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A. Education:

Degree	Year	Institute	Subject
Post-Doctoral Fellow	2014-15	UGC – Women scientist with IIT Delhi	Human Exposure on Particulate Matter (PM10 & PM2.5)
Ph.D. (Institute Research Scholar)	2005-09	Indian Institute of Technology, Delhi	Air Quality Monitoring and Modelling for Naturally Ventilated School Buildings in Delhi
Graduate Aptitude Test for Engineers (GATE)	2004	Indian Institute of Technology	Life sciences
M.Sc.	1999- 01	Guru Gobind Singh Indraprastha University, Delhi (School of Environment Management)	Environment Management
B.Sc. (Honors)	1996-99	Delhi University (Daulat Ram College, North Campus)	Zoology

B. Memberships & Professional Associations:

- Brand Ambassador of Municipal Corporation of Delhi (MCD) for Swachhta Sarvekshan year 2022-23
- Technical Expert for a study on, “Nature & Climate Related Disclosures in BRSR & Integrated Performance Statements of The Companies in India” for UNDP under its “BIOFIN Programme” from October 23- December 23.
- Reviewer for BRSR submitted by Volunteer companies for F.Y. 2021-22 & for F.Y. 22-23
- Reviewer of Social Audit Standards (SAS) for Social Stock Exchange- Sustainability Reporting Group (SSE-SRSB) of Institute of Chartered Accountants of India (ICAI), 2022
- Expert Member of Indoor Air Pollution Committee of **Central Pollution Control Board (CPCB)** for formulation of IAQ guidelines and standards for India, 2022
- Trainer for Urban Local Bodies (ULBs) in India appointed by National Institute of Urban Affairs (NIUA) under Swachh Bharat Mission (Urban) Phase III and Phase IV of Ministry of Housing and Urban Affairs (MOHUA), Govt. of India for conducting workshops with ULBs of city clusters of the States of Rajasthan, Haryana, Uttar Pradesh, Jammu & Kashmir, Himachal Pradesh and Madhya Pradesh during year 2018 & 2019
- Founding Member and Former Secretary, Society for Indoor Environment (SIE), India

- Board member of Indian Pollution Control Association (IPCA), New Delhi.
- Technical Expert Member of Indoor Air Pollution Committee of Ministry of Environment, Forest & Climate Change (MoEFCC), Govt. of India formed in 2019
- To Ernst & Young and UNICEF, India in the study on " Formative assessment study to Understand knowledge, attitude and practices of parents and communities regarding pneumonia and Household Air Pollution (HAP)" sponsored by Ministry of Health, Govt. of India.
- Member, technical committee of indoor air quality protocol of Central Pollution Control Board (CPCB), Govt. of India, 2012
- Member, technical committee in First International Conference on Environmental Management and Sustainability (ICEMS 2017), organizing by SIES and IEM, Nerul Mumbai.
- Life Member, Indian Science Congress (ISC), Kolkata
- Life Member, Tata Institute of Social Science and Health (TISSH), Mumbai.
- Life Member, Indian Aerosol Science & Technology Association (IASTA)
- Reviewer of International Journals of Air, Atmosphere and Health, Building and Environment, Atmospheric Environment and many more of Springer and Elsevier Groups

C. Employment Record

From : 2015 To till date

Employer: Indian Pollution Control Association (IPCA), Delhi, India

Positions held: Deputy Director – IPCA, Head-Air Quality Project, Team Leader-CSR Projects

From : 2014 To 2015

Employer: Department of Civil Engineering, IIT Delhi

Positions held: Post-Doctoral Fellow

From : 2010 To 2013

Employer: CSIR- National Environmental Engineering Research Institute (NEERI), Delhi Zonal Centre.

Positions held: Scientist Fellow

From : 2009 To 2009

Employer: Department of Civil Engineering, Indian Institute of Technology, Delhi in association with Central Pollution Control Board (CPCB) and MOEFCC, GOI

Positions held: Research Associate

From : 2001 To 2004

Employer: Department of Civil Engineering, Indian Institute of Technology, Delhi

Positions held: Senior Research Fellow

From : 2001 To 2001

Employer: Development Alternatives (D.A.), New Delhi.

