


Faculty Proforma 2019-2020



Title	Dr.	First Name	Chirashree	Last Name	Ghosh	Photograph
Designation		Associate Professor				
Address		Dept. of Environmental Studies University of Delhi, Delhi 110007				
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Educational Qualifications						
Degree		Institution			Year	
Post Doc.		University of Wageningen, The Netherlands			1993 & 1994 (Two Years)	
Ph.D.		Visva Bharati University			1992	
PG		Visva Bharati University			1986	
UG		Visva Bharati University			1984	
Career Profile						
University of Delhi	Associate Professor	2012	- till date	Teaching and Research		
University of Delhi	Sr. Asst. Professor	2004	- 2012	Teaching and Research		
University of Delhi	Asst. Professor	2003	- 2004	Teaching and Research		
IIT, Delhi	Project Scientist	1999	- 2003	Research		
IIT, Delhi	Pool Officer	1996	- 1999	Research		
Administrative Assignments (Last Five Years)						
<ol style="list-style-type: none"> 1. Nodal officer of entrance exam. 2017-2018; 2018-2019 2. PG course coordinator 2016-2017; 2017-2018 3. Member of Screening committee for the college teacher selection, 2015-2016, 2016-2017 4. Coordinator of the purchase committee under XII GPA Plan allocation, 2015 – 2016 5. MA/M.Sc. Admission Committee, 2016 – 2018. 6. Member of Selection committee for admission to Ph.D. course work, 2016 7. Teacher coordinator, central placement cell, 2014-2015 8. Deputy Superintendent for entrance exam. 2014, 2015 9. Course Coordinator of PhD course work, 2014 10. Member of Board of research studies, 2014 – 2017 11. Member of Admission advisory committee, 2013 – 2014, 2015 – 2016, 2016-2017, 2019-2020 12. Member of departmental Anti Ragging Committee and Squad, 2012 – 2015; 2016-220 13. Member of departmental research committee, 2012 – 2015, 2015 – 2016, 2016-20207 14. Member of departmental courses committee/staff council, 2012 –2015; 2016 - 20207 15. Member of departmental purchase committee, 2012-2015; 2016 – 2017, 2019-2020 						
Areas of Interest / Specialization						
Broad area of interest: Environmental Pollution and Health						
I. Inventory preparation of Indoor and Outdoor pollutants and their Human Health impacts						
II. Tropospheric Ozone pollution monitoring and bio-mapping of other green house gases for understanding global warming concept –special highlights to the topic of Carbon Sequestration & Carbon mapping						
III. Impact of heavy metal and pesticide toxicity on the bio-magnification/bioaccumulation process of aquatic food chain						

Subjects Taught

(A) Currently teaching

M.A/ M.Sc integrated Programme

- Paper I- - Introduction to Environmental Sciences (Core)
Paper VI - Environmental Pollution and Health (Core) , ***Coordinator**
Paper VII - Urban ecosystems (Core) , ***Coordinator**
Paper IX - Atmosphere and Climate Change (elective)(Theory & Practical)***Coordinator**
Paper XIII - Ecotoxicology and Environmental Health (M.Sc. elective)(Theory & Practical)
Paper XV - Environmental Chemistry (elective) (Theory & Practical))***Coordinator**
GLG 403 - Interdisciplinary paper with department of Geology(***Coordinator**) (Theory & Practical) 2013

(B) Past Teaching activities

(a) Undergraduate:

Visiting faculty (at Saheed Rajguru College of Applied Sciences for Women) in B.Tech. programme – paper ‘Ecology’ (2004).

(b) Post-graduate:

(i) Taught in the interdisciplinary M. Phil programme at School of Env Studies (2004-2005; 2006-2007)

Paper I - Techniques and Methodology course

Paper II - Restoration Ecology

(ii) M.Sc Environmental Biology course (2006- 2011)

- Course III – Environmental Physiology and Behavioral Science or EVB 205 (Theory & Practical)
- Course VI –Environmental Toxicology and Impact Assessment (Theory & Practical)
- EVB 102 : Environmental Chemistry and Climate (Theory and Practical)(convener)

(iii) Taught in M.Sc. Environmental biology programme at Dept. of Environmental Biology (2004-2006)

Course II – Cell Biology and Genetics (Theory)

Course VIII– Biotechnology in Resource enhancement and Ecosystem Redevelopment.

(iv) Taught in integrated MA/M.Sc. programme at School of Environmental Studies. (2005-2007)

Paper 1 - Introduction to Environmental Science (Core)

Research Guidance

1. Supervision of awarded Doctoral Thesis: 6 (Six)
2. Supervision of Doctoral Thesis, under progress: 5 (five) [2 (submitted) & 3 (underprogress)]
3. Supervision of Master’s Dissertations (awarded)
 - a. M.Phil dissertations :3 (Three)
 - b. M.SC dissertations : 44 (Forty four)
 - c. MD Dissertation – 2 [1 (awarded) and 1 (submitted)]
 - d. M.Tech -3 (Three)

Publications Profile

A) Books/Monographs (Authored-one chapter)-11 (last five years)

1. PalakBalyan, ChirashreeGhosh, Shukla Das & B.D. Banerjee. **Jan, 2020:** Comparison of efficiency of active and passive methods of Bioaerosols estimation, **Indoor Environmental Quality, Springer**, ISBN 978-981-15-1334-3 (eBook), **85-94**
2. Ruchika Gupta, Kajol Chakraborty, Ch. Vikar Ahmad, Chirashree Ghosh and Punita Verma. **July, 2019.** Elemental constitution detection of environmental samples of Delhi using XRF Spectroscopy. Quantum collisions and confinement of atomic and molecular species and Photons. **Springer Nature Singapore Pvt. Ltd. 1-13**

