

Curriculum Vitae

Dr. ANKITA SEHRAWAT



Designation	Assistant Professor	
Address	Department of Botany, First floor, NSB, Maitreyi College	
E-Mail	asehrawat@maitreyi.du.ac.in	
Educational Qualification:		
Degree	Institution	Year
Ph.D.	Ph.D. in Plant Stress Physiology, Proteomics and Bioinformatics, Department of Botany, University of Delhi, Delhi- 110007, India Thesis: "S-nitrosoproteome analysis in <i>Brassica juncea</i> from apoplast to nucleus indicates nitric oxide (NO) and cold stress cross-talk in stress, signaling and redox related pathways"	2015
PG	M.Sc. Botany, Department of Botany, University of Delhi, University of Delhi, Delhi- 110007, India	2009
UG	B.Sc. Botany, Maitreyi College, University of Delhi, Delhi- 110021, India	2007
Career Profile		
1.	Assistant Professor, Maitreyi College, Department of Botany, University of Delhi	2018 - continuing
2.	Assistant Professor, Daulat Ram College, Department of Botany, University of Delhi	2015 - 2018
3.	University Teaching Assistant, UTA, Department of Botany, University of Delhi	2010 - 2012
Areas of Interest / Specialization	Cold stress and Nitric oxide Signaling in sub-cellular Proteome; Environmental air- and water pollution assessment and management	
Publications		
Total Impact Factor - 43; Total citations - 328) https://scholar.google.com/citations?user=z-jRR4UAAAAJ&hl=en https://www.researchgate.net/profile/Ankita-Sehrawat		
1.	Sehrawat Ankita , Baweja Pooja, Chopra Haritma, Gandhi Pinkey, Sharma Priyanka, Suman Sakshi, Dahiya Vaishnavi, Poddar Nisha, Pal Madhurima, Identifying Pollution Scavenging Potential of Perennial Plants Growing in Maitreyi College Campus, University of Delhi. <i>Journal of Environmental Biology</i> , 44, 863-871, ISSN: 2394-0379.	2023
2.	Sehrawat Ankita ; Sougrakpama Yaiphabi; Deswal Renu, Cold modulated nuclear S-nitrosoproteome analysis indicates redox modulation of novel Brassicaceae specific, myrosinase and napin in <i>Brassica juncea</i> . <i>Environmental and Experimental Botany</i> , 161, 312-333, ISSN: 0098-8472, Impact factor-6.	2019

3.	Sehrawat Ankita; Sharma Shruti; Deswal Renu, Asada-Halliwell pathway maintains redox status in <i>Dioscorea alata</i> tuber which helps in germination. <i>Plant Science</i> , 250, 20-29. ISSN: 0168-9452, Impact factor – 5.2.	2016
4.	Sehrawat Ankita; Kashyap Prakriti; Deswal Renu, Nitric oxide modulates <i>Lycopersicon esculentum</i> C-repeat factor 1 (LeCBF1) transcriptionally as well as post-translationally by nitrosylation. <i>Plant Physiology and Biochemistry</i> , 96, 115-123. ISSN: 0981-9428, Impact factor – 6.5.	2015
5.	Sehrawat Ankita; Deswal, Renu S-nitrosylation analysis in <i>Brassica juncea</i> apoplast highlights the importance of nitric oxide in cold stress signaling. <i>Journal of Proteome Research</i> , 13, 2599-2619. ISSN: 1535-3893, Impact factor – 5.3.	2014
6.	Sehrawat Ankita; Deswal, Renu Sub-proteome S-nitrosylation analysis in <i>Brassica juncea</i> hints at the regulation of Brassicaceae specific as well as other vital metabolic pathway(s) by nitric oxide and suggests post-translational modifications cross-talk. <i>Nitric Oxide</i> , 43, 97-111. ISSN: 1089-8603, Impact factor – 4.8.	2014
7.	Deswal, R. Abat, J. K.; Sehrawat, Ankita. ; Gupta, R.; Kashyap, K.; Sharma, S.; Sharma B.; Chaurasia, S.P.; Chanu, S. Y.; Masi, A.; Agrawal, G. K.; Sarkar, A.; Agrawal, R.; Dunn, M. J.; Renaut, J.; Rakwal, R. First systematic plant proteomics workshop in Botany Department, University of Delhi: transferring Proteomics knowledge to next-generation researchers and students. <i>Proteomics</i> , 14, 1581-1586. ISSN: 1615-9853, Impact factor – 5.3,	2014
8.	Sehrawat Ankita; Gupta Ravi; Deswal, Renu Nitric oxide-cold stress signalling crosstalk-evolution of a novel regulatory mechanism. <i>Proteomics</i> , 13, 1816-1835. ISSN: 1615-9853, Impact factor – 5.3.	2013
9.	Sehrawat Ankita; Abat Kaur Jasmeet; Deswal, Renu; Deswal, RuBisCO depletion improved proteome coverage of cold responsive S-nitrosylated targets in <i>Brassica juncea</i> . <i>Frontiers in Plant Science</i> , 4, 342. ISSN: 1664-462X, Impact factor – 6.62.	2013
10.	Malkani, Neelam Pari; Sehrawat, Ankita* A survey of diversity of perennial plants in the Daulat Ram College Campus, University of Delhi - a case study. <i>Indian Journal of Tropical Biodiversity</i> , 25, 121-141. ISSN: 0971-4642. <i>*Corresponding Author</i>	2017
11.	Sehrawat, Ankita, Medicinal Importance of Plant Proteins, <i>International Journal of Biotechnology and Biomedical Sciences</i> , 2, 18-21. ISSN: 2454-4582, e-ISSN: 2454-7808.	2016
12.	Sehrawat Ankita; Deswal, Renu Protein tyrosine nitration in abiotic stress in plants. <i>Plant Stress</i> , 6, 77-88. ISSN: 1749-0359.	2012
13.	Sharma Meenakshi; Sehrawat Ankita; Gautam, Nidhi “Hindon once a lifeline, now a dead river: a mini review” in proceedings of National Conference on innovations in sciences and emerging challenges in health and environment (NSHE-2018) , 47-51. ISBN: 9788192981246.	2018

14.	Sehrawat Ankita; Abat Kaur Jasmeet; Deswal, Renu; Deswal, Cold stress modulates <i>Brassica juncea</i> nitrosoproteome, inhibits RuBisCO explaining photosynthetic down regulation observed in cold stress, <i>The Proceeding of International Symposium. “Frontiers in Agriculture Proteome Research: Contribution of proteomics technology in agricultural sciences”</i> , 64-67. ISBN: 978-4-904633-99-1.	2012
Other Publications		
1.	Published Reference (2-D) gels and proteome identification data of cold responsive S-nitrosylated proteins from RuBisCO depleted fractions of <i>Brassica juncea</i> to the World-2DPAGE Repository with database number 0084 . http://world-2dpage.expasy.org/repository/database=0084	2015
2.	Published Reference (2-D) gels and proteome identification data of S-nitrosoglutathione and cold responsive S-nitrosylated apoplastic proteins from <i>Brassica juncea</i> to the World-2DPAGE Repository with database number 0080 . http://world-2dpage.expasy.org/repository/database=0080	2015
3.	Editor of Book “Futuristic Trends in Biotechnology” , Book series ID: IIPV3EBS17_G45, Iterative International Publishers, USA, DOI: 10.58532. (Under final formatting and publishing)	2023
4.	Sehrawat, A.; Deswal, R. “Proteomics Approach to Uncover Key signalling pathways in <i>Brassica juncea</i> Abiotic and Biotic stress”, in book “The Brassica juncea Genome” , Publishers: Springer (New York City) , ISBN: 978-3-030-91507-0.	2022
5.	Authored book entitled “Replication of CSIR NET Life sciences”, Viva Books Private limited, ISBN: 978-93-90054-27-5	2021
6.	Authored book entitled “UGC-CSIR NET Life sciences Explanations and Solutions”, Viva Books Private limited, ISBN: 978-93-89662-47-4	2020
7.	Ankita Sehrawat, Adesh, Ayushi Gupta and Avantika Pathak, “Bioinformatics databases and Intellectual Property Rights” , Book chapter in Book entitled “Intellectual Property rights: Challenges and Prospects, Imperial Publications, ISBN: 978-81-949439-8-3	2021
8.	Sehrawat, A.; Deswal, R. “S-Nitrosylation in abiotic stress in plants and nitric oxide interaction with plant hormones”, in book “Mechanism of Plant Hormone Signaling under Stress” (Volume I), 399-409, Publishers: Wiley-Blackwell . ISBN: 978-1-118-88892-6	2017
9.	Sharma M.; Sehrawat A.; Gautam, N. “Role of microbes in pollution control and agriculture” in book “Environmental concerns of 21st Century: Indian and Global context” (Volume I), 9-16, ISBN: 978-93-83281-65-7	2016
10.	Sehrawat, A.; Deswal, R. “Dissecting nitric oxide signaling in nucleus: role of S-nitrosylation in regulating nuclear proteins” in a book “Reactive oxygen and nitrogen	2014

	<i>species signaling and communication in plants</i> ", 239-266. Springer, ISBN: 978-3-319-10079-1	
Awards / Fellowship		
1.	"Best oral presentation Award" for presenting "Identifying Air Pollution Scavenging Potential by Assessing Air Pollution Tolerance Index (APTI) of Perennial Plants Growing in Maitreyi College Campus, University of Delhi by 4 th World Environment Summit, ESDA (Environment and Social Development Association)	2023
2.	"Young Environmentalist Award" , for outstanding contributions in Environmental Physiology and Proteomics by 4 th World Environment Summit, ESDA	2023
3.	"Best Poster presentation Award" (second prize) for presenting "Analysing the effect of Hindon river water on phytochemical constituents of three species of <i>Ocimum</i> ", Equinox, The Annual International Conference, Conference on Research, Development and Social Transformation, Maitreyi College, University of Delhi	2023
4.	"Best Teacher Award" INSC, International Publishers	2022
5.	Dr. Sarvepalli Radhakrishnan "Best Faculty & Researcher Award" 2022 in Botany , IMRF Institute of Higher Education & Research	2022
6.	"Best Internship Project Award" , Maitreyi College, University of Delhi	2019
7.	"Best Poster Award" for presenting "S-nitrosylation analysis in <i>Brassica juncea</i> nuclear proteome" National Symposium on biotechnology: present status and future prospects in the Department of Biotechnology, Deenbandhu Chhotu Ram University of Science & Technology, Murthal, Haryana, India	2013
8.	"Student Fellowship Award" for presenting Paper entitled "S-nitrosoproteome analysis in <i>B. juncea</i> hints at wide spectrum metabolome regulation & spatial distribution of targets" 5 th International Nitrogen Conference by Reactive Nitrogen Management for Sustainable Development - Science, Technology and Policy Organizers: Indian Nitrogen Group (ING-SCON) & International Nitrogen Initiative (INI)	2010
9.	"University Ranker Prize" in M.Sc. Botany, University of Delhi, Delhi, India	2009
10.	"Academic Prize" , Highest Marks in part-I, M.Sc. Botany (2008-09), Miranda House College, University of Delhi, India	2008
11.	"Laxmi Krishnaswami Prize" , Highest marks in M.Sc. Botany (2008-09), Miranda House College, University of Delhi	2009
Research Projects:		
1.	Effects of Polluted Hindon River Water on Phytochemical Traits in <i>Ocimum</i> species	2023
2.	Identifying pollution scavenging potential in perennials growing in Maitreyi College campus "Best Summer Internship Award"	2019
3.	Literature survey for the comparative analysis of pollution scavenging potential of the perennials growing in Maitreyi College Campus	2020

Reviewer of International and National Journals		
1.	Biologia Plantarum	
2.	Journal of Experimental Agriculture International	
3.	Asian Journal of Research in Biochemistry	
4.	Biotechnology Journal International	
5.	International Journal of Pathogen Research	
6.	Phytomorphology Journal	
Invited speaker/Resource person		
1.	Lead talk on “S-nitrosoproteome analysis in <i>Brassica juncea</i> from apoplast to nucleus during cold stress” in the 9th Plant Nitric Oxide International Meeting (PN09), NIPGR, New Delhi	2024
2.	Resource Person for International workshop on " Intellectual Property Rights: Inventions, Patents and Copyrights ", Maitreyi College, University of Delhi	2023
3.	Resource Person of workshop in 4th Plant Proteomics workshop entitled “Seabuckthorn- Genomics, Proteomics and Metabolomics” for the Ph.D. students and Research Scholars in the Department of Botany, University of Delhi	2019
4.	Presented a poster on “ Bioinformatics and Intellectual Property Rights ” in National Conference on Intellectual Property Rights: Challenges and Prospects organized by Department of Botany, Maitreyi College, University of Delhi	2019
5.	Resource Person of SDP (Skill Development Programme) for undergraduate students on Basics of Bioinformatics: Theory and Practice in the Daulat Ram College, University of Delhi	2019
6.	Co-convener and resource person of Faculty Development Program (FDP) on CBCS based curriculum paper Industrial and Environmental Microbiology for B.Sc. Botany (Hons) held in the Department of Botany, Daulat Ram College, University of Delhi	2018
7.	Resource Person of National Workshop on “ Intellectual Property Rights (IPR): Current Status and Future Prospects ” held in Maitreyi College, University of Delhi	2018
8.	Invited lecture on “ Mining deep proteome by analyzing sub-cellular nuclear proteome and RuBisCO depletome ” in the 3rd Plant Proteomics Workshop/Training Program on Mining Proteome and Deep Proteome (by sub-cellular proteome analysis, depletion, affinity enrichment) and beyond , held in the Department of Botany, University of Delhi	2017
9.	Resource Person of two weeks SDP (Skill Development Programme) for undergraduate students on “ Food Adulteration and Security ” in the Daulat Ram College, University of Delhi	2017
10.	Resource person in the 2nd Plant Proteomics Workshop/Training Programme on “ Analyzing major PTMs: S-nitrosylation, glycosylation and phosphorylation ” held in the Department of Botany, University of Delhi	2015

11.	Resource person in the 1st Plant Proteomics Workshop/Training Programme held in the Department of Botany, University of Delhi	2013
Conferences/workshops/seminars organized		
1.	Convenor of seminar on "Wildlife Hazard Management" organized by Department of Botany, Maitreyi college, University of Delhi	2024
2.	Co-ordinator of seminar on " Intellectual Property Rights and Innovations " organized by Department for Promotion of Industry and Internal Trade in collaboration with Blossom: The Botanical Society, Maitreyi College, University of Delhi for the undergraduate students in Maitreyi College, University of Delhi	2023
3.	Convenor for International workshop on " Intellectual Property Rights: Inventions, Patents and Copyrights ", Maitreyi College, University of Delhi	2023
4.	Co-ordinator of webinar on " Intellectual Property Rights Awareness Programme ", organized by Intellectual Property Office, India under National IP Awareness Mission (NIPAM) for the undergraduate students in Maitreyi College, University of Delhi	2022
5.	Organizing Committee Member of webinar on " Intellectual Property Rights: creating value from intellect, innovation and invention ", organized by the Department of Botany, Maitreyi College, University of Delhi	2021
6.	Organizing committee member of seminar on " How to read scientific literature and Introduction to MANAV-Human Atlas initiative " organized by the Department of Botany, Maitreyi College, University of Delhi	2021
7.	Organizing committee member of webinar on " Computer-Aided Design and 3D Printing " organized by Short-term committee and Department of Botany, Maitreyi College, University of Delhi	2021
8.	Organizing committee member of webinar " National Webinar on 'Drug Development " organized by b "Science Setu", Maitreyi College, University of Delhi	2021
9.	Organizing committee member of webinar " Yings and Yags of an Infectious Disease " organized by "Science Setu", Maitreyi College, University of Delhi	2021
10.	Organizing committee member of webinar on " Personality Development " organized by the Department of Botany, Maitreyi College, University of Delhi	2021
11.	Organizing committee member of webinar " National Webinar on Developing a potent vaccine against the SARS-COV2: Feasibility and Challenges " under "Science Setu", Maitreyi College, University of Delhi	2020
12.	Organizing Committee member for the seminar on " Cyber Hygiene For Virtual Teaching Platforms " organized by Department of Botany, Maitreyi College, University of Delhi	2020
13.	Organizing Committee Member of National Conference on Intellectual Property Rights: Challenges and	2019