Positions held: Environmental Scientist

D. Work Undertaken that Best Illustrates Capability to Handle the Tasks

- 1. Name of the Project:** nature and climate-related risk assessments and reporting in India, by developing climate and biodiversity-specific reporting parameters around the Business Responsibility and Sustainability Reporting (BRSR) framework

Year: 2023

Client: UNDP

Positions held: Technical Expert

Work Description: Identification of Gaps in reporting on nature and climate related parameters in current BRSR framework, Feasibility analysis of parameters identified to be incorporated and expansion of BRSR framework for reporting on biodiversity specific parameters

- 2. Name of the Project:** Development of Social Audit Standard (SAS)

Year : 2022

Client : SRSB of ICAI

Positions held: Technical Reviewer

Work description: reviewer for SAS 500- Ensuring environmental sustainability, addressing climate change including mitigation and adaptation, forest and wildlife conservation

- 3. Name of the Project:** Segregation of Organic Waste for its Recycling and Treatment (S.O.R.T.) – CSR Project of Motherson Group

Year : 2018- 23

Location : Delhi, Mumbai & Pune, India

Client: Swarn Lata Motherson Trust of Motherson Group of Industries

Positions held: Team Leader/ Project manager

Main Project Features : The project is towards implementing decentralized solid waste management system in the cities of India, under which all the stakeholders at Society, Institute and office level are educated and Awared on the source segregation and their capacity has been built to treat their wet waste using aerobic composting technologies, which are installed at their premises under CSR initiative of Motherson Group. Till date more than 500 composters has been installed at more than 116 locations in Delhi NCR and in Mumbai which are running successfully to treat the wet waste. The project till date has treated more than 320 Metric Tons of wet waste and prevented almost 600 tons of waste to reach to landfills. The project has also saved 220 MT of CO₂ emissions if this waste would have reached to the landfills. Project has almost 3 lakhs direct and indirect beneficiaries in the cities of Delhi, Mumbai, Gurugram, Ghaziabad, Noida, Greater Noida and Faridabad.

Activities performed: Liasoning with urban local bodies, Corporate office, RWAs, Admin staff of schools, colleges and offices; Conducting awareness workshops with Residents, students and staffs; evaluating the impacts of the project; KAP Studies; Report Writing; and fund utilization.

- 4. Name of the Project:** Installation of Ambient Air Purifiers at the main traffic junctions and Air Pollution Hot spots in Gurugram - (Project Air Care) – CSR Project of GSK Consumer Healthcare

Year: (2020 - 23)

Location: Gurugram, Haryana, India

Client: GSK Asia Ltd. (Renamed Heleon Ltd.)

Positions held: Team Leader cum Technical Expert

Main project features: Project Air Care is the CSR Initiative of GSK Asia Ltd. in NGO partnership with IPCA and Government partnership with GMDA and CSIR- NEERI. The project was

successfully launched by CM Haryana on 10th November 2020 to address the rising levels of air pollution in the millennium city. Under this public private partnership initiative of IPCA, GSK and GMDA, total 85 Wind Augmentation Air Purifying Units (WAYU designed and developed by CSIR-NEERI) have been installed at 8 major traffic intersections of Gurugram. There is a significant reduction (25-30% reduction in PM₁₀ levels and 40-50% reduction in PM_{2.5} levels) at all locations. The project is an attempt to reduce the high exposure levels of PM₁₀ and PM_{2.5} for pedestrians at traffic intersections with heavy traffic loads and to circulate fresh air to local commuters.

Activities performed: Concept and proposal development; Brought on board to Gurugram Metropolitan Development Authority (GMDA) as government stakeholder to facilitate the implementation of project on ground; need assessment study of ambient air purifiers at heavy traffic junctions and at local hot spots with heavy footfall; team building for Identification of the local air pollution hotspots in the city, feasibility survey of traffic junctions for installation of WAYU; performance evaluation of the WAYU; impact assessment of the project on ground.

5. Name of assignment or project: Project Solutions to Air Pollution (SAP) – CSR initiative of Goodyear India Ltd.

Year: 2021-24

Location: Faridabad, Haryana, India

Client: Goodyear India Ltd.

Positions held: Team Leader/ Project Investigator

Main project features: Installation of ambient air purifier at densely populated areas with high footfall and activities of Ballabhgarh city in Faridabad. Also, development of the greenbelt on national highway, Mathura Road for upto 2.5 Km Stretch from Goodyear Factory, Ballabhgarh to Escort Mujesar, Faridabad. One greenbelt of approximately 600 meters is also made outside Goodyear Factory under their CSR initiative.

