




# CURRICULAM-VITAE



Title	Dr	First Name	<b>Charu Khosla</b>	Last Name	<b>Gupta</b>	Photograph 
Designation	<b>Associate Professor in Botany</b>					
Address	Department of Botany, Acharya Narendra Dev College, Govindpuri, Kalkaji New Delhi – 110 019, INDIA					
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Residence						
Mobile	+91 9871668885					
Email/ Web-Page	<a href="mailto:charukhoslagupta@andc.du.ac.in">charukhoslagupta@andc.du.ac.in</a> <a href="mailto:charukgupta@gmail.com">charukgupta@gmail.com</a>					
Educational Qualifications						
Degree		Institution			Year	
<b>Ph.D. (Reproductive Biology)</b>		<b>University of Delhi</b>			<b>1997</b>	
<b>M.Phil. (Botany)</b>		<b>University of Delhi</b>			<b>1992</b>	
<b>M.Sc. (Hons. in Botany)</b>		<b>Panjab University</b>			<b>1990</b>	
<b>B.Sc. (Hons. in Botany)</b>		<b>Panjab University</b>			<b>1989</b>	
Career Profile						
<p>Working as an Associate Professor in Botany at Acharya Narendra Dev College, University of Delhi. My Doctoral degree from University of Delhi is in <b>Reproductive Biology of aquatic angiosperms</b>. I am also a B.Sc. and M.Sc. <b>Gold medalist</b> from Panjab University and M.Phil. with <b>distinction</b>, from University of Delhi. Currently, am actively engaged in Environment monitoring and assessment with primary focus on Ambient Air Pollution, in which we have also collaborated with Josef Stefan Institute, Ljubljana, SLOVENIA. My research interests also include Environment Education and mitigation aspects. My teaching career spans over 22 years with research experience of over 20 years. A total of 52 scientific papers/articles have been published by me with 21 presentations in International conferences. I have also authored 02 chapters in books on Reproductive Biology and 02 e-chapters for University of Delhi. I am designated Scientific Chair at International Conference on Education and have chaired two different tracks as Session Chair. I have also delivered an Invited Talk at NILU, Norway and have been reviewer for the journals <b>Air, Soil and Water Research</b> and <b>Plant Studies</b>. I have been Best presentation Awardee at two International conferences and also bagged <b>Teaching Excellence Award for Innovation</b> by University of Delhi in 2015. I have completed 02 major and 04 minor research projects funded by DST, University of Delhi and CSIR</p>						
Administrative Assignments						

Convener, Sports Committee, <b>2018 till date</b>
Convener, Annual Day Committee, <b>2017 and 2018.</b>
Teacher-in-charge, Department of Life Sciences, <b>2014 - 2016.</b>
Convener, Examination Committee, <b>2014 - 2016.</b>
Convener, Annual Events Management Committee, <b>2010 - 2012.</b>
Convener, Garden Committee, <b>2008 - 2010.</b>
Convener, Attendance Committee, <b>2008 - 2010.</b>
Convener, Sports Committee, <b>2008 - 2010.</b>
Teacher-in-charge, Department of Botany, <b>2006 - 2008.</b>
<b>Areas of Interest / Specialization</b>
<ul style="list-style-type: none"> <li>• Reproductive Biology of Angiosperms</li> <li>• Environment - Monitoring &amp; Assessment</li> <li>• Environment Education</li> <li>• Mitigation aspects</li> </ul>
<b>Subjects Taught</b>
<ul style="list-style-type: none"> <li>• Reproductive biology of angiosperms</li> <li>• Ecology</li> <li>• Environmental studies</li> <li>• Environment management</li> </ul>
<b>Research Guidance</b>
<ul style="list-style-type: none"> <li>• Recognized as registered guide for independent Ph.D. supervision by University of Delhi.</li> <li>• Guided more than 100 undergraduate students for Summer Internships and Research</li> </ul>
<b>Research Visits to countries abroad</b>
<p>a) <b>Jozef Stefan Institute, Ljubljana, SLOVENIA</b>  Visiting Fellow at Jozef Stefan Institute, Ljubljana, SLOVENIA from 20 September 2019 to 04 October 2019 under aegis of INSA Bilateral Exchange Programme-2019</p> <p>b) <b>Kuala Lumpur, MALAYSIA</b>  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</p>

**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

Publications Profile

**Publications in Peer-Reviewed Journals**

**2018**

- “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]

**2017**

- “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]
- “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)

**2016**

- “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]
- “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]

- “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.