3. **Chirashree Ghosh (November, 2018)**: Review of book Proposal- Electronic Waste Management in India- Challenges & Opportunities, RoutledgeIndia, **Taylor & Francis** group (Book Review)
4. Priyanka Sharma, Reena Jain and **Chirashree Ghosh, (2018)**. Application of Green Nanoparticle in dye degradation. In International conference on Environmental and Ecological Sustainability: Engaging the Stakeholders, Organised by **School of Interdisciplinary and Trans-disciplinary studies, Indira Gandhi National Open University**, New Delhi from October 4th-5th, 2018.
5. R. Gupta, K. Chakraborty, Ch.V. Ahmad, **C. Ghosh & P. Verma, (2018)**, Elemental constitution detection of environmental samples of Delhi using XRF spectroscopy , Quantum Collisions and Confinement of Atomic and Molecular Species, and Photons. In **Emerging Issues In Ecology And Environmental Science, Springer**,
6. Abhinav Garg, Priyanka Sharma, Gufran Beig and **Chirashree Ghosh, (2018)**, Temporal Mount in Air Pollutants Allied with Religious Fiesta: Diwali, Festival of Lights, **Emerging Issues In Ecology And Environmental Science, Springer**, ISBN 978-3-319-99397-3, 10-25.
7. Guncha Sharma and **Chirashree Ghosh,(2018)**, Microplastic an unsafe pathway from Aquatic Environment to Health: A Review, **Emerging Issues in Ecology and Environmental Science, Springer**, ISBN 978-3-319-99397-3, 66-72
8. Pallavi Saxena and **Chirashree Ghosh, (2018)**, Establishing correlation between abiotic stress and Isoprene emission of selected plant species. **Emerging Issues in Ecology and Environmental Science, Springer**, ISBN 978-3-319-99397-3, 43-65
9. Pallavi Saxena and **Chirashree Ghosh, (2017)**, Ranking of BTEX with respect to Ozone Formation by Development of Ozone Reactivity Scale. **Paradigms in Pollution Prevention (Eds. Tanu Jindal), Springer-Nature** ISBN 978-3-319-58415-7, 49-60.
10. Nautiyal, A., Mallick, D.K., Shekhar, A., Sharma, P., **Ghosh, C.**, Sharma, P., Sunny, N., Shaw, P., Sharma, A., Sharma, A., & Ghosh, T. **2017**, Significance of Avenue trees As an Indicator and Scavengers of Air Pollution in Metropolitan Cities, **Book Age Publications. (ISBN No. 978-93-83281-65-7)**
11. Mallick, D.K., Nautiyal, A., Shekhar, A., Sharma, P., **Ghosh, C.**, Sangraj., Negi, S., & Kumar, V. **2017**, Higher Plant as Remediator of Urban Air Quality Delhi, **Book Age Publications. (ISBN No. 978-93-83281-65-7)**

(B) Research papers published in Refereed/Peer Reviewed Journals (Only last eight years)

1. Arun Kumar Sharma, Sulabh Saini, Pragati Chhabra, Sunil Kumar Chhabra, **Chirashree Ghosh**, Palak Baliyan . **June, 2020**. Air Pollution and weather as the determinants of acute attacks of Asthama: Spatiotemporal approach in **Indian Journal of Public Health, June 17, 2020, 64: 124-9 (IP: 14.139.60.131, published online) Published by Wolter Kulwer-Medknow.**
2. Priyanka Sharma , Poonam Yadav , **Chirashree Ghosh**, Bhupinder Singh , **April, 2020**. Heavy metal capture from the suspended particulate matter by *Morus alba* and evidence of foliar uptake and translocation of PM associated zinc using radiotracer (⁶⁵Zn), **Chemosphere, 25th April, 2020 available online,Elsevier.**
3. Arun Kumar Yadav, **Chirashree Ghosh** and B.D. Banerjee. **October, 2019**. *A Review on Indoor Air Pollution and Associated Health Impacts with Special Reference to Building Design in International Research Journal of Environmental Sciences, Vol. 8(4), 1-11, (ISSN: 2319-1414)*