Activities performed: Concept and proposal development; Liaisoning and networking with Municipal corporation of Faridabad, Project Management Units of NHAI at Mathura Road to take them on board as the government stakeholders of the project; Liaisoning with other concern departments and authorities to execute the project on ground (SDM, HSPCB and DHVBN office); team building; trained the team for Identification, assessment & installation of ambient air purifier (WAYU) at heavy footfall and densely populated areas of Ballabhgarh city in Faridabad; developed innovative ideas for development of green belt on national highway2 (Mathura road) of 2.5 km in association with NHAI

6. Name of assignment or project: Air Quality Assessment of Gurugram

Year: 2019-20

Location: Gurugram, Haryana, India

Client: DLF Foundation

Positions held: Project: Technical Advisor/ Consultant

Main project features: Air Quality Assessment of Gurugram by developing network of Low cost air Quality Monitoring Stations

Activities performed: Liaisoning and networking with GMDA for conducting air quality assessment of Gurugram by developing a network of low cost air quality monitoring stations for DLF Foundation. Reviewed and assessed the performance of different low cost sensor monitors with BAM and other research grade air quality monitors. Submitted a comparative assessment report to DLF and to GMDA for different Air Quality Monitoring Sensors

7. Name of assignment or project : EPR action plans – prepared the EPR action plans for Nestle India, Mother Dairy, Dabur, Perfetti Van Melle, DS Group

Year: 2018-19

Activities performed: prepared action plans for the above mentioned companies for their plastic waste management under EPR Guidelines of CPCB under PWM Rules 2016.

8. Name of assignment or project: SWM workshops for Urban Local Bodies in India under Swachh Bharat Mission, Phase III and Phase IV

Year: 2017-18 and 2018-19

Location: City Clusters of Haryana, Rajasthan, Madhya Pradesh, Himachal Pradesh, Jammu and Kashmir and U.P.

Client: National Institute of Urban Affairs (NIUA)

Positions held: Organizer cum Expert Trainer to ULBs

Main project features: 3-days capacity building workshops were organized for the senior officials of the urban local bodies at different clusters in India identified by Ministry of Housing and Urban Affairs (MoHUA), Govt. of India. IPCA organized and conducted the workshop on behalf of NIUA as training entity to the ULBs in India. The workshops involve classroom sessions and exposure visits to different Solid Waste Management (SWM) locations in different parts of India

Activities performed: Conducted SWM workshops for Urban Local Bodies in India to build their capacity on solid waste management under Swachh Bharat Mission, Phase III and Phase IV programme of MOHUA, Govt. of India. Liaison with ULBs and with incharge/ owners of waste management facilities in different states and city clusters to successfully organizing the workshop. Facilitate Government officials for their comfortable stay for 3 days during workshop and delivered lectures on effective IEC for sustainable waste management in India

9. Name of assignment or project: Formative study to understand the knowledge, attitude and practices of parents and communities regarding childhood pneumonia and household air pollution

Year: 2017

Location: India

Client: UNICEF and Ministry of Health and Family Welfare (MoHFW), Govt. of India

Positions held: Technical Expert

Main Project Features: the goals of project are to understand the Household level practices and beliefs towards unclean fuels, smoking and hand washing in rural/ semi urban India and to understand the stakeholders' perceptions regarding indoor air pollution and its linkages with pneumonia. The project aimed to develop communication strategy framework to reach community and health system audiences in India keeping in mind the gender and inequality aspect to replace unclean fuels and follow hygiene practices; Social and economic inequities with respect to clean fuels as well as System related barriers to promote clean fuels and cooking practices

Activities performed: Reviewed the approach and methodology developed by E & Y and UNICEF to execute the project at different stakeholder's level. Guided the team in developing questionnaire for survey of different stakeholders, the content for group discussions and meetings with government stakeholders. Analysed and assessed the feedback and questionnaires of participants of the project and reviewed the reports technically before submitting to MoHFW with recommendations.

10. Name of assignment or project: Environmental best practices for hospitality Industry under the Clean Technology Initiative (CTI) programme.

Year: (2001)

Location: India

Client: Development Alternatives (D.A.), New Delhi.

Main project features: The prime objective of the manual was to suggest —best environmental practices/ technologies for Indian hospitality industry for their sustainable

development.

Positions held: Environmental Scientist

Activities performed: The Environmental best practices manual has been prepared as teamwork for hospitality industry as it is the second largest foreign exchange earner industry in India. However, various activities (housekeeping, laundry, kitchen, horticulture, parking lots etc.) of the industry are responsible for many environmental problems (stress on water and energy resources, generation of huge quantity of waste) at local as well as global level

11. Name of assignment or project: Assessment of Indoor Air Quality in the Classrooms of Naturally Ventilated School Buildings at Busy Traffic Roads in Delhi”

Year: 2005-2009

Location: Delhi

Client: IIT Delhi (Research Project)

Positions held: PhD Research Fellow

Activities performed: Need Assessment and review of the existing studies in the field; indoor – outdoor air quality monitoring of PM10, PM2.5, PM1.0, SO2, NOx, CO has been conducted in different classrooms of schools along with thermal comfort parameters, Indoor – Outdoor ratio calculation, developed a mass balance based IAQ model for classrooms to predict the air quality. The findings of the study are published in international journals with high impact factors, like Atmospheric Environment, Building and Environment, Environmental Monitoring and Modelling etc.