	Prospects organized by Department of Botany, Maitreyi College, University of Delhi	
14.	Organizing Committee Member of National Workshop on “ Intellectual Property Rights (IPR): Current Status and Future Prospects ” Maitreyi College, University of Delhi	2018
15.	Co-ordinator of “ Digital marketing workshop ”, Daulat Ram College, University of Delhi,	2018
16.	Organizing Committee Member of Workshop on “ Biodesign and Diagnostics ” under “Science Setu” by Maitreyi College, University of Delhi, Delhi in association of “Centre for Biodesign Diagnostics”, THSTI	2018
17.	Organizing Committee Member of the Skill Development Workshop on “ Food Adulteration and Security ” for the undergraduate students, organized by Department of Botany, Daulat Ram College, University of Delhi	2017
FDPs/Conference/Workshops/Seminars		
1.	Participated in 4 weeks Faculty Induction Program (MMTTP), Ramanujan College	2024
2.	Participated in "NEP 2020 Orientation & Sensitization Programme", Centre for Professional Development in Higher Education (UGC-MMTTC)	2024
3.	“ Rapporteur ” in Virtual Conference entitled “ Next generation proteome mining and nano-bio interactions for better plant health ” organized by Delhi University Botanical Society, Department of Botany, University of Delhi	2021
4.	Participated in webinar on “ Intellectual Property Rights in India and its Career Prospects ” organized by Department of Botany, Maitreyi College, University of Delhi	2021
5.	Participated in the International Conference on “ Effective strategies for Biodiversity conservation ” held in the Daulat Ram College, Department of Botany, University of Delhi	2021
6.	Participated in Four weeks Induction/Orientation Programme for "Faculty in Universities/Colleges/Institutes of Higher Education" by Ministry of Human Resource Development Pandit Madan Mohan Malaviya, National Mission on Teachers and Teaching	2020
7.	Participated in two weeks Faculty Development Programme on “ Managing Online classes and Co-creating MOOCS:2.0 ”, by Ministry of Human Resource Development Pandit Madan Mohan Malaviya, National Mission on teachers and Teaching	2020
8.	Participated in the National Webinar on “ Tinkering with Plant Genomes ” held in the Miranda College, University of Delhi	2020
9.	Participated in the National Webinar on “ Biodiversity and conservation ” held in the Daulat Ram College, Department of Botany, University of Delhi	2020
10.	Participated in the International Conference on “ How to Build up Efficient Immunity against respiratory infections including Covid-19 issue ” organized by University of Leipzig, Germany and Kalindi College, University of Delhi	2020

11.	Participated in Webinar on “Medicinal Plants: Eternal Source of Health and Wellness” organized by Swami Shradhanand College, University of Delhi	2020
12.	Poster presented on “ Bioinformatics and Intellectual Property Rights ” in National Conference on Intellectual Property Rights: Challenges and Prospects organized by Department of Botany, Maitreyi College, University of Delhi	2019.
13.	Paper presented on “ Identifying pollution scavenging potential in perennials growing in Maitreyi College campus ” in the National seminar on “ Assessment and Accreditation of best Practices in Higher Education Institute under NAAC Framework ” organized by Internal Quality Assurance Cell, Maitreyi College, University of Delhi	2019
14.	Participated in National conference on “ Biotechnology in present era: Impact on human life and environment ” organized by Department of Biotechnology, Govt. of India (under DBTCTEP program) and Maitreyi College, University of Delhi	2019
15	Presented a poster on “ Hindon once a lifeline, now a dead river: a mini review ” in National Conference on Innovations in sciences and emerging challenges in health and environment (NSHE-2018)	2018
16.	Presented a paper “ Role of microbes in pollution control and agriculture ” in National conference on environmental concerns of 21 st century: India and global context in Zakir Husain Delhi College (evening), University of Delhi	2016
17.	Participated in workshop for undergraduate science teachers on “ Bioinformatics and Biostatistics: An Introduction ”, organized by Department of Zoology, Miranda House, University of Delhi	2016
18.	Participated in the workshop on “ Conservation of medicinal plants by micropropagation ” for the undergraduate students, in the Daulat Ram College, Department of Botany, University of Delhi	2015
19.	Oral presentation on “ Medicinal importance of plant proteins ” in International Conference on public health: Issues, Challenges, Opportunities, Prevention, Awareness (public health: 2016), organized by Daulat Ram College, University of Delhi, Delhi and Krishi Sanskriti, New Delhi,	2016
20.	Presented “ Role of Nitric Oxide in Morphogenesis and Tissue Culture ” in the workshop on Conservation of medicinal plants by micropropagation” in the Daulat Ram College, Department of Botany, University of Delhi	2015
21.	Oral presentation on “ Cold modulated Brassica juncea S-nitrosoproteome ” in the Proteomics Society Group Meet, Delhi Chapter, in the Department of Botany, University of Delhi	2014
22.	Poster presentation on “ Proteome and S-nitrosoproteome analysis suggest a cross talk between nitric oxide and cold stress signalling ” in the "International symposium on plant signaling and behaviour" in the Department of Botany, University of Delhi	2014

23.	Oral presentation on “ S-nitrosoproteome analysis in Brassica juncea apoplast shows involvement of nitric oxide signaling in cold stress ” in the 7th annual convention of ABAP and International conference on plant biotechnology, molecular medicine & human health in Department of Genetics, University of Delhi, South Campus,	2013
24.	Poster presentation on “ S-nitrosylation analysis in Brassica juncea nuclear proteome ” in the National symposium on biotechnology: present status and future prospects in the Department of Biotechnology, Deenbandhu Chhotu Ram University of Science & Technology, Murthal, Haryana	2013
25.	Poster presentation on “ S-nitroproteome analysis in Brassica juncea hints at the wide spectrum metabolome regulation and spatial distribution of targets ” in 5 th International Nitrogen conference, New Delhi	2010
26.	Participated in the short-term course on Bioinformatics in Genomics and Proteomics in IIT Kharagpur	2008
27.	Participating in Disaster Management and Self Defense Course held in Maitreyi college, University of Delhi	2005
Administrative Committees		
1.	Member, Garden Committee	2023-2024 2022-2023 2021-2022 2020-2021 2019-2020
2.	Member, Alumni Committee	2023-2024 2022-2023 2021-2022 2020-2021 2019-2020
3.	Member, Freeship Committee	2023-2024 2022-2023
4.	Member, Short term course committee	2020-2021
5.	Member, Science Setu, a collaboration of Maitreyi College with THSTI (Translational Health Science and Technology Institute, Faridabad)	2023-2024 2022-2023 2021-2022 2020-2021 2019-2020 2018-2019
Membership		
1.	International Plant Proteomics Organization (INPPO)	
2.	MOMS in Proteomics	
3.	ESDA, Environment and Social Development Association Lifetime membership	
4.	InSc lifetime Membership	
Others		
1.	“ Convener ”, course content (Theory & Practicals) paper “ Genomics, Proteomics and Metabolomics ” for generic elective (GE) courses, “ National Education Policy ”	2022

2.	Educational visit to National Rail Museum, New Delhi for the students of Skill Enhancement Course entitled, "Sustainable Ecotourism and Entrepreneurship".	2023
3.	Educational visit and workshop to Central Council for Research in Ayurvedic Sciences (CCRAS), Ministry of AYUSH, Govt. of India, New Delhi for the students of B.Sc. Life Sciences (V semester) as a part of Skill Enhancement Course entitled, "Ethnobotany" for attending the lecture session on the title, " Documentation of Ethno-Medical Knowledge "	2018
4.	Educational visit to " Mother Dairy Factory ", New Delhi for the students of B.Sc., Botany (Hons) for the paper "Industrial and Environmental Microbiology"	2018

Ankita

Dr. Ankita Sehrawat