4. Palak Balyan, **Chirashree Ghosh**, Shukla Das & B.D. Banerjee. **July, 2019**. Spatio-Temporal Variations of Indoor Bioaerosols in different Socio-Economic Zones of an Urban Metropolis. **Polish. J. Environ. Stud. Vol. 28, No. 6 (2019), 4087-4097**
5. Palak Balyan, **Chirashree Ghosh**, Shukla Das & B.D. Banerjee. **March, 2019**. *Spatio-temporal Characterisation of Bioaerosols at diverse outdoor land-use sites in an urban environment* published online on March 19th, 2019 in **Aerobiologia**, Springer Nature (ISSN: 0393-5965)
6. Reena Jain, Priyanka Sharma, **Chirashree Ghosh**, 2018. A Sustainable way of Waste Management: A Green nanotechnology Approach. **Asian Academic Research Journal of Multi-Disciplinary**, 5 (04), 1-10.
7. Govind Singh, Mihir Deb, **Chirashree Ghosh**, 2018. Delimiting the boundary of Delhi for effective Urban political Ecology Investigations, **Journal of Innovation for inclusive development**, 3 (1), 31-39.
8. Palak Balyan, **Chirashree Ghosh**, A.K. Sharma, B.D. Banerjee, 2018. Health effects of air pollution among residents of Delhi: a systematic review. **Int J Health Sci Res.**, 8(1):273-282
9. Pallavi Saxena, **Chirashree Ghosh**, 2018. A Sustainable Way to Mitigate Ozone Pollution by Reducing Biogenic Vocs Through Landscape Management Programme", **International Journal of Engineering Trends and Technology (IJETT)**, 56(2),87-91.
10. Abhinav Garg, Priyanka Sharma and **Chirashree Ghosh**, 2018. Time Series Analysis of Particulate Matter (PM10) in Delhi, **International Journal of Latest Engineering and Management Research**, 3(2), 4-10
11. Pallavi Saxena, **Chirashree Ghosh**, 2017. Role of Biogenic VOCs in Atmosphere for the production of tropospheric ozone in Delhi, India, **International journal of scientific & Engineering Research**, 8, 10, 748-755.
12. Palak Balyan, **Chirashree Ghosh**, Shukla Das and B.D. Banerjee, 2017, Spatial Variation of Biogenic Aerosols at Different Land Use Configurations in Urban Delhi. **International Journal of Applied Environmental Sciences**, 12(5), 731-744.
13. Govind Singh, Mihir Deb & **Chirashree Ghosh**, 2016. Urban Metabolism of river Yamuna in the national capital territory of delhi, India, **Int. jr. of Adv. Res.**, 4 (8), 1240- 1248
14. Priyanka Sharma, Reena jain & **Chirashree Ghosh**, 2016. Role of Ascorbic acid in imparting tolerance to plants against oxidizing pollutants, **Int. Journal of scientific and technological reseach**, vol.5(8)
15. Shailender Kumar and **Chirashree Ghosh**, 2016. Book Review: Toxic Effects of Mercury. **Frontiers in Environmental Science**. DOI: 10.3389/fenvs.2016.00042
16. Pallavi saxena and **Chirashree Ghosh**, 2015, Seasonal Variation of Isoprene emissions from tropical road side plant species and their possible role in deteorating air quality. **Environmental Skeptics and Critics**. Vol 4(2): 67-80.
17. Pallavi Saxena and **Chirashree Ghosh**, 2015. A Sustainable Approach towards Minimizing Atmospheric Benzene by the Use of Plants. **International Journal of Agriculture and Crop Sciences**, 8 (3), 495-502.
18. Abhinav Garg, Pallavi Saxena and **Chirashree Ghosh**, 2015, Evaluation of Tolerance and Sensitivity of Selected Plant Species with Special Reference To Gasoline Exhaust Pollution, **International Journal of Scientific & Technology Research**, Volume 4, Issue 02, 199-207,

ISSN 2277-8616

19. Priyanka Sharma, Shailender Kumar, Abhinav Garg and **Chirashree Ghosh, 2015**, Analyzing the effect of atmospheric trace elements on selected plant species. **Environmental Earth Sciences, Springer**. Volume 74, Issue 12, pp 7793–7800.
20. Pallavi saxena and **Chirashree Ghosh, 2013**, Ornamental plants as sink and bioindicators, **Environmental Technology**, online publication, **Taylor and Francis**. 34: 3059-3067.
21. Sunita Kumari, Girija Jayaraman and **Chirashree Ghosh, 2013**, Analysis of long term ozone trend over Delhi and its meteorological adjustment, **International Journal of Environmental Science and Technology**, Springer publication Volume 10, Issue 6, pp 1325–1336.
22. **Chirashree ghosh** and Govind Singh Bajwa **2012**, Efforts to combat the challenges of changing Climate and understanding people’s perception on climate change in India, Institute of Science and technology (IST) **Journal on Business and Technology: ICWSET**, IssueVol 5. No.1ISSN: 2070-4135: 78-85.
23. Pallavi sxena and **Chirashree Ghosh, 2012**, Status of air pollutants after implementation of CNG in Delhi,Current world environment, **International Research Journal of Environmental Science**, Vol. 7 (1), 109-115.
24. Samraj Sahay and **Chirashree Ghosh, 2012**, Monitoring variation in greenhouse gases concentration in urban environment of Delhi, **Environment Monitoring Assessment**, published online February 24, 2012, **Springer Publ.** 185(1):123-42.
25. Rashmi Kant and **Chirashree Ghosh, 2012**, Asymmetric variation in soil Carbon Emission in sub tropics, **Atmospheric and Climate Sciences**, published online January, 2012, **Scientific Research**

(C) Research papers published in Academic Journals other than Refereed/Peer Reviewed Journals

1. **Chirashree Ghosh**, Rohit kumar & Neerja Singh (**Dec. 2019**), Ecofeminism: an evolving concept, **Management E-Journal**, Vol. 01, No. 2, pg 1-8
2. **Chirashree Ghosh** and P.Sharma, **2013**, Air pollution Tolerance Index, A solution to air pollution, **Urban Nature**, vol 1, 15-17

(D) Research papers Published in Peer Reviewed Conferences (Full Paper)

1. Shailender Kumar, Swati Tailor and **Chirashree Ghosh, 2016**, Assessing water quality for layman understanding: Water Quality Index (WQI). Proceedings of **National Seminar on Water and Air Quality in Urban Ecosystem**, held on March 22, 2016 at **Shivaji College, Delhi University**, Delhi, pp 14 - 17.
2. Abhinav Garg, Pritiva Bharamchari & **Chirashree Ghosh, 2016**. Mapping of Particulate Matter as a Criteria Pollutant in Urban Delhi, Proceedings of **National Seminar on Water and Air Quality in Urban Ecosystem**, held on March 22, 2016 at **Shivaji College, Delhi University of Delhi**, pp 41 - 45.
3. Namrata Pathak and **Chirashree Ghosh. 2014**. Rainwater Quality- A case Study from Delhi (India). Proceedings of Third International Conference on Community and Water Services, held from August 22-24, 2014 at Sri Lanka International Buddhist Academy, Sri Lanka.

Conference Organization/ Presentations (Abstract) Last Five years (2015-2020)

International

1. **Chirashree Ghosh, 2019**, “Climate link with deteriorating urban health of India- Delhi as a case study” in the National Conference on “**Advancement of Biotechnology in Healthcare, Bioproducts and Environmental Research**” during 13-14 December , 2019

at Gunupur, Odissa.

2. **Chirashree Ghosh, 2019. Environmental Biotechnology- A Bioremediation Strategy, International Conference on Biotechnology & Bioengineering: Innovation and advancement for sustainable future’’ on 7-8th November 2019** at Sharda University.
3. Priyanka Sharma and **Chirashree Ghosh. Role of urban vegetation in attenuating particulate pollution. International Skynet Workshop** organized by IMD held on **February 13th-15th, 2019** at New Delhi.
4. Guncha Sharma and **Chirashree Ghosh. 2018. Microplastic: A vector for Heavy metal adherence and its transportation. In International conference on Environmental and Ecological Sustainability: Engaging the Stakeholders, Organised by School of Interdisciplinary and Trans-disciplinary studies, Indira Gandhi National Open University, New Delhi from October 4th-5th, 2018.**
5. Arun Kumar Yadav, Palak Balyan and **Chirashree Ghosh. 2018. A Review on Indoor Air Pollution and Associated Health Impact With Special reference to building design. In International conference on Environmental and Ecological Sustainability: Engaging the Stakeholders, Organised by School of Interdisciplinary and Trans-disciplinary studies, Indira Gandhi National Open University, New Delhi from October 4th-5th, 2018.**
6. Arun Kumar Yadav, Palak Balyan and **Chirashree Ghosh Estimation of Indoor bioaerosols and Occurrence of SBS Symptoms within Office Premises in Delhi at Asian Conference on Indoor Environmental Quality, 1st Edition Habitable Built Environment- Experience the Unseen, on February 1st-2nd, 2019** in Delhi.
7. Arun Kumar Yadav, Palak Balyan and **Chirashree Ghosh. A Review on Indoor Air Pollution and Associated Health Impact with Special reference to building design. In International conference on Environmental and Ecological Sustainability: Engaging the Stakeholders, Organized by School of Interdisciplinary and Trans-disciplinary studies (SOITS), IGNOU, New Delhi from October 4th-5th, 2018.**
8. Guncha Sharma and **Chirashree Ghosh. Microplastics: A Vector for heavy metal adherence and its transport. In International conference on Environmental and Ecological Sustainability: Engaging the Stakeholders, Organized by SOITS, IGNOU, New Delhi from October 4th-5th, 2018.**
9. Priyanka Sharma, Reena Jain and **Chirashree Ghosh. Application of green nano particle in dye degradation. In International conference on Environmental and Ecological Sustainability: Engaging the Stakeholders, Organized by SOITS, IGNOU, New Delhi from October 4th-5th, 2018.**
10. Shailender Kumar and **Chirashree Ghosh. Mercury pollution in surface and subsurface water at upper stretch of river Yamuna in Delhi. In International conference on Environmental and Ecological Sustainability: Engaging the Stakeholders, Organized by SOITS, IGNOU, New Delhi from October 4th-5th, 2018.**
11. Akshay Shankar, Arun Yadav, Palak Balyan, Shuka Das, **Chirashree Ghosh. 2017. Dynamics of Bio Allergens Exposure in Urban Indoor. Conference Proceedings: International Conference on Advances in Plant and Microbial Biotechnology (PMB- 2017); JIIT, Noida: February 2-4, 2017.**
12. Guncha Sharma and **Chirashree Ghosh, 2016, Microplastic: unsafe pathway from environment to health. Presented in “36th Annual conference of Society of Toxicology (INDIA) International conference on new insights & multidisciplinary approaches in toxicological studies’’ held from 3 to 5 August, 2016 at Amity University, Uttar Pradesh, Noida.**

13. Shailender kumar and **Chirashree Ghosh, 2016**, Spatial variation of potentially toxic elements (PTEs) at upper stretch of River Yamuna in Delhi in **International Conference on New Insights & Multidisciplinary Approaches in Toxicological Studies**" as 36th Annual Conference of Society of Toxicology (India) 2016 on August 3-5, 2016, at **Amity University**, Uttar Pradesh, Noida.
14. Priyanka Sharma and **Chirashree Ghosh, 2015**, Plants As A Tool For Remediating Atmospheric Particulate Matter And Trace Elements. Presented at the 13th **international conference** on the Atmospheric Sciences and Application to Air Quality (ASAAQ), held from 11 to 13 November, 2015 at **Kobe, Japan**.
15. Abhinav Garg and **Chirashree Ghosh, 2015**, Analysing the concentration of Criteria pollutant in the national capital of India: Delhi. Presented at at the 13th **international conference** on the Atmospheric Sciences and Application to Air Quality (ASAAQ), held from 11 to 13 November, 2015 at **Kobe, Japan**.
16. Palak Baliyan and **Chirashree Ghosh, 2015**, Trend of Biogenic aerosols and its associated health effects in capital city of India. Presented at at the 13th **international conference** on the Atmospheric Sciences and Application to Air Quality (ASAAQ), held from 11 to 13 November, 2015 at **Kobe, Japan**.

