Title	Profe	ssor	First	Charu	Last	Gupta	Photograph
			Name	Khosla	Name		
Designation		Professor in Botany				A desired of a second	
Address Depa		Depar	partment of Botany,				
Achar		harya Narendra Dev College (University of Delhi),					
Govin			ovindpuri, Kalkaji,				951
	New I		New Delhi – 110 019 INDIA				
Phone	Phone No. +91		+91 - 11 - 26294542, +91 - 11 - 26293224				
Office	Office						
Reside	Residence /						
Mobile	:						
Email / Web charu		harukhoslagupta@andc.du.ac.in					
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		ments/Botany/Charu%20Faculty%20Proforma%202					
		021.p	df				

Educational Qualifications

Ludeational Quantications				
Degree	Institution	Year		
Ph.D.	University of Delhi	1997		
(Reproductive Biology)				
M.Phil. (Botany) with Distinction	University of Delhi	1992		
M.Sc. (Hons.) in Botany	Panjab University	1990		
Gold Medallist				
B.Sc. (Hons.) in Botany	Panjab University	1989		
Gold Medallist				

Career Profile

Working as a Professor in Botany at Acharya Narendra Dev College, University of Delhi, my Doctoral degree from University of Delhi is in Reproductive Biology of aquatic angiosperms. In 2022, I authored a book on 'Reproductive Biology of Angiosperms- Concepts and Laboratory Methods', published by the prestigious Cambridge University Press. I am a recipient of the "Meritorious Teacher Award" instituted by Government of National Capital of Delhi for the year 2021. I was also an INSA visiting scientist to Slovenia in 2019 that was an extension of a bilateral Indo - Slovenia international project funded by DST during the period 2015 - 2018. Currently, I am actively engaged in Environment monitoring and assessment with primary focus on Ambient Air Pollution, in which we have also collaborated extensively with scientists from Josef Stefan Institute, Ljubljana, SLOVENIA and NILU, Kjeller, NORWAY. My teaching career spans over 25 years with research experience being more extensive. Besides several research publications in Scientific journals of National and International acclaim, I have also authored 04 chapters in books / e-resources on Reproductive Biology. I have been a designated Scientific Chair and Judge at International Conference on Education (ICEDU) for last four years (2019-2023) and have also chaired different tracks as Session Chair. I am Member, Editorial Board- International Journal of Coordination and management in Sustainable development (IJCMSD). I have been a reviewer for the journals Air, Soil and Water Research and Plant Studies. I have been the recipient of best presentation award at two international conferences and also bagged Teaching Excellence Award for Innovation by University of Delhi in 2015. I have completed 02 major and 04 minor research projects funded by DST, University of Delhi and CSIR.

Research Guidance and related visits

Recognized for independent Ph.D. guidance by University of Delhi since November 2019. Currently, one student Mr. Nitin Joshi is registered under my supervision for doctoral thesis work. Guided more than 100 undergraduate students for Summer Internships and Research

a) Jozef Stefan Institute, Ljubljana, SLOVENIA

Visiting Fellow at Jozef Stefan Institute, Ljubljana, SLOVENIA from 20 September 2019 to 04 October 2019 under aegis of INSA Bilateral Exchange Programme-2019

b) Kuala Lumpur, MALAYSIA

Presented a paper and chaired two sessions at the 5th International Conference on Education 2019 (ICEDU 2019) held from 5 – 7 April, 2019 at Kuala Lumpur, Malaysia

c) NILU- Norsk institutt for luftforskning, NORWAY

Invited talk on "Mitigation of Ambient Air Pollution" - on 27 October 2017 at Norwegian Institute of Air Research (NILU), Kjeller, Norway

d) Budapest, HUNGARY

Presented paper at ICOEST 2017 Conference, Budapest 19 – 23 October 2017

e) Jozef Stefan Institute, Ljubljana, SLOVENIA

- i) Visit (28th September 08 October 2015) under the aegis of Indo-Slovenia bilateral project funded by DST, Govt. of India.
- ii) Presented paper at a. ISEB 2015 Conference September 2015 Piran-Portoroz and OCWC Global 2014 Conference April 2014, Ljubljana

Research Projects

S. No.	Sponsoring	Title of the Projects	Position	Tenure	Budget
	Agency				(Rs.
					Lakh)
1.	Department of Science and Technology (DST)	Exposure-response assessment of Ambient Air Pollution (AAP) and Hg contamination in affected cities of India and Slovenia: A comparative study	PI	May 2015 – Novemb er 2018	16.11
2.	University of Delhi	Development of low-cost, robust, portable water purifier prototype with physical, chemical and biological filtration for field water disinfection and potable water generation in natural calamity afflicted zones with harsh conditions	PI	Septemb er 2015 – Novemb er 2016	6.00
3.	University of Delhi	Artificial Olfaction using E-NOSE – mimicking human nose for gas sensing applications (ANDC - 204)	Co-PI	Novemb er 2013 – March 2015	5.00
4.	IEDC, Department of Science and Technology	Development of compact water purifier system	PI	2013 – 2014	1.00

5.	Department of Science and Technology	Fertilization in Podostemaceae: an unresolved problem	PI	2003 – 2006	10.00
6.	CSIR	Reproductive biology of some aquatic	Research	1998 –	
		angiosperms	Associate	2003	

Invited Talks, Scientific Reviewer, Session Chair and Distinctions

- Session Chair, at the one-day National Conference on 'One earth, one family, one Future' organized by Acharya Narendra Dev College and Department of Commerce, Delhi School of Economics, University of Delhi in collaboration with Indian commerce Associates (ICA) Delhi NCR Chapter held at ANDC on April 3, 2023
- Academic partner, Scientific Committee Member, Evaluation Panel Member and Session chair at the 9th International Conference on Education 2023 (ICEDU-2023)-Equitable education in the post pandemic World held in Bangkok from March 16-17, 2023
- Scientific Committee Member at International Congress on Impacts of Climate Change on Agriculture, Ecosystems, and Human Health (ICCC 2022) November 16-18, 2022, Malaysia
- Session Chair, 3rd International Symposium on Ciliate Biology (ISCB-2022) organized by Acharya Narendra Dev College and Maitreyi College, University of Delhi on November 8, 2022
- Scientific Reviewer, Scientific Committee Member and Judge at the 8th International Conference on Education 2022 (ICEDU 2022)- Education in times of uncertainty: Preparing for the held from 24 26 March, 2022
- Scientific Chair at the International e-conference on 'Mitigating Contemporary Environmental issues by Sustainable Approaches (ICMCESA-2-22)' held from 22-28 February, 2022 under the aegis of IQAC & DBT Star College scheme of Acharya Narendra Dev College, University of Delhi
- Scientific Chair and Judge at 7th International Conference on Education 2021 (ICEDU 2021)
- Scientific Chair at 6th International Conference on Education 2020 (ICEDU 2020) held from 3 5 April, 2020 at Bangkok, Thailand
- Awarded Best Oral Presentation in 2nd National Conference on 'New Trends in Nanotechnology and Applications' (NTNA-2020) organized by Atma Ram Sanatan Dharam College, University of Delhi during Feb 6-7, 2020.
- Session Chair for two tracks at the 5th International Conference on Education 2019 (ICEDU 2019) held from 5 – 7 April, 2019 at Kuala Lumpur, Malaysia
- Awarded Session's Best Presentation for the talk "Addressing issues of Environmental Pollution by initiating a paradigm shift in scientific temperament at the grass root level of primary school education at the 5th International Conference on Education 2019 (ICEDU 2019) held from 5 – 7 April, 2019 at Kuala Lumpur, Malaysia
- Best Poster presentation award at the interdisciplinary exhibit presentation "New Frontiers in Science" held on 22 October 2019 and organized under the aegis of DBT sponsored Star College programme.
- Certificate of appreciation for membership in MHRD's Innovation Cell, Govt. of India for the year 2018 19
- Recipient of Best Poster Award at International Conference on strategies for Environmental Protection and management, ICSEPM-2016, held during December 11-13, 2016 at Jawaharlal Nehru University, New Delhi.
- Recipient of certificate of appreciation from University of Delhi for Innovation Project

- ANDC 301: Development of low-cost, robust, portable water purifier prototype with physical, chemical and biological filtration for field water disinfection and potable water generation in natural calamity afflicted zones with harsh conditions.
- Nodal Officer at AND College for Delhi University Innovation Projects 2015-16
- Winner of Best Innovative Idea award for DU Innovation project ANDC 204 at Antardhvani 2015 (Academic & Cultural festival) held from 20 – 22 February 2015 at University of Delhi.
- Recipient of Teaching Excellence Award for Innovation, University of Delhi 2014 –
 15.
- Guided summer interns on the project 'Studies on understanding and measuring ambient air pollution (AAP)' from Banasthali Vidyapeeth, Rajasthan during May-June 2015.
- Project details included in Report on Innovation Projects Summary of 2013 15 initiative published by Research Council, University of Delhi [ISBN: 978-93-85611-10-0].