## 2014

- “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://videlectures.net/arijit\\_chowdhuri/](http://videlectures.net/arijit_chowdhuri/))
- “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]
- “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]

## 2009 - 1993

- “Pollination biology of *Indotristicha ramosissima* (Podostemaceae: Tristichoideae)” - Charu K. Gupta and Anita Sehgal, Aquatic Botany Vol. 91, 2009 pp 51 - 56.
- “Cleistogamy in *Griffithella hookeriana* (Podostemaceae)” - Charu Khosla, K. R. Shivanna and H. Y. Mohan Ram, South African Journal of Botany Vol. 67, 2001 pp 324 - 328.
- “Reproductive biology of *Polypleurum stylosum* (Podostemaceae)” - Charu Khosla, K. R. Shivanna and H. Y. Mohan Ram, Aquatic botany Vol. 67, 2000 pp 143 - 154.
- “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.
- “Morphology of flower, fruit and seed in *Polypleurum stylosum*” - Charu Khosla and H. Y. Mohan Ram, Aquatic Botany Vol. 46, 1993, pp 255 - 262.

## Conference/ Presentations/Workshops

### International Conferences (peer reviewed)

- “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” – Arijit Chowdhuri, Charu Khosla Gupta and Divya Mann – International Conference on Education 2019 (ICEDU 2019) 5 – 7 April 2019, Kuala Lumpur, Malaysia pp 85

- “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 Arijit Chowdhuri – International Conference on Education 2019 (ICEDU 2019) 5 – 7 April 2019, Kuala Lumpur, Malaysia pp 11
- “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
- “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
- “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]
- “Preliminary assessment of simultaneous emission of PM0.5, PM2.5 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]
- “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/>)
- “Comparison of atmospheric mercury (Hg<sup>0</sup>) 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

- “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.
- “Detection of trace-level H<sub>2</sub>S, SO<sub>2</sub> and H<sub>2</sub> gas concentrations using nanocrystalline SnO<sub>2</sub> 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
- “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
- “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
- “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, 25-26 August, 2015, held at Gargi College, University of Delhi-110049 pp21 (UGC-UKIERI IUCRACS-2015)
- “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]
- “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]
- “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

- “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
- “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
- 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
- “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
- “An investigation of CO<sub>2</sub> 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 pp 28

### **National Conferences (peer reviewed)**

- “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 Dharma College (University of Delhi) pp 17 – **This work received Best Paper Award**
- “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

- “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
- “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.
- “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.
- “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]
- “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]



- “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]
- “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]
- “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.

### **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
- “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, pp 75 - 92.

#### Research Projects (Major Grants/Research Collaboration)

Sponsoring Agency	Title of the Projects	Position	Tenure	Budget (Rs. Lakh)
University of Delhi	Development of low-cost, robust, portable water purifier prototype with physical, chemical and biological filtration for field water disinfection	PI	2015 – 2016	6.00

	and potable water generation in natural calamity afflicted zones with harsh conditions			
<b>Department of Science and Technology (DST) under Indo-Slovenia bilateral scheme</b>	Exposure-response assessment of Ambient Air Pollution (AAP) and Hg contamination in affected cities of India and Slovenia: A comparative study	Co – PI	June 2015 – 2019	16.11
<b>University of Delhi</b>	Artificial Olfaction using E-NOSE – mimicking human nose for gas sensing applications	Co – PI	November 2013 – March 2015	5.00
<b>DST under IEDC initiative</b>	Development of a compact water purifier system	PI	April 2014 – March 2015	
<b>Department of Science and Technology</b>	Fertilization in Podostemaceae: an unresolved problem	PI	2003 – 2006	10.00
<b>CSIR</b>	Reproductive biology of some aquatic angiosperms	Research Associate	1998 – 2003	

#### Awards and Distinctions

- Scientific Chair at 6th International Conference on Education 2020 (ICEDU - 2020) scheduled to be held from 3 – 5 April, 2020 at Bangkok, Thailand
- 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].

#### Association with Professional Bodies

- 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

#### Other Activities

### **National/ Local academic event Organizer / Coordinator / Convener**

- 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.