A. National

1. AbhinavGarg, Anandita Roy Saha and **ChirashreeGhosh**. Role of Green Belt in Reducing Particulate Matter inside an Institutional Area. National Conference "Urban Environment Sustainability" organized by Zoology Department, Kalindi College, University of Delhi & Mahatma Gandhi Institute of Combating Climate Change (MGICCC), Govt. of NCT, Delhi, **on February 7th -8th, 2019**
2. PalakBalyan, **ChirashreeGhosh**, Arun Kumar Sharma,RajnishAwasthi& B. D. Banerjee Impact of Environmental Bio-Aerosol Pollution on Human Health: A "Follow Up Study" on Exacerbation of COPD in conference of Indian Aerosol Science and Technology Association (IASTA) on Aerosol Impacts: Human Health to Climate Change held on **November 26th-28th, 2018** at IIT, New Delhi.
3. MeenakshiJeena, PalakBalyan, Arun Kumar Yadav, Shukla Das and **ChirashreeGhosh**. *Air-Borne Bioareosols & COPD: A Case-Control Study*. In National conference on Chemistry for Human Health and Environment (CHHE) Organized by Green Chemistry Network Centre (GCNC), University of Delhi & Royal Society of Chemistry (RSC) London North India Section in Collaboration with National Environmental Science Academy (NESA) , Delhi from **December 15th-16th, 2018**. (**poster and abstract publication**)
4. AbhinavGarg and **ChirashreeGhosh**. *Heavy Metal Enrichment on Indoor Fine Particulate Matter in Different Socio-Economic Zones of Delhi*in conference of Indian Aerosol Science and Technology Association (IASTA) on Aerosol Impacts: Human Health to Climate Change held on **November 26th-28th, 2018** at IIT, New Delhi. (**poster and abstract publication**)
5. Priyanka Sharma and **Chirashree Ghosh**. *Potential of urban vegetation in attenuating particulate pollution*. Conference of Indian Aerosol Science and Technology Association (IASTA) on Aerosol Impacts: Human Health to Climate Change held on **November 26th-28th, 2018** at IIT, New Delhi. (**poster and abstract publication**)
6. Palak Balyan, Akshay Shankar, Arun K. Yadav & **Chirashree Ghosh, 2017**. Effect of Micro-environment on Bio-aerosol Count. Poster presented at Rajasthan science congress conference on Environmental Pollutants and Climate change on 13th October, 2017 at Biotechnological center, Amity University, Jaipur, Rajasthan.

7. Abhinav Garg and **Chirashree Ghosh, 2017**, “Assessment of Respirable Particulate Matter (PM_{2.5}) In and Around Residential Area of University Of Delhi” abstract published in the **Workshop** on “Celebrating Earth Day: A Step towards Nurturing Nature” at **GD Goenka University**, Sohna Gurgaon Road, Sohna, Haryana-122103 in association with **National Environmental Science Academy (NESA)**, April, 28 2017.
8. Palak Balyan and **Chirashree Ghosh. 2017**. Comparison of Bioaerosol Sampling Methods in Indoor Built-Up Environment. Poster presented at **National Conference** on Environmental Pollutants: Impact Assessment and Remediation on 29th March, 2017 at School of Environmental Sciences, **Jawaharlal Nehru University**, Delhi.
9. Priyanka Sharma and **Chirashree Ghosh. 2017**. Urban Vegetation Combating Challenges of Increasing Particulate Matter. Oral Presentation at **National Conference** on Environmental Pollutants: Impact Assessment and Remediation on 29th March, 2017 at School of Environmental Sciences, **Jawaharlal Nehru University, Delhi**.
10. Guncha Sharma and **Chirashree Ghosh. 2017**. Microplastic: Invisible Journey from Environment to Food Chain. Poster presented at **National Conference** on Environmental Pollutants: Impact Assessment and Remediation on 29th March, 2017 at School of Environmental Sciences, **Jawaharlal Nehru University, Delhi**.
11. Palak Balyan, **Chirashree Ghosh**, B. D Banerjee & Shukla Das. **2017**. Assessment of bioaerosols and associated health effect in diverse built-up settings. Oral Presentatiobn in the **National Conference** to be held in **AIIMS Jodhpur**.
12. Shailender kumar, Shoobhangi tyagi, & **Chirashree Ghosh, 2016** “Heavy metal Pollution Index” an useful tool for the assessment of metal toxicity in the Urban-Stretch of River Yamuna. Presented in “**National Conference** on Combating Industrial Pollution for Sustainable Environment – A Fusion of Industrial and Scientific Efforts (CIPSE-2016)” held from 22 to 23 September, 2016 at **Gargi college, University of Delhi**.
13. Guncha Sharma and **Chirashree Ghosh, 2016**, Microplastic: a source of toxic chemical leaching in environment. Presented in “**National Conference** on Combating Industrial Pollution for Sustainable Environment – A Fusion of Industrial and Scientific Efforts (CIPSE-2016)” held from 22 to 23 September, 2016 at **Gargi college, University of Delhi**.
14. Guncha Sharma and **Chirashree Ghosh, 2016**, Micro plastic a risk to our health & environment. Presented in **National seminar** on the “Role of Analytical Science in Sustainable Development (RASSD 2016)” held from 4 to 5 March, 2016 at **Hansraj College, University of Delhi**.

Participation As Key Note Speaker Or Resource Person in Last six Years (2014-2020)

A. INTERNATIONAL

1. **Chirashree Ghosh (September, 2019)** delivered lecture on the topic” Local scale fluxes of carbon dioxide in tropical urban environment: Sectorial emission and sequestration challenges in India” and also participated as an invited panel speaker at **SEGAM post-convention workshop San Antonio, Texas, USA from 17th- 20th September 2019**
2. **Chirashree Ghosh (2018)** delivered Invited Talk in International Conference on 21st Century India- Interrogating, Social, Economic, Political & Environmental Process conducted by **Satyawati College (evening), DU on April 24th & 25th , 2018 at Satyawati College, DU**
3. **Chirashree Ghosh, October 5-7, 2016- International brain storming meeting on “Air quality & climate impacts”** organized by **IMD & FMO** along with **WMO and WHO** at

Delhi.

4. **Chirashree Ghosh. On Understanding Climate Change in Urban India**, on 11-13 November, 2015- 13th international conference on the Atmospheric Sciences and Application to Air Quality (ASAAQ) at Kobe, Japan on Urban air quality: Climate change, health and e-resilience.
5. **Chirashree Ghosh, on “Health Risk of Air Pollution: What we know about the problem”** on June 3, 2015 – on Environment Day at Aiestm, Amity Institute of Environmental Sciences.
6. **Chirashree Ghosh, 2014** – Guest of honor and main speaker of 4th International conference on “Innovative Entrepreneurship to minimize **carbon footprints**” held in Department of business administration, Maharaja Surajmal Institute, Delhi, 19th April, 2014
7. **Chirashree Ghosh, January 28, 2014** – at Aiestm, Amity Institute of Environmental Sciences, “**Earth and environment: Pollution and prevention**”.

B. NATIONAL

1. Organized **one day Workshop on “Need for flora fauna biometrics in urban planning”** held on **29nd February, 2020** by Environmental Pollution Laboratory, Department of Environmental Studies, in collaboration with **Hindu college**, University of Delhi at Science Festival ESIC 2020 (27th -29th Feb, 2020)
2. **Expert Panelist** in one day National conference on **Innovative Approaches to Plastic free India on 28th Feb., 2020** at **Jesus & Mary College**, University of Delhi.
3. Organized **Curtain raiser workshop of 2nd National workshop EPCEE 2020 on 25th Feb, 2020** by Environmental Pollution Laboratory, Department of Environmental Studies, in collaboration with **IP college**, University of Delhi
4. Organized **one day Workshop on “ Air Pollution Mitigation: Species to Communities” under DBT star college Program** held on **17th February, 2020** by Environmental Pollution Laboratory, Department of Environmental Studies, in collaboration with **Miranda House**, University of Delhi
5. Lecture delivered on Smart City and Urban risk on **27th January, 2020** at Shivaji College as Keynote Speaker.
6. Organized **one day Practical session on “Role of vegetation in improving urban air quality”** held on **15th July 2019** by Environmental Pollution Laboratory, Department of Environmental Studies, University of Delhi in collaboration with Department of Botany, Shivaji college
7. Lecture delivered on ***Air Pollution: Its impact on health & possible solution*** in Vallabhbai **Patel Chest Institute. (VPCI, DU)** on **April 2nd 2019** purpose of SwatchtaPakhwada, Public Lecture & Panel Discussion.
8. Lecture delivered on *Attenuation of Dust pollution by urban green Belt* in **Deshbandhu College, DU** on **March 8th, 2019** in Deshbandhu College as Keynote Speaker.
9. Keynote Lecture delivered on *Urban Health & Sanitation Issue* in Zoology Department, **Kalindi College, DU & MGICC, Delhi Govt.** on **February 7th -8th, 2019** conducted at Kalindi College, DU.
10. Keynote Lecture delivered on *Impacts of air Pollution on Human Health* conducted by **CPCB** with GSDP, MoEFCC on **January 11th, 2019** at CPCB.

11. Group Discussion in Utkarsh, 2018. *Empowerment and enabling Women in Science* conducted by CSIR-NEERI & OWSD on **October 30th, 2018 at Symposium Hall, NASC Complex, Pusa, New Delhi.**
12. Chief Guest & Keynote Lecture delivered at *Air Quality & Campus Sustainability* conducted by Botanical Society, Vasundhara, Daulat Ram College on October 12th, 2018 at Daulat Ram College, DU.
13. Delivered Invited Lecture on, “**Environmental Biotechnology**” on October 12, 2018 at **Vasundhand Botanical Society, Daulat Ram College, DU, Delhi**
14. Invited Lecture on Shocking Plastic Facts: What we know & Where are we going? Conducted at IP college for Women, DU on **September 24th, 2018 at IP college for Women, DU**
15. Panel Discussion on *Sustainable Urbanization- Resilient Cities* conducted by UNDP with SDCD UN- Habitat on **June 1st, 2018 at Vigyan Bhawan, New Delhi.**
16. Invited Lecture delivered on Earth Day Celebration conducted by AISTEM Amity University on **April 20th, 2018 at Amity University, Noida.**
17. Invited Talk on Low Carbon Lifestyle conducted by Deshbandhu College, DU on **April 11th, 2018 at Deshbandhu College.**
18. Delivered Invited Lecture on, “**Indoor air quality and Human health**” on March 20, 2018 at **Gargi college, Delhi University, Delhi.**
19. Delivered Invited Lecture on, “**Environmental Pollution and climate change**” on January 30, 2018 at **Gujarat Ecological commission, Ministry of Science and Technology.**
20. Delivered Invited Lecture on, “**Building the City for Tomorrow: Smart City**” on November 3, 2017 at **Hindu College, DU, Delhi.**
21. Delivered Invited Lecture on, “**Indoor air Pollution and Human health**” on October 10, 2017 at **Indraprastha University, Delhi**
22. Delivered Invited Lecture on, “Climate change and Disaster management” on June 14th, 2017 at **CPDHE, DU, Delhi**
23. Delivered Invited Lecture on “**Carbon sustainability index calculation**” on, 7th June, 2017 at **Daulat ram College, University of Delhi**
24. Delivered Invited Lecture on “**Environmental Pollution**” on 24th January, 2017 at **Lady Sri Ram College, University of Delhi.**
25. Delivered Invited lecture in Symposium “Caring water resources in changing urban climate of India- Delhi as a case study” on January 5, 2017, at **104th Indian Science Congress, SV University, Tirupati.**
26. Delivered Invited Lecture on 17th November, 2016 “**Invitation for India and sustainability standards: International dialogue and conferences 2016 at India Habitat Centre, Delhi** Delivered Invited Lecture on “**Combating Industrial pollution for sustainable environment- A fusion of Industrial and scientific efforts**” on 22nd Sept., 2016 at Silver jubilee conf. of Dept. of Chemistry at **Gargi College, University of Delhi.**