12. Name of assignment or project: Exposure Assessment of PM2.5 in volunteers of UK

Year: 2008 -09

Location: Freeman Hospital & Newcastle University, UK

Client: British Commission

Positions held: Research Fellow

Activities performed: Personal exposure monitors make of SKC was mounted on the volunteer citizens of the UK along with portable ECG, Holtameter and GPS to track their movements and asked them to record their daily activities to understand their exposure to PM2.5 levels. This activity and data collection was done under student exchange programme of UK and India during PhD research.

13. Name of assignment or project: Developing the Comprehensive Environmental Pollution Index (CEPI) for Selected Industrial Clusters in India

Year: (2009-2010)

Location: India

Client: Department of Civil Engineering, Indian Institute of Technology, Delhi in association with Central Pollution Control Board (CPCB) and MOEFCC, GOI

Main project features: Comprehensive Environmental Pollution Index (CEPI), which is a rational number to characterize the environmental quality at a given location following the algorithm of source, pathway and receptor have been developed. The data refers to the Comprehensive Environmental Pollution Index (CEPI) scores of the critically polluted industrial clusters/areas. The index captures the various dimensions of environment including air, water and land.

Positions held: Research Associate

Activities performed: Contributed in developing the formulae to calculate the various pollution indices, i.e. air, water and soil pollution indices, analysis of pollution, industrial and demographic data of 89 industrial clusters of India, preparation of final project report

14. Name of assignment or project: Interlinkages among air pollution, climate change and human health – A consortium project of CSIR- NEERI and CSIR- IGIB

Year: 2011-13

Location: Delhi

Client: USEPA

Positions held: Project Scientist

Activities performed: An indoor – outdoor air quality monitoring was conducted in 8 different schools of Delhi w.r.t. their location (residential, commercial and industrial as per CPCB’s guidelines and standards). Personal Exposure Assessment study (with questionnaire survey, BMI monitoring and their spirometer data collection) was also conducted on school children to find out the correlation between indoor air quality and respiratory health of children. 1800 children between age group of 12-15 years were selected for the study. The results of the above all studies were published in reputed international journal of Air, Atmosphere and Health

15. Name of assignment or project: Sustainable urban built environment (Indo-German research Initiative Project in collaboration with IIT Delhi and Leipzig University, Germany

Year: 2011-12

Location: Delhi

Client: Leipzig University, Germany

Positions held: Resource Person

Activities performed: Capacity building workshops were organized in Delhi to create the awareness on urban build infrastructure and on indoor environmental quality for different stakeholders like architects, academicians, researchers, building developers and government authorities.

16. Name of assignment or project: Development of “Integrated Indoor Air Quality Protocol for India”

Year: 2011-12

Location: India

Client: CPCB, Govt. of India

Positions held: Resource Person/ Technical Expert

Activities performed: A detailed Indoor Air Quality (IAQ) protocol has been developed and submitted to CPCB to propose IAQ as one of the mandates of Central Pollution Control Board (CPCB), Ministry of Environment, Forests and Climate Change (MoEFCC), GOI similar to National Ambient Air Quality Monitoring Programme. The protocol was developed in collaboration of IIT Delhi, CSIR- NEERI and University of Delhi.

17. Name of assignment or project: Obama –Singh 21st Century Initiative project on “Resource Building for Ecosystem and Human Health Risk Assessment with Special References to Microbial Contamination” in collaboration with IIT Delhi, IIPH, Hyderabad (National team) and Drexel University, Philadelphia, USA, Michigan State University, USA

Year: 2012-16

Location: Delhi and USA

Client: MHRD, Govt. of India

Positions held: Resource Person/ Technical Expert

Activities performed:

18. Name of assignment or project: Clean and Healthy Air Management Programme - Project CHAMP

Year: 2016-17

Location: India

Client: Delhi NCR Schools

Main project features: The project aimed to create “Clean Air Champions” in schools of Delhi/ NCR who are sensitized and informed about the concept of air pollution, its sources and its consequences. These champions will be trained to take action at individual level.

Positions held: Principal Investigator and Team Leader

Activities performed: Liaison with Principals of different schools in Delhi; team building to conduct the workshops, technical expert on air pollