (A) in collaboration with Department of Botany, GDC, Ramachandrapuram, AP, 04-05 July 2024.



- Sneha, Samad, D., Bajaj, M. and **Bahri, S.** 2024. Poster presentation on Role of Omics in Agriculture in An International Conference cum Workshop on Making Sense of Omics: Proteomics, Transcriptomics, and Molecular Drug Design (in hybrid mode) organized by Department of Botany, Zakir Husain Delhi College, University of Delhi, 23-24 April 2024.
- Jit, S., **Bahri, S**., Sengupta, S. and Sonkar, S.M. 2024. Oral presentation on Mitigation of solid waste generated in campus by compost in 8th International Conference of Indian Network for Soil Contamination Research (INSCR-2024) on 'Exploring the Microbial World from Human Health to Environmental Sustainability' and 4th International Symposium on Ciliate Biology (ISCB-2024), organised by INSCR and Acharya Narendra Dev College, University of Delhi, April 03-05, 2024 at Conference Centre, University of Delhi, Delhi, India.
- Aggarwal, N., Rawat, A., Sejal, S., Bajaj, M. & **Bahri, S.** 2024. Poster presentation on "Catalyst of Change Strategies for Tackling Global Infectious Disease Challenges at 3rd International Conference on Integrative Chemistry, Biology and Translational Medicine (ICBTM 2024), Hansraj College, University of Delhi, Pacific University, Udaipur, Rajasthan, 08-10 March 2024.
- Sejal, S., Aggarwal, N., Rawat, A., Bajaj, M. & **Bahri, S.** 2024. Poster presentation on "From Crisis to Resilience: Global Health Security for Pandemic Preparedness at 3rd International Conference on Integrative Chemistry, Biology and Translational Medicine (ICBTM 2024), Hansraj College, University of Delhi, Pacific University, Udaipur, Rajasthan, 08-10 March 2024.
- Krishna, S., Chaturvedi, S., Bajaj, M. & Bahri, S. 2024. Participated and presented a Poster on Building a Viksit Bharat one Grain at a Time: Millets from Obscurity to Prevalence in Annual National Conference on Advances in Plant Biology (APB 2024): Innovations and Strategies for Sustainable Agricultural Productivity for Viksit Bharat @ 2047 organized by Department of Botany, Hansraj College, University of Delhi Mexico in collaboration with Mahatma Hansraj Malaviya Mission Teacher Training Centre (MH-MMTTC) on 10 February 2024.
- Jit, S., **Bahri, S.**, Sengupta, S., Sonkar, SM., Tanuja, Sharma, A., Joshi, N. 2024. Participated and presented a Poster on Compost: As a Sustainable Solution to Waste Management in Annual National Conference on Advances in Plant Biology (APB 2024): Innovations and Strategies for Sustainable Agricultural Productivity for Viksit Bharat @ 2047 organized by Department of Botany, Hansraj College, University of Delhi Mexico in collaboration with Mahatma Hansraj Malaviya Mission Teacher Training Centre (MH-MMTTC) on 10 February 2024.
- Jit, S., **Bahri, S.**, Sengupta, S., Sonkar, SM., Tanuja, Sharma, A., Joshi, N. 2023. Participated and presented a Poster on Compost: As a sustainable solution to waste management in the urban academic sector at the People's Festival of Innovations,2023, a National Conference on scaling innovations from idea to impact, held at India International Centre, New Delhi, 28-30 November 2023.
- **Bahri**, S., Choudhary, P., Pandey, S. & Somdutta Sinha Roy. 2021. Poster presentation on A Review of Resurrection Properties of *Selaginella bryopteris*(L.) Bak.: Understanding its physiology for survival under extreme desiccation conditions in Two Days National e-Conference on Plant Science Research: Relevance, Funding, Challenges and Opportunities organized by Department of Botany, Hansraj College in collaboration with Mahatma Hansraj Faculty Development Centre, Hansraj College, University of Delhi, 16-17 January 2021.
- Sinha Roy, S., Karn, A., Gupta, P. and **Bahri, S.** 2021.Poster presentation on *Catharanthus roseus* (sadabahar) Taxonomy and Biomedical Properties: A Review in Two Days National e-Conference on Plant Science Research: Relevance, Funding, Challenges and Opportunities organized by Department of Botany, Hansraj College in collaboration with Mahatma Hansraj Faculty Development Centre, Hansraj College, University of Delhi, 16-17 January 2021.
- **Bahri**, S., Ashmita, Goyal, G., Sharma, P., Jha, P., Rana, S. & Sinha Roy, S. 2020. Presented poster on Particulate matter mitigation by avenue trees at ISW-2020 International Summit on Women in STEM-"Visualizing the Future: New Skylines" held at India Habitat Centre, Lodhi Road, Delhi, 23-24 January 2020.