27. Delivered Invited Lecture on “**Air Pollution and Health**” on 10th April, 2016 at 20th refresher Course in Environmental Studies at **JNU**.
28. Delivered invited lecture under the theme “**Air pollution and Health: Issues, Challenges and Policy**”, on March 19, 2016, at **Daulat ram College, University of Delhi**.
29. Delivered Invited lecture in Symposium “**Assessment and Mitigation of air quality in major cities of India in terms of inorganic and organic pollutants**” on January 5, 2016, under the topic: Health risk of air pollution: what we know about the problem, at **103rd Indian Science Congress, University of Mysore**.
30. Delivered lecture as a resource person on “**Air pollution and Health**” on October 30, 2016, in **CPDHE, Refresher course** at University of Delhi, Delhi
31. Delivered Invited Lecture on “**Air Pollution and Health**”, on April 10, 2015 – **At academic staff college, JNU**.
32. Delivered Invited Lecture, on “**Environmental Pollution**” on November 26, 2014 at **CPDHE, DU, Delhi**.
33. Delivered Invited Lecture on “**Introduction to Environmental Studies**” on November 24, 2014 at **CPDHE, DU, Delhi**
34. Delivered Invited Lecture on “**Physics of Noise and impact on human**” on September 9, 2014 at **CPCB head quarter**.
35. Delivered Invited Lecture on “**Emerging challenges in Urban sustainability**” on 17th February, 2014 at 19th refresher course in Environmental Science at **Academic staff college, JNU**,
36. Delivered Invited Lecture on “**Delhi city profile: Climate and Air Pollution Resilience**, on Jan, 28-30, 2014, at ”National conference on “Earth and Environment: Pollution and Prevention” **Amity University, Noida**
37. Delivered Invited Lecture, on “**Monitoring of PM 2.5 and other notified air pollutants as per revised NAAQS**” on January 20 2014, at **CSIR-NEERI, Delhi zonal office**.

Research Projects (Major Grants/Research Collaboration)

A. Research Collaboraton:

1. Collaborative Project coordinator of System Of Air Quality Forecasting And Research (Safar) programme of IITM, Pune; sponsored by Ministry of Earth Sciences, Govt. of India, 2010-till now.(project coordinator).
2. Collaborative Research with University college of Medical Sciences
3. Academic collaboration with University of Wageningen, The Netherlands on a project The post treatment efficiency of aquaculture system in the temperate climate from 1992-1994.

B. Major Research Grants

1. Monitoring Indoor Air Pollution (IAP) in Delhi University Area and accessing its Human Health Impacts, Ministry of Earth Sciences (**MoES**), **2016-2020 (PI)(Under Extention)**
2. Spatio-Temporal Epidemiology of Chronic Respiratory Illnesses in Urban Indian Settlements (STEPCRUISE), Ministry of Health & Family Affairs **2015- 2019 (C0-PI)**
3. Impact of Environmental Bioaerosol Pollution on Human Health: A “case-control study” for Exacerbation of COPD in North Indian Population, Ministry of Environment & Forests (MoEF), **2015-20(PI) (Under Extention)**
4. Inventorization of the greenhouse gases: sources and sinks in Delhi sponsored by Department of Environment, Govt. of Delhi, **2008-2009 (PI)**.
5. Spatial distribution of PTE and other pollutant anions in the ground water in varied urban environments of NCT, Delhi sponsored by Department of Environment, Govt. of Delhi, **2008-**

2009 (PI).

6. Development advanced mathematical techniques for modeling in aquatic ecology sponsored by Department of Science and Technology, Govt. of India collaborative project at IIT Delhi, Delhi, **2007-2009 (Co-PI).**
7. Bio-monitoring of ozone pollution in north Indian climate sponsored by Department of Science and Technology, Govt. of India, **2004-2008 (PI)**
8. Modeling the effect of environment factors on the water quality and aquaculture production of fresh water ponds sponsored by Department of Biotechnology, Govt. of India, **2001-- 2004 (Co-PI).**
9. The conversion of vegetable waste.....vermiculture and pisciculture technologies by Department of Science and Technology (DST), Govt of India, 1999-2009 **(PI)**
10. Waste utilization by aquaculture system.....of the producers and end users by Department of Science and Technology (DST), Govt of India, 1996-1999 **(PI)**

Awards and Distinctions

1. NESAI Environmentalist Award, 2018
2. Bharat Vikas Award, 2018
3. DST Young Scientist Fellowship (Under SERC Scheme) 2004
4. DAAD Fellowship 2000
5. DST Young Scientist Fellowship (under SYS Scheme) 1999
6. Post Doc fellowship from University of Wageningen, The Netherlands, 1993 & 1994
7. University Merit Scholarship study for 3 years 1981-1984

Association With Professional Bodies

A. Committees and Boards

1. Attended **CSIR Assessment committee on 10th July, 2019** as an external expert in the area “Biosciences & Biotechnology” at CFTRI, Mysore
2. Area Advisory Board of AIETSM, Amity University, 2019, 2020
3. **Expert committee** and block preparation team member (**2019**) in IGNOU study material unit 4 (pg 39-48), titled Introduction to Environmental Health, ISBN Number is: 978-93-88498-80-7.
4. Expert Panel in Environmental Studies for the selection committee of **Chinese government Scholarship, 2017-2018.**
5. Expert Panel in Environmental Studies for the selection committee of **Israel government Scholarship, 2016-2017.**
6. External Examiner for the M.Sc. practical exam in Department of Botany at **Visva Bharati University.**
7. Expert Member of Board of Studies in **Gautam Buddha University, 2015.**
8. Expert member of DRC and Courses Committee at AIETSM, **Amity Univ., 2014**
9. Member of selection committee of **National museum of National history**, FICCI, Museum building, Tansen marg, New Delhi, **2013.**
10. Member of the Recruitment and Assessment committee (RAC) of **CSIR- NEERI, 2012- 2015; 2015-2016.**
11. Member of Committee for preparation of RFP documentation for ‘ Aerosol monitoring overtime’, **IMD, New Delhi.2012-2014**
12. Expert member as stakeholder in An Obama-Singh 21st Century Knowledge Initiative (OSI), at Department of Civil Engineering, **IIT, Delhi**, on 4th March, **2013.**
13. Expert panel member of first project/Award Scrutinizing Committee under “Science Promotion Scheme (**2009**) of Delhi Council of Science Technology, **Dept. of Environment, Govt. of NCT of Delhi.**

B. Memberships

1. Full member of Women scientist society of **SEG, Texas, USA, 2019-2020**
2. Referee of the journal : International journal of Environmental Protection: Journal of hazardous material
3. Life member of Third World Women in Science, Trieste, Italy.
4. Life member of World Water Sanitation Programme, Geneva, Switzerland
5. Life member of National Environmental Science Academy, Delhi, India.
6. Member of National Institute of Ecology, Delhi, India.

Other Activities

1. **Chirashree Ghosh & Shailendra Singh March, 2020**, Prepared study material on **Municipal, Agricultural, Industrial and Hazardous waste management (Block 4)** program (**Unit 3- Transportation and Treatment ; Unit 4- Policies and Regulations**) in Hindi for July 2020, solid waste management certificate program. (CSWM), IGNOU.
2. **Chirashree Ghosh, (February, 2019)** Expert committee and block preparation team member in IGNOU study material **unit 4** (pg 39-48) **titled Introduction to Environmental Health**, ISBN Number is: 978-93-88498-80-7
3. Participated in **Interactive Radio Counseling (IRC)** session on Gyan Vain Broadcast (105.6FM) held on 22.04.2019 on the topic “Earth Day’ at Electronic Media Production Centre (EMPC), IGNOU.
4. Organised **National Workshop on Emerging Pollution Challenges on Earth Ecosystem-SAFAR, India’s** Novel Initiative held on February 26th, 2019 in DU Conference Centre , Environmental Pollution Laboratory, Department of Environmental Studies, and DU. Sponsored by Ministry of Earth Sciences (GoI). No. of participants-200.
5. Lecture on “**Practical Session on air and water pollution monitoring (For Students of St. Stephens College)**” by Environmental Pollution Laboratory, Department of Environmental Studies, DU on February 21st and 28th 2019 at Department of Environmental Studies, DU. 30 (UG ChemistrtyHons. Students) Creating awareness by disseminating valuable information about Indoor air pollution.
6. Article in **Hindi Newspaper** (Print Media)-DainikJagaran (New Delhi) on the topic “सजगनह हुएतोप्रदुषणहोजायेगाघातक” published on March 27th, 2019.
7. Article in **E-Newspaper** (Print Media)-The Ken (Bangalore, Karnataka) titled “Are air purifiers the new water purifiers?” published on November 9th, 2018.
8. Article in **E-Newspaper** (Print Media)-Mongabay (India) titled “Greening with Pollution-Gobbling Trees Double Benefits” published on November 1st, 2018.
9. **Paper setter** in IIS University of paper titled “Air pollution Monitoring and Management.
10. **Paper setter** in Ch. Charan Singh University, Meerut of paper titled “Environmental Pollution and Monitoring”
11. Member of **Departmental Inspection Committee** for examining the proposal to start B.Sc. (H) Environmental Science.in Shri Guru Nanak DevKhalsa College.
12. Participation in **Interactive Radio Counselling** for School of Interdisciplinary and Trans-disciplinary studies by Indira Gandhi National Open University.
13. **Demonstrated experiments** related to air and water pollution during the visit of St. Stephan College.
14. **Organizing secretary and organized workshop on “The Last Gasp: Fight for Clean air”**, at Hindu College, University of Delhi, October 11, 2018.
15. **Advisory committee, Resource person and Organized workshop on Indoor Air Quality and Human Health “How Saafe Are We At Home”?** at Indraprastha College for Women, University of Delhi, September 22, 2017.
16. **Resource person and organized graduate workshop on Understanding our Environment: Human Interference**, at Miranda House, University of Delhi, August 18, 2017.
17. **Organizing Secretary, Organized workshop**, “Environmental pollution and Health in urban

ecosystem”, at Department of Environmental Studies in collaboration with **Shivaji College, June 23, 2016.**

18. **Organised Session:** Title: **Urban air quality: Climate change, health and e-resilience** at the 13th international conference on the Atmospheric Sciences and Application to Air Quality (ASAAQ), held from 11 to 13 November, 2015 at Kobe, Japan.
19. **Mentor in Innovation Project of Deshbandhu College** “Unbeatable Air Pollution in Delhi: Trees for Rescue - A comparative study of different plant species to combat rising pollution in Delhi”, has been approved by **University of Delhi** under Innovation project scheme **2015-16**
20. **Database generation for University Engineering dept., University of Delhi (2012)** and hence, Report prepared for “Testing of surface water quality and ground quality for the development of infrastructure facility for Institutional building”.
21. **Collaborative partner of ‘SAFAR’** project with IITM, Pune for air quality forecasting during Commonwealth Games (**2-14, Oct., 2010**) at **Sports complex of Delhi University.**
22. **Carbon Map Preparation:** As an outcome of the research project, for the first time came out with the Carbon foot print of Delhi, which was taken to Copenhagen summit by state chief secretary - Project sponsored by **DOE, Delhi Govt.(Dec.,2009).**

(Dr. Chirashree Ghosh)