Publications Profile

Books Published

 Reproductive Biology of Angiosperms: Concepts and Methods. – Yash Mangla, Priyanka Khanduri and Charu Khosla Gupta. 2022. Cambridge University Press. ISBN 978-1-009-16040-7 (a text book for undergraduates).

Book Chapters

- "Self-Incompatibility- Open Educational Resource", University of Delhi. Yash Mangla and Charu K. Gupta (2015) pp 1 – 30 (http://www.vle.du.ac.in)
- "Love in the air: wind pollination ecological and evolutionary considerations" Yash Mangla and Charu K. Gupta in 'Plant Reproductive Biology and Conservation' (2014) Editors Rupam Kapoor et.al. I. K. International Publishing House Private Limited pp 234 245. [ISBN 978-93-82-3329-09]
- "Rhodophyceae-Open Educational Resource", University of Delhi. Charu K. Gupta
 (2013) pp 1 35 (http://www.vle.du.ac.in)
- "Pollination in Aquatic flowering plants" H. Y. Mohan Ram and Charu Khosla (1998)
 Plant Reproduction: Genetics and Biology. Editor R. N. Gohil. Scientific Publishers
 India, pp 75 92. [ISBN 817-233-1770]

Papers in Refereed Journals

- 1. "Inclusion of environmental awareness as basic tenet of education in India for realization of sustainable practices"- Arijit Chowdhuri, Sakshi Saraswat, and Charu Khosla Gupta- Research Journal of Educational Sciences Volume 9 (2021) pp 1-8 [ISSN: 2321-0508]
- 2. "Gauging the nature and magnitude of Particulate Matter (PM) concentrations in Bengaluru, the IT capital of India" Charu Khosla Gupta, Jatinder Pal Singh, Priya Chopra, V. Bhasker Raj and Arijit Chowdhuri DU Journal of Undergraduate Research and Innovation Volume 3, Issue 2, (2018) pp 71-81 [ISSN: 2395-2334]
- 3. "Assessment of particulate matter (PM) concentrations at a typical concentration site in Bangalore, India" Arijit Chowdhuri and Charu Khosla Gupta, International Research Journal of Environmental Sciences Vol. 6 (2), February 2017 pp 1 5 [ISSN: 2319-1414]
- 4. "Virtual Learning Environment (VLE)- A platform to enhance quality education"-

- Charu K. Gupta and Arijit Chowdhuri, International Journal on Education Growth and Research 2017 Vol. II (I)
- 5. "Diminishing public health due to Particulate Matter in the ambient" Charu K. Gupta and Arijit Chowdhuri International Journal of Engineering Research and Allied Sciences (IJERAS) Vol. 1 (9), November 2016 pp 1 5 [ISSN: 2455-9660].
- **6.** "A particulate Matter Based Real-Time Analysis of Odd-Even Car Experiment in Delhi" Charu Khosla Gupta, Shweta Singh, Abhishek Singh, Pragya Yagnik, Bishal K. Das and Arijit Chowdhuri, DU Journal of Undergraduate Research and Innovation Vol. 2 (1), 2016 pp 31- 39 [ISSN 2395-2334]
- 7. "Assuaging Human Health Concerns Through Analysis of Physicochemical Parameters of Potable Water Samples in Delhi" Arijit Chowdhuri, Bishal K. Das, Shweta Singh and Charu K. Gupta, Journal of Innovation for Inclusive Development (JIID) Vol. 1 (1), 2016 pp 20 25.
- 8. "A novel OER initiative under University of Delhi's new Four-Year Undergraduate Programme: an investigation into the Pedagogical Impact" Arijit Chowdhuri and Charu Khosla Gupta Video Journal of Open Education Abstracts Vol. 1, April 2014 (http://videolectures.net/arijit chowdhuri/)
- 9. "Low cost 'Smart' switch for designing Electronic Nose (E Nose) for gas sensing applications" Nikhil Kumar, Saptarshi Chakrabarty, Shobha Badola, Sunita Narang, Charu K. Gupta and Arijit Chowdhuri, Journal of Advanced Research in Electrical and Electronic Engineering (AREEE) Vol. 1 (1), 2014 pp 35 37 [Print ISSN: 2349-5804 Online ISSN: 2349-5812]
- 10. "Using mobile phones with android OS for measuring hazardous gas concentrations detected using Electronic Nose (E-Nose)" Prayas Tiwari, Ashish Pokhriyal, Pankaj Rawat, Charu K. Gupta, Sunita Narang and Arijit Chowdhuri, Journal of Advanced Research in Electrical and Electronic Engineering (AREEE) Vol. 1 (1), 2014 pp 25 27 [Print ISSN: 2349-5804 Online ISSN: 2349-5812]
- 11. "Pollination biology of Indotristicha ramosissima (Podostemaceae: Tristichoideae)" Charu K. Gupta and Anita Sehgal, Aquatic Botany Vol. 91, 2009 pp 51 56.
- **12.** "Cleistogamy in Grifithella hookeriana (Podostemaceae)" Charu Khosla, K. R. Shivanna and H. Y. Mohan Ram, South African Journal of Botany Vol. 67, 2001 pp 324 328.
- **13.** "Reproductive biology of Polypleurum stylosum (Podostemaceae)" Charu Khosla, K. R. Shivanna and H. Y. Mohan Ram, Aquatic botany Vol. 67, 2000 pp 143 154.
- **14.** "Pollination in aquatic insectivore Utricularia inflexa var. stellar"- Charu Khosla, K. R. Shivanna and H. Y. Mohan Ram, Phytomorphology Vol. 48 (4), 1998 pp 417 425.
- **15.** "Morphology of flower, fruit and seed in Polypleurum stylosum" Charu Khosla and H. Y. Mohan Ram, Aquatic Botany Vol. 46, 1993, pp 255 262.

Abstracts in International Conferences (refereed):

- "Estimating air pollution tolerance index of some native tree species in Delhi using UV-Vis spectroscopy" Nitin Joshi, Arijit Chowdhuri and Charu Khosla Gupta, 2nd Int'l Conference on Advanced Functional Materials and Devices" (AFMD-2023), 13 15 March 2023, organized by Atma Ram Sanatan Dharma College (University of Delhi) Dhaula Kuan, New Delhi 110 021, INDIA pp 143
- 2. "Estimation of particulate matter exposure experienced by an undergraduate student in Delhi on a daily basis" Sruthi S. Kumar, Jay Kumar Sirmoria, <u>Arijit Chowdhuri</u> and Charu Khosla Gupta, 2nd Int'l Conference on Advanced Functional Materials and Devices (AFMD-2023), 13 15 March 2023, organized by Atma Ram Sanatan Dharma College (University of Delhi) Dhaula Kuan, New Delhi 110 021,

- INDIA pp 162
- 3. The New Face of Education Beyond the Realms of the Regular Classroom: Innovation in Practice Charu Khosla Gupta and Arijit Chowdhuri, International Conference on Education 2023 (ICEDU 2023) 16 17 March 2023, Bangkok, Thailand pp 106 [ISBN 978-624-5746-34-7]
- 4. The New Education Policy (NEP) a Step Towards Equity in Education in India Arijit Chowdhuri and Charu Khosla Gupta, International Conference on Education 2023 (ICEDU 2023) 16 17 March 2023, Bangkok, Thailand pp 24 [ISBN 978-624-5746-34-7]
- 5. "Microbes as natural crusader for pollutants in air" Aishwary Kumar Chaturvedi, Mayank Yadav, <u>Arijit Chowdhuri</u> and Charu Khosla Gupta, 7th Annual International Conference of Indian Network for Soil Contamination Research (INSCR), 7 11 November 2022 pp 140
- 6. "Air Pollution Tolerance Index (APTI) a tool to measure pollution tolerance in some native trees of Delhi" Sruthi S. Kumar, Jay Kumar Sirmoria, Yash Mangla, <u>Arijit Chowdhuri</u> and Charu Khosla Gupta, 7th Annual International Conference of Indian Network for Soil Contamination Research (INSCR), 7 11 November 2022 pp 159
- 7. "The effects of climate change on the plant-pollinator relationship"- Mridula Rani, Charu K Gupta, Yash Mangla and Mayank Yadav- International e-conference on Mitigating Contemporary Environmental issues by sustainable approaches (ICMCESA-2022) organized by Acharya Narendra Dev College, University of Delhi, India from February 22-28, 2022.
- 8. "A study on environmental efficacy of air-purifiers vis-à-vis features and cost benefits"- Sandeep Kumar Goel, Priyanka, Arijit Chowdhuri and Charu Khosla Gupta- International e-conference on Mitigating Contemporary Environmental issues by sustainable approaches (ICMCESA-2022) organized by Acharya Narendra Dev College, University of Delhi, India from February 22-28, 2022.
- 9. "The effects of Air-pollution on human health"- Aishwary Kumar Chaturvedi, Yash Mangla and Charu Khosla Gupta- International e-conference on Mitigating Contemporary Environmental issues by sustainable approaches (ICMCESA-2022) organized by Acharya Narendra Dev College, University of Delhi, India from February 22-28, 2022.
- 10. "A typical everyday exposure to particulate matter in the life of an undergraduate student in Delhi"- Arijit Chowdhuri, Jay Kumar Sirmoria, Sruthi S. Kumar, Charu Khosla Gupta- International e-conference on Mitigating Contemporary Environmental issues by sustainable approaches (ICMCESA-2022) organized by Acharya Narendra Dev College, University of Delhi, India from February 22-28, 2022.
- 11. Soil quality monitoring using low-cost networked sensors: investigating the effect of climate change in real-time" Arijit Chowdhuri and Charu Khosla Gupta- 6th Annual International Conference of INSCR 2021on "Microbes in Sustainable Development" held from 15-18 November, 2021
- 12. "Investigating the role of ICT infrastructure in influencing the uptake of educational innovation and development of digital competencies amongst students in primary-education classrooms of Government funded schools in Delhi, INDIA" <u>Arijit Chowdhuri</u>, Charu Khosla Gupta and Divya Mann International Conference on Education 2019 (ICEDU 2019) 5 7 April 2019, Kuala Lumpur, Malaysia pp 85
- 13. "Addressing issues of environmental pollution by initiating a paradigm shift in scientific temperament at the grass-root level of primary school education"- Charu