- **Bahri**, S., Ashmita, Chaudhary, K. & Sinha Roy, S. 2020. Presented poster on Role of biodiversity in maintaining water quality at 2 days National Conference on Water Sustainability: Conservation, Policy, Ethics and Science organized by Department of Environmental Studies & Srishti: Nature and Environment Society Zakir Husain Delhi College, University of Delhi, Delhi, 21-22 January 2020.
- Sinha Roy, S., Chaudhary, K., Ashmita & **Bahri S.** 2020. Presented poster on Water: as a factor effecting biodiversity at 2 days National Conference on Water Sustainability: Conservation, Policy, Ethics and Science organized by Department of Environmental Studies & Srishti: Nature and Environment Society Zakir Husain Delhi College, University of Delhi, Delhi, 21-22 January 2020.
- **Bahri, S.,** Jaitak, D., Kumari, N., Sheoran, P., Nayak, S., Swathi, V. and Sinha Roy, S. 2019. Traditional knowledge: of the people, for the people and by the people. Poster presented in the National Conference on "Intellectual Property Rights (IPR): Challenges and Prospects", Maitreyi College, University of Delhi, 22-23 October 2019.
- Sinha Roy, S., Jyoti, Mamta, Johnson, M., Dhyani, S. & **Bahri, S.** presented a poster on Protection of plant varieties in the National Conference on "Intellectual Property Rights(IPR): Challenges and Prospects", Maitreyi College, University of Delhi, 22-23 October 2019.(**Poster was awarded third prize**).
- **Bahri, S.,** Bhardwaj, S., Marni, A.D. & Subramanyan, J. 2019. Edible vaccines. Poster presented at the DBT-Biotechnology Popularization Programme under the CTEP Programme of DBT, Government of India, Miranda House, University of Delhi, Delhi, 02 August 2019.
- **Bahri**, S., Sinha Roy, S., Devi, P.A. & Dash, A. 2019. Presented a poster on Indoor Plants: Natural Air Purifiers at the Symposium on Avenues in Plant Sciences: A Hope for Sustainable Future organized by Department of Botany, Deshbandhu College, University of Delhi, Delhi, 08-09 March 2019. (**Poster was awarded third prize**).
- **Bahri**, S., Sinha Roy, S., Devi, P.A. & Deepthi, A. 2019. Presented poster on Medicinal Plants for Cancer Treatment at First International Conference on Integrative Chemistry, Biology & Translational Medicine organized by Hansraj College, University of Delhi & Loyola University Chicago Stritch School of Medicine, 25-26 February 2019, p.118.
- Subramanyan, J., **Bahri, S.,** Sinha Roy, S., Pragati, Middha, A., Soni, A., Bhardwaj, S., Yadav, M., Rathore, S & Ahuja, B. 2018. Presented poster on Health benefits of anthocyanins. In: Abstracts of the Indo-US Colloquium on Recent Developments in Interdisciplinary Research, Hansraj College, University of Delhi, Delhi, India, and Loyola University Stritch School of Medicine, Maywood, IL, USA, 02 July 2018.
- **Bahri**, S., Sharma, S., Sharma Bhatia, S., Akanksha, Anamika, Ariba, Mahajan, D., Anabh, K., Pant, M., Tontang, M.T., Prabha, R., Chaudhary, R. & Acharya, S. 2018. Presented poster on Therapeutic potential of medicinal plants: Culture, extraction, physicochemical characterization and testing their cytotoxic or immunostimulatory properties at National Science Day, jointly organized by Indian Academy of Sciences, Bangalore and Indian National Science Academy, Delhi at INSA Delhi, 28 February 2018.
- Subramanyan, J., **Bahri, S.,** Singh, M., Bushra, Prabha, Rashmi & Singh, R. 2018. Presented poster on A study on the pollen grains of *Hymenocallis littoralis*. In: Abstracts of the National Student Conclave & Seminar on Science, Technology and Innovation, Amity Institute of Applied Sciences, Amity University, Uttar Pradesh, 18-19 January 2018, p.20.
- **Bahri, S.,** Subramanyan, J., Akilandeshwari, P. D., Devi, K., Kashiv, P., Jha, P., Yadav, S. & Chandra Sekhar, V.J.S.D.A. 2018. Presented poster on Morphogenetic studies on cowpea cotyledons. In: Abstracts of the National Conference on Challenges and Strategies to Improve Crop Productivity in Changing Environment: An Integrated Approach, Department of Botany, Zakir Husain Delhi College, University of Delhi, Delhi, 12 January 2018, p. 54.



- **Bahri, S.**, Sinha Roy, S. and Moitra, S. 2017. Presented poster on Anticancerous compounds in Mentha species. In: Abstracts One-Day Indo- Hungarian Symposium on Recent Advances in Chemistry and Biology (INHCAB-2017), p. 43, Department of Chemistry, Miranda House, University of Delhi, in association with Department of Pharmaceutical Chemistry, University of Debrecen, Hungary, organized at Miranda House, 11 December 2017.
- Sinha Roy, S., **Bahri, S.** and Moitra, S. 2017. Presented poster on Glucosinolates: A potential target for metabolic engineering in plants. In: Abstracts One-Day Indo- Hungarian Symposium on Recent Advances in Chemistry and Biology (INHCAB-2017), p. 46, Department of Chemistry, Miranda House, University of Delhi, in association with Department of Pharmaceutical Chemistry, University of Debrecen, Hungary, organized at Miranda House, 11 December 2017.
- **Bahri, S.,** Sinha Roy, S. and Moitra, S. 2017. Presented poster on Newly discovered valuable plants. In: Souvenir and Abstracts XXVII Annual Conference of Indian Angiosperm Taxonomy & amp; International Symposium on Plant Systematics: Priorities and Challenges, pp. 157-158, Delhi University Botanical Society, Department of Botany, University of Delhi, Delhi, 10-12 November 2017.
- Sinha Roy, S., Bahri, S. and Moitra, S. 2017. Presented poster on Key transcription factors in heavy metal tolerance in higher plants. In: Souvenir and Abstracts XXVII Annual Conference of Indian Angiosperm Taxonomy; International Symposium on Plant Systematics: Priorities and Challenges, p. 189, Delhi University Botanical Society, Department of Botany, University of Delhi, Delhi, 10-12 November 2017.
- Sinha Roy, S., **Bahri, S.,** Moitra, S., Verma, H. and Yadav, S. 2017. Presented poster on Phytoremediation: a biotechnological approach. In: Abstracts National Conference on Biotechnology & Environment, p. 88, Department of Biotechnology, Jamia Millia Islamia, 10-11 April 2017.
- **Bahri, S.,** Sinha Roy, S. and Moitra, S. 2017. Poster presented on *Trigonella foenum-graceum* L.-an important medicinal herb. In: Abstracts National Conference on Pharmacognosy Scope of Phytochemically Unexplored Medicinal Plants organized by Zakir Husain Delhi College, University of Delhi, 12 January 2017, pp. 61-62.
- Sinha Roy, S., **Bahri, S.** and Moitra, S. 2017. Poster presented on Water sources of Delhi: How safe are they? In: Abstracts International Conference and Outreach Programme on Environment & Ecology: Sustainability and Challenges (ECON 2017) organized by Sri Venkateswara College, University of Delhi, 04-06 January 2017.
- **Received Certificate of Appreciation** for poster presentation of Innovation Project (MH-310) Sugarcane to Nanoparticles: Green nanotechnology the future (MH-310) at 93<sup>rd</sup> Annual Convocation of University of Delhi, 19 November 2016.
- **Bahri, S.,** Sinha Roy, S. and Moitra, S. 2016. Poster presented on Do Cosmetics and Personal Care Products Threaten Water Quality? In: Abstracts National Conference on Combating Industrial Pollution for Sustainable Environment-A Fusion of Industrial and Scientific Efforts (CIPSE-2016) held at Gargi College, University of Delhi, 22-23 September 2016, p. 104.
- Awarded first position for poster presentation on Application of green technology in waste water treatment, National Seminar on Water Quality in Urban Ecosystem organized by Eco Club Shivaji College, University of Delhi, Delhi, 22 March 2016.
- Second position was awarded to the paper presented on Effect of nanoparticles in plant systems, Indo-Portugese Workshop on Emerging Trends of Nanotechnology in Chemistry and Biology (INCB 2016) organized by Department of Chemistry, Hansraj College and Deshbandhu College, University of Delhi, Delhi, India in association with University da Madeira, Portugal, 12-13 February 2016.



- Presented the paper entitled My city, my Delhi-Biomedical wastes at the UGC Sponsored National Seminar on Environmental Ethics, Resource Depletion and Sustainable Development, Kalindi College, University of Delhi, 26 February 2016 (Oral presentation).
- Presented the paper entitled Plants: Treasure House for Pharmacologists. International Conference on Public Health: Issues, challenges, opportunities, prevention, awareness (Public Health: 2016), Daulat Ram College, University of Delhi, Delhi, 15-16 January 2016 (Oral presentation).
- Presented a paper titled "Effect of Copper oxide nanoparticles on seedling growth of *Vigna radiata* L. (Wilczek)- a preliminary report" at RSC Workshop on Chemistry for Tomorrow's World, Green Chemistry Network Centre, Delhi University, Manav Rachna University, Faridabad, Shiv Nadar University, Greater Noida, New Delhi, 02-03 December 2015(Oral presentation).
- Presented the paper titled 'An Interdisciplinary Pedagogical Approach to Develop A Module for Phytoregulatory Profile of Nanoparticles'' at the 2<sup>nd</sup> National Conference on Striving and Thriving Towards Diffusion of Student-driven Research in Science and Technology for Inspired Learning, Maharaja Agrasen College, University of Delhi, Delhi, 16-17 October 2015(Oral presentation).
- Effect of nanoparticles on environment and human health at the National Conference on Climate Change: Impacts, Adaptation, Mitigation Scenario and Future Challenges in Indian Perspective, Deen Dayal Upadhyaya College, University of Delhi, Delhi, 02-03 March 2015(Oral presentation).
- New sources of medicines: A Botanist's view at the National Seminar Relevance of Medicinal Plants in 21<sup>st</sup> Century, Ramjas College, University of Delhi, Delhi, 10-11 February2015(Oral presentation).
- An interdisciplinary pedagogical approach to develop a module for phytoregulatory profile of nanoparticles at the National Conference Striving and Thriving Towards Diffusion of Student-driven Research in Science and Technology for Inspired Learning, Maharaja Agrasen College, University of Delhi, Delhi, 16-17 October 2014 (Oral presentation).
- To study bacteria by Gram staining technique in ASELL National Science Workshop, University of Sydney, Sydney, Australia, 02-05 April, 2013 (Oral presentation).
- Subramanyan, J. & Bahri, S. Plant Tissue Culture, Roundtable Discussion, Science and Education Snapshots: A Summary of Activities at Miranda House, University of Delhi, presented by the University of Sydney South Asia Research Network (USSA) and the Institute for Innovation in Science & Mathematics Education (IISME), 16 April 2013, University of Sydney South Asia Research Network (USSA) and the Institute for Innovation in Science & Mathematics Education (IISME), 16 April 2013, University of Sydney South Asia Research Network (USSA) and the Institute for Innovation in Science & Mathematics Education (IISME), 02-05 April, 2013 (Oral presentation).
- Phytoregulatory Profile of Nanoparticles : ZnO and TiO<sub>2</sub> in National Conference on Relevance of Nanotechnology in Biology, Hans Raj College, University of Delhi, 01 March, 2013 (Oral presentation).
- Awarded Certificate of Appreciation for poster presentation on Effect of plant growth regulators on root morphogenesis under *in vitro* conditions at International Symposium on Green Chemistry and Sustainable Development, Miranda House, University of Delhi, Delhi in collaboration with Vigyan Prasar, 30-31 March 2012.
- Chaudhary, E., Jahan, I., Medha, **Bahri, S.** and Subramanyan, J. 2010. Presented poster on Conductivity probe to understand limitations on cell size-surface area: volume ratio. In: Souvenir of the National Symposium on Chemistry in Biology: The Future of Life Sciences, Acharya Narendra Dev College, University of Delhi, Delhi, 12-13 February 2010, p. 69.
- Jahan, I., Chaudhary, E., Medha, Subramanyan, J. and **Bahri, S**. 2010. Presented poster on Measurement of catalase activity using a gas pressure sensor. In: Souvenir of the National Symposium on Chemistry in Biology: The Future of Life Sciences, Acharya Narendra Dev College, University of Delhi, Delhi, 12-13 February 2010, p. 68.



## Orientation course/Refresher course/Faculty development programme/Short-term courses attended

- Two-days online training course for teaching faculty of Universities and Colleges on Conservation Issues in India organized by Central Academy for State Forest Service (CASFOS), Dehradun, Uttarakhand, 27-28 January 2021.
- 2-Week Online Faculty Development Programme Managing Online Classes and Co-Creating MOOCS 3.0, organized by the Teaching Learning Centre of Ramanujan College, University of Delhi and sponsored by Ministry of Human Resources Development Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching, 25 July-10 August 2020.
- National One Week Online Faculty Training Program Pedagogical Training for Effective Online Teaching & Learning organized by Deen Dayal Upadhyaya College, University of Delhi in association with K.T.H.M. College, Nashik, Maharashtra, from 03 to 10 August 2020.
- Two weeks online Faculty Development Program on "Advanced Concepts for Developing MOOCS" sponsored by Ministry of Human Resource Development Pandit Madan Malviya National Mission on teachers and teaching organised by Teaching Learning Centre, Ramanujan College, University of Delhi, from 2-17 July 2020.
- Online Faculty Development Programme Open Source Tools for Research organized by the Teaching Learning Centre of Ramanujan College, University of Delhi and sponsored by Ministry of Human Resources Development Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching, 08-14 June 2020.
- Short Term Course on E-Contents/MOOCs Development & Delivery on the theme ICT TOOLS for Online Teaching organized by CPDHE (UGC-HRDC), 15-17 May 2020.
- Participated in Two days Faculty Development Programme on Agriculture, Health & Society organized by Mahatma Hansraj Faculty Development Centre, Hansraj College, University of Delhi, Delhi, 15-16 March 2019.
- Annual Refresher Programme in Teaching 2019, Online Course in Biotechnology organized by MHRD, 01 November 2018-28 February 2019.
- DST-Sponsored Two Weeks Faculty Development Programme on Entrepreneurship (Science, Technology & Management for Society), Sponsored by DST and organized by Deshbandhu College, University of Delhi, Delhi and ABES Engineering College, Ghaziabad in association with Teaching Learning Centre, Ramanujan College, Delhi, 13- 27 December 2018.
- Faculty Development Program in Research Project Management Proposal to Publication and Beyond, CIC-Centre for Science Education and Communication, 19 July 2016.
- Refresher Course in Life Sciences organized by Centre for Professional Development in Higher Education (CPDHE), Institute of Life Long Learning (ILLL), University of Delhi, 9-30 December 2014.
- International Training Program on Leadership & Career Development for Women Scientists & Technologists organized by DBT, IUSSTF and COACH, New Delhi, 01-05 September 2014.
- Refresher Course in Life Sciences organized by Centre for Professional Development in Higher Education (CPDHE), Institute of Life Long Learning (ILLL), University of Delhi held from February 15, 2011 to March 9, 2011.
- UGC-ASC UGC sponsored 4-weeks Orientation Course organized by Centre for Professional Development in Higher Education (CPDHE), Institute of Life Long Learning (ILLL), University of Delhi at CPDHE (ILLL), Delhi, held from July 3-30, 2008



Membership of Professional Bodies (reverse chronological order):

- 1. Life Membership of Delhi University Botanical Society
- 2. Life Membership of Association of Teachers in Biological Sciences, C/O Homi Bhabha Centre for Science Education, TATA Institute of Fundamental Research, Mumbai.
- 3. Life Membership of Society for Ecological Research and Natural Resources Management.

**Research Projects** (reverse chronological order):

- PI in the research project titled "Analysis and Improvement of the Compost Generated in Urban Academic Sector-funded by R & D cell of MH", 2024.
- Co-PI in the research project titled "Computational Phytoregulatory Profiling of Cu nanoparticles on seedlings of maize: A fusion of in silico and in vitro techniques" funded by R & D cell of MH, 2024.
- Co-PI in the research project titled "To explore the phytoremediation potential of some hydrophytes with special focus on *Alternanthera philoxeroides* (Mart.) Griseb." funded by R & D cell of MH, 2024.
- Co-PI in the research project titled "Urban Heat Islands Mitigation And Its Linkages To Spatial Patterns Of Vegetation Cover: A Case Study of Delhi" funded by R & D cell of MH, 2024.
- Co-PI in the research project titled "Development of Innovative Greener Methods for Qualitative Organic Analysis" funded by R & D cell of MH, 2024.
- PI in the research project titled Identification of plant species suitable for mitigating air pollution in Delhi University Campus under the aegis of DBT Star College scheme, January-March 2020 under DBT Star College scheme, January-March 2020.
- PI in the research project MH-02 Therapeutic Potential of Medicinal Plants: Culture, Extraction, Physicochemical Characterization and Testing their Cytotoxic or Immunostimulatory Properties (2016-2019), funded by University of Delhi.
- PI in the research project Innovation Project MH 310- Sugarcane to Nanoparticles: Green Nanotechnology the Future(2015-2016), funded by Research Council, University of Delhi
- PI in the research project Innovation Project MH-206 Nanoparticles and plant systems: in vitro and in silico studies (15 Nov. 2013-31 March 2015), funded by Research Council, University of Delhi
- PI in the research project Project MH 102- Computational modeling of phytoregulatory profile of some nanoparticles (May 15, 2012 to July 15, 2013), funded by Research Council, University of Delhi.

# Undergraduate Research Projects DSKC (D.S. Kothari Central Inter-disciplinary Research Facility; formerly D.S. Kothari Centre for Research and Innovation in Science Education), Miranda House, University of Delhi, Delhi, at the Summer Workshops Flavor of Research

- To study the effect of insecticide on seed germination (jointly); 2024
- Comparative Study of Campus Compost (jointly); 2024
- Phytoremediation of grey water generated on campus using Eicchornia crassipes (jointly); 2024
- Effect of UV on roots of Allium cepa (jointly); 2023
- Effect of insecticides on Allium cepa roots (jointly); 2023
- Effect of high temperature treatment on pollen viability (jointly); 2023
- Effect of insecticides on pollen (jointly); 2023
- Effect of fungicide on pollen (jointly); 2023
- Study on Bioinformatics tools to analyze phylogeny(jointly); 2023
- A Review on Biological Action of Heavy Metals in Plants (jointly); 2023
- Effect of Vesicular Arbuscular Mycorrhiza on Vigna radiata under heavy metal stress (jointly);



2022

- Fungi on Mars -- A review (jointly); 2022
- Effect of N,P,K on growth of *Allium cepa* roots (jointly); 2022
- Study of the genetic makeup of *Trifolium pratense* and its medicinal effects A review (jointly); 2022
- Incorporation of plastids in animal cells: how will it help us? A review (jointly); 2022
- Secondary metabolites in some Gymnosperm species (jointly); 2021
- Phytochemicals of family Poaceae and their biological function (jointly); 2021
- Review article on Selaginella bryopteris- the Sanjeevani Booti (jointly); 2020
- Effect of carbohydrates on pollen of Catharanthus roseus in vitro-A review (jointly);2020
- A review on plant species identified for mitigating particulate matter (jointly) 2020
- Plant species resistant to Sulphur dioxide pollution-A review (jointly); 2020
- Effect of carbohydrates on in vitro pollen germination; 2019
- Effect of nanoparticles and heavy metals on seed germination; 2019
- A Study on Anthocyanins (jointly); 2018
- Analysis of Drinking Water Quality (jointly); 2018
- Morphogenetic Studies on Cowpea Seeds (jointly); 2017
- A comparative study of antioxidant content in naturally extracted and different brands of *Aloe vera* gel (jointly); 2017
- A comparative study of natural and synthetic antacids (jointly); 2017
- A comparative study of antioxidant content in different brands of green tea (jointly); 2017
- A Study on Pollen Grains (jointly); 2016
- How Pure Are Our Juices? (jointly); 2015
- Nanoparticles: Effects on seedling biology (jointly); 2014
- Limnological Studies on Three Shallow, Man-made Eutrophic Lakes in Delhi: A comparative study (jointly); 2013
- Understanding seed germination in *in vivo* and *in vitro* (sole); 2012
- In vitro Studies on Vigna radiata (Linn.) Wilczek, Sorghum bicolor (L.) Moench., Triticum aestivum Linn., and Nicotiana tabacum Linn. (sole); 2011
- Use of Sensors in Biology (jointly); 2008

Administrative Responsibilities (reverse chronological order):