- Khosla Gupta and <u>Arijit Chowdhuri</u> International Conference on Education 2019 (ICEDU 2019) 5 7 April 2019, Kuala Lumpur, Malaysia pp 11
- 14. "Preliminary studies on estimating the composition and concentration levels of dangerous metals in fine dust at Dariba Kalan, Delhi: human health concerns" Charu Khosla Gupta, Jatinder Pal Singh, Priya Chopra and Arijit Chowdhuri International Symposium on Ciliate Biology (ISCB 2018) 4 6 April 2018, India Habitat Centre, New Delhi, INDIA pp 108
- 15. "Potential health risks arising from Ambient Air Pollution (AAP) due to variation in PM10, SOx, NOx and CO concentration levels in New Delhi, Bengaluru (India) and Ljubljana (Slovenia): A spatio-temporal study" Arijit Chowdhuri, Priya Chopra, Jatinder Pal Singh, Anju Gupta and Charu Khosla Gupta International Symposium on Ciliate Biology (ISCB 2018) 4 6 April 2018, India Habitat Centre, New Delhi, INDIA pp 111
- 16. "Measuring ambient air pollution using data envelope analysis with principal components: an exposure response assessment" Arijit Chowdhuri, Charu Khosla Gupta, V. Bhasker Raj, and Vineet Kumar Singh 3rd International Conference on Environmental Science and Technology (ICOEST 2017) 19 23 October 2017, Budapest, HUNGARY pp 46 [ISBN 978-605-83575-6-3]
- 17. "Preliminary assessment of simultaneous emission of PM_{0.5}, PM_{2.5} and CO from incense and mosquito repellents contributing to non-discernible pollution within Asian households" Charu Khosla Gupta, V. Bhasker Raj, Arijit Chowdhuri 3rd International Conference on Environmental Science and Technology (ICOEST 2017) 19 23 October 2017, Budapest, HUNGARY pp 47 [ISBN 978-605-83575-6-3]
- 18. "OER adoption by University of Delhi, India: Student's readiness and acceptance"-Sarita Kumar, Charu K. Gupta and Savithri Singh, OE Global Conference 2017, 8 10 March 2017, Cape Town, South Africa (http://conference.oeconsortium.org/2017/presentation/oer-adoption-by-university-of-delhi-india-students-readiness-and-acceptance/)
- 19. "Comparison of atmospheric mercury (Hg⁰) concentration levels in air at Hg mine area in Idrija, Slovenia and wholesale gold market in Dariba Kalan, Delhi, India" Charu K. Gupta, David Kocman and Arijit Chowdhuri, International Conference on Strategies for Environmental Protection and Management (ICSEPM 2016) held from 11 13 December 2016 at Jawaharlal Nehru University, New Delhi 110 067, INDIA pp O3 O4
- 20. "Remote monitoring of landfill gas concentrations in real-time from MSW landfills in Delhi using portable and autonomous Electronic Nose" Arijit Chowdhuri and Charu K. Gupta, International Conference on Strategies for Environmental Protection and Management (ICSEPM 2016) held from 11 13 December 2016 at Jawaharlal Nehru University, New Delhi 110 067, INDIA pp ES 2 ES 3.
- 21. "Detection of trace-level H₂S, SO₂ and H₂ gas concentrations using nanocrystalline SnO₂ thin films loaded with CuO nanoparticles" Charu K. Gupta and Arijit Chowdhuri, Proc. of 22nd International Symposium on Environmental Biogeochemistry (ISEB 2015) 28th September 2nd October 2015 Piran-Portoroz, SLOVENIA pp 91
- 22. "Real-time measurement of gaseous emissions from unrestrained MSW landfills located in Delhi, India using Electronic-Nose (E-Nose)" Arijit Chowdhuri, Shubham Raj and Charu K. Gupta, Proc. of 22nd International Symposium on Environmental Biogeochemistry (ISEB 2015), 28th September 2nd October 2015 Piran-Portoroz, SLOVENIA P 49, pp 142

- 23. "Significant amount of Carbon Monoxide (CO) generation with heater operation within the microenvironment of a closed car cabin" Charu K. Gupta, Nikhil Kumar, Saptarshi Chakrabarty and Arijit Chowdhuri, Proc. of 22nd International Symposium on Environmental Biogeochemistry (ISEB 2015) 28th September 2nd October 2015 Piran-Portoroz, SLOVENIA P 50, pp 143
- 24. "Carbon monoxide generation within micro-environment of households through regular usage of popular incense and anti-mosquito repellants"- Shweta Singh, Pragya Yagnik, Charu K. Gupta and Arijit Chowdhuri. Proceedings of 3rd Indo-UK Seminar on Recent advances in Chemical sensors (UGC-UKIERI IUCRACS-2015), 25-26 August, 2015, held at Gargi College, University of Delhi-110049 pp21
- 25. "An investigation of the physico-chemical parameters of water samples in Delhi: estimating potable quality and assuaging human health concerns" Arijit Chowdhuri and Charu K. Gupta, Proc. of 7th Int'l Congress of Environmental Research (ICER 2014), 26 28 December 2014, RVC College of Engineering, Bengaluru, INDIA pp 266 [ISBN: 978-81-909379-7-9]
- 26. "Indoor and outdoor pollutant gas sensing using ultra low-cost electronic nose" Charu K. Gupta and Arijit Chowdhuri Proc. of 7th Int'l Congress of Environmental Research (ICER 2014), 26 28 December 2014, RVC College of Engineering, Bengaluru, INDIA pp 625 [ISBN: 978-81-909379-7-9]
- 27. "Low cost 'Smart' switch for designing Electronic Nose (E-Nose) for gas sensing applications" Nikhil Kumar, Saptarshi Chakrabarty, Shobha Badola, Sunita Narang, Charu K. Gupta and Arijit Chowdhuri, Proc. of 2nd Int'l Conference on Innovative Trends in Applied Physical, Chemical, Mathematical, Statistical Sciences and Emerging Energy Technology for Sustainable Development" (APCMSET-2014), 19 20 July 2014, Jawaharlal Nehru University, New Delhi 110 067, INDIA
- 28. "Using mobile phones with android OS for measuring hazardous gas concentrations detected using Electronic Nose (E-Nose)" Prayas Tiwari, Ashish Pokhriyal, Pankaj Rawat, Charu K. Gupta, Sunita Narang and Arijit Chowdhuri, Proc. of 2nd Int'l Conference on Innovative Trends in Applied Physical, Chemical, Mathematical, Statistical Sciences and Emerging Energy Technology for Sustainable Development" (APCMSET-2014), 19 20 July 2014, Jawaharlal Nehru University, New Delhi 110 067, INDIA
- 29. "A novel OER initiative under University of Delhi's new Four-Year Undergraduate Programme: an investigation into the Pedagogical Impact" Arijit Chowdhuri and Charu K. Gupta, Proc. of OCWC Global 2014: Open Education for a Multicultural World, 23 25 April 2014, Ljubljana, SLOVENIA
- 30. Creation of E-museum as Open Educational Resource Repository of Organisms for Students of Biological Sciences Sarita Kumar, Ravi Toteja and Charu K. Gupta Proc. of OCWC Global 2014: Open Education for a Multicultural World, 23 25 April 2014, Ljubljana, SLOVENIA
- 31. "Evaluation of physico-chemical parameters of potable water in Delhi: human health concerns" Abdul Jafar, Abhishek Srivastava, Amit Dubey, Arijit Chowdhuri and Charu K. Gupta, Proc. of 1st Indo UK seminar on Recent Advances in Chemical Sensors (UGC-UKIERI IUCRACS-2014) 10 11 February 2014, Gargi College, New Delhi 110 049, INDIA pp 28
- 32. "An investigation of CO₂ generation characteristics of commercially available antacid (ENO) of different flavours (Cola, Orange and Lemon)" Sandal Azhar, Prithvi Singh, Sunita Narang, Subhash Kumar, Charu K. Gupta, Arijit Chowdhuri, Proc. of 1st Indo UK seminar on Recent Advances in Chemical Sensors (UGC-UKIERI IUCRACS-2014) 10 11 February 2014, Gargi College, New Delhi-110 049, INDIA

Abstracts in National Conferences

- "Carbon Dioxide (CO₂) detection at room temperature using Graphene Oxide (GO) coating on Quartz Crystal Microbalance (QCM)" Jatinder Pal Singh, Siddharth Das, Priya Chopra, Shani Kumar, Amit Garg, Charu Khosla Gupta and Arijit Chowdhuri 2nd National Conference on New Trends in Nanotechnology and Applications (NTNA 2020), 06 07 February 2020 held at Atma Ram Sanatan Dharma College (University of Delhi) OT 11 This work received best Oral Presentation award
- 2. "Investigating the effect of Cadmium and Ethidium Bromide on DNA using Surface Plasmon Resonance (SPR) technique" Charu Khosla Gupta, Chaitanya Raj, Senjuti Sengupta, Ravi Toteja, Seema Makhija, and Arijit Chowdhuri National Seminar on New Trends in Nanotechnology and Applications (NTNA-2018), 27 28 September 2018 held at Atma Ram Sanatan Dharm College (University of Delhi) pp 17 This work received Best Paper Award
- 3. "Study of Particulate Matter Pollution in Different Modes of Public Transport in New Delhi, India" Charu Khosla Gupta, Medha Jha, Manohar S. Bisht and Arijit Chowdhuri 4th National Symposium on Environment: Green Technology for Environmental Sustainability, 25 September 2018 held at DeshBandhu College (University of Delhi) pp 48
- 4. "Gauging the Comprehension about Environmental Awareness, Conservation and Sustainability Amongst Primary, Secondary and Undergraduate Students for Precisely Defining Exposure–Response Relationships of Pollution on Health" Arijit Chowdhuri, Sakshi Saraswat, and Charu Khosla Gupta 4th National Symposium on Environment: Green Technology for Environmental Sustainability, 25 September 2018 held at Deshbandhu College (University of Delhi) pp 54
- "Ambient air pollution (AAP) measurements using Electronic Nose at unrestrained MSW landfills located in Delhi" - Arijit Chowdhuri, Priya Chopra, Jatinder P. Singh, V. Bhasker Raj and Charu K. Gupta, Innovation Conclave - 2016, 25 – 26 October 2016 held at Acharya Narendra Dev College (University of Delhi) pp 04
- "Biological contamination in groundwater-an impending disaster" Mayuri Mathuria, Pratyaksh Singh, Sarita Kumar, Arijit Chowdhuri and Charu Khosla Gupta, Innovation Conclave - 2016, 25 – 26 October 2016 held at Acharya Narendra Dev College (University of Delhi) pp 51
- "Synthesis and characterization of metallic nanoparticles for water filtration units" -Harveen Kaur, Manoj Kumar, Arijit Chowdhuri, Charu K Gupta and Sarita Kumar, Innovation Conclave - 2016, 25 – 26 October 2016 held at Acharya Narendra Dev College (University of Delhi) pp 67
- 8. "Addressing posteriori environmental concern 21st century Clean potable drinking water in households" Charu Khosla Gupta, Shweta Singh, Pragya Yagnik, Bishal K. Das, Sarita Kumar and Arijit Chowdhuri, National Seminar on Water and Air quality in urban ecosystem, 22 March 2016 held at Shivaji College (University of Delhi) pp 35.
- 9. "Synthesis and characterization of copper nanoparticles (CuNPs) for water purification" Rahul Roy, Gayatri Rai, Aarti Sharma, Arijit Chowdhuri, Charu K Gupta and Sarita Kumar, Proceedings of Second National Symposium on Environment: Greener Future and Awareness, Deshbandhu College, University of Delhi, March 19, 2016, pp 20.
- 10. "Carbon monoxide (CO) pollution within micro-environment of households from hidden and non-discernible sources" Charu Khosla Gupta, Pragya Yagnik, Shweta

- Singh and Arijit Chowdhuri, Proc. of National Conference on Recent Advances in Materials and Field Theory (NCRAMFT 2015), 28 29 December 2015, held at Bhagwan Parashuram Institute of Technology (I. P. University) pp 28 [ISBN 978-93-5254-054-9]
- 11. "Particulate matter emissions from coal fired barbeque ovens a potential source for pulmonary and cardiovascular diseases" Charu Khosla Gupta, Shweta Singh, Pragya Yagnik, and Arijit Chowdhuri, Proc. of National Conference on Recent Advances in Materials and Field Theory (NCRAMFT 2015), 28 29 December 2015, held at Bhagwan Parashuram Institute of Technology (I. P. University) pp 36 [ISBN 978-93-5254-054-9]
- 12. "Heater operation within the closed confines of a car during winter months in Delhi: evidence of toxic CO generation" Bishal K. Das, Arvind Mamgain, Charu Khosla Gupta and Arijit Chowdhuri, Proceedings of National Conference on Climate Change: impacts, adaptation, mitigation scenario and future challenges in Indian perspective, 02 03 March, 2015, held at University of Delhi, Delhi 110 007 INDIA pp 32 [ISBN: 978-93-5235-339-2]
- 13. "Health effects of exposure to ambient carbon monoxide within closed office space as a result of room heater operation during winter months in Delhi" Abhishek Singh, Shiwani Katiyar, Arijit Chowdhuri and Charu K. Gupta, Proceedings of National Conference on Climate Change: impacts, adaptation, mitigation scenario and future challenges in Indian perspective, 02 03 March, 2015, held at University of Delhi, Delhi 110 007 INDIA pp 33 [ISBN: 978-93-5235-339-2]
- 14. "Biodiversity in Podostemaceae: Conservational aspects"- Charu K. Gupta and Anita Sehgal in Proceedings of National Conference on Biodiversity Related international Conventions: Role of Indian Scientific Community, 8 10 March 2006, held at University of Delhi.

Administrative Assignments

- Teacher-in-charge, Department of Botany, 2021- till date
- Member, Garden Committee, University of Delhi, 2022- till date
- Secretary Staff Council, 2020-2022
- Liaison officer EWS, 2019-2021 Convener, Sports Committee, 2018 2020
- Convener, Annual Day Committee, 2017 and 2018.
- Teacher-in-charge, Department of Life Sciences, 2014 2016.
- Convener, Examination Committee, 2014 2016.
- Convener, Annual Events Management Committee, 2010 2012.
- Convener, Garden Committee, 2008 2010.
- Convener, Attendance Committee, 2008 2010.
- Convener, Sports Committee, 2008 2010.

• Teacher-in-charge, Department of Botany, 2006 – 2008.

Areas of Interest / Specialization

- Climate Change and Reproductive Ecology of Angiosperms
- Pollination and Pollen-pistil interaction in angiosperms
- Environment Monitoring & Assessment
- Mitigation aspects of Environment Pollution

Subjects Taught

- Reproductive biology of angiosperms
- Ecology
- Environmental studies
- Environment management

National/Local academic event Organizer / Coordinator / Convener

- Organizer International Congress on Impacts of Climate Change on Agriculture, Ecosystems, and Human Health (ICCC 2022) held in Malaysia from November 16-18, 2022
- Convener and Resource person, in 'Revisiting Laboratory Techniques in Botany'- a
 five days hands-on training for undergraduate students held from 21-26 October
 2021, organized under DBT Star College scheme and IQAC Acharya Narendra Dev
 College
- Convener, in the Inter-college hands-on workshop on "SPR and UV-Vis Spectroscopy"Convener, in the Inter-college hands-on workshop on SPR and UV Spectroscopy held from 23 27 August 2019 under the aegis of DBT sponsored Star College programme
- Convener, in the Intra-college interdisciplinary workshop "Learning Science by doing Science" held from 18 – 24 June 2019 under the aegis of DBT sponsored Star College programme
- Organizing Secretary, in the National Symposium on Contemporary Environmental Concerns 2018, 15 17 March 2018
- Organizer, in workshop for "Biology Laboratory Course" of B. Sc. Programme III year from October 21 24, 2008, organized by Institute of Life Long Learning and Centre for Promotion of Undergraduate Research and Training, Acharya Narendra Dev College, University of Delhi, Delhi.
- Organizer, in practical training workshop on "Understanding Complexities of Life from Molecules to System: Concepts and Tools" May 12 - 23, 2008, held at Acharya Narendra Dev College.
- Organizer, in workshop for developing e-learning material for NCERT textbook for class XI and XII, held on March 26 27, 2007 organized by NCERT.

Association with Professional Bodies

- Member, Editorial Board- International Journal of Coordination and management in Sustainable development (IJCMSD)
- Reviewer for International Journals a) Air, Soil and Water Research b) Plant Studies
- Life member of Delhi University Botanical Society
- Life member of Association of Teachers in Biological Sciences