- Coordinator IQAC, 06 February 2023-till date.
- Member, IQAC, December 2020-05 February 2023.
- Nodal Officer, Admissions 2024-25.
- Deputy Superintendent(Nodal Officer) for Semester Examination, December 2020 and March 2021.
- One of the Deputy Co-ordinators for the Central Evaluation Centre(CEC) for Annual/Semester Examinations for the Academic year 2018-19 for May-June 2019.
- Teacher-in-charge, Department of Botany, 16 August 2018 to 19 May 2020.
- Convener, Garden Committee, 16 August 2018 to 19 May 2020.
- Department Coordinator, Preparation of Self Study Report (SSR) for the National Assessment and Accreditation Council (NAAC 2016); Member, preparation of SSR A Convenor, Editorial Team, Oct. 2015-March 2017
- Coordinator, Environment al Studies: Compulsory Core Module for Undergraduate Studies, Miranda House, University of Delhi, July 2014-till date
- Teacher-in-charge, Department of Botany, Miranda House, University of Delhi, 01 May 2014-31 July 2014.



- Member, Departmental Anti-Ragging Committee, June-July 2014.
- Coordinator, B.Sc. Life Sciences, Sep. 2012 to April 2013.

Resource person (reverse chronological order):

- Resource person in Add-On Certificate Course on Nanochemistry, Miranda House, University of Delhi, Delhi, 13 November 2017.
- Resource Person for the exercise Microscopy in the Bridge Course 'Basic Laboratory Techniques' for students of B.Sc.(H) Life Sciences I Year from 08-09 August 2019 and for students of B.Sc.(H) Botany I Year from 05-06 August 2019; 27-28 August 2018; 07-08 September 2016; 26-30 October 2015.
- Resource Person for the exercise Microscopy in the Bridge Course 'Basic Laboratory Techniques' for students of B.Sc. Life Sciences I Year from 07-08 September 2017 and for students of B.Sc.(H) Botany I Year from 05-06 September 2017; 05-06 September 2016; 12-16 October 2015.
- Mentor for the Workshop The Cell: Life's Playground, INSPIRE Internship Programme, D.S. Kothari Centre for Research and Innovation in Science Education, Miranda House, University of Delhi, Delhi, 18-22 December 2017; 15-20 December 2013; 16-20 July 2012; 11-15 July 2011; 12-16 July 2010.
- Workshop on Biofertilizers for B.Sc. Life Science II Year students, DBT Star College Scheme, Department of Botany, Miranda House, University of Delhi, Delhi, 28 August 2019, pp. 04-05.
- Resource Person for the topic Legume Root Nodules in the Workshop on Biofertilizers for B.Sc. Life Science II Year students, DBT Star College Scheme, Department of Botany, Miranda House, University of Delhi, Delhi, 13 March 2019, pp. 04-05.
- Resource person for Legume Root Nodules. In: Manual of the Workshop on Biofertilizers for B.Sc. (Honours) Zoology I Year students, 02 November 2018, DBT Star College Scheme, Department of Botany, Miranda House, University of Delhi, Delhi, pp. 02-04.
- Resource person for the session 'Microscopy' (on 31 January 2018) in the Workshop for Laboratory Staff: Laboratory Techniques and Instrumentation, organized by Internal Quality Assurance Cell (IQAC), Miranda House, University of Delhi, 31 January-07 February 2018.
- Resource person for the exercise Micropropagation in the Workshop for Senior Secondary School Teachers on Building Concepts in Science with Hands-on Activities, D. S. Kothari Centre for Research and Innovation in Science Education, Miranda House, University of Delhi, Delhi, 25-26 May 2011.
- **Bahri, S.** and Sinha Roy, S. 2017. Root nodules. In: Manual of Workshop The Cell: Life's Playground, INSPIRE Internship Programme, pp. 08-11, D.S. Kothari Centre for Research and Innovation in Science Education, Miranda House, University of Delhi, Delhi, 18-22 December 2017 (Resource Persons).
- Sinha Roy, S. and **Bahri, S.** 2017. Rhizosphere: The Action Zone of the Root. In: Manual of Workshop The Cell: Life's Playground, INSPIRE Internship Programme, pp. 12-15, D.S. Kothari Centre for Research and Innovation in Science Education, Miranda House, University of Delhi, Delhi, 18-22 December 2017 (Resource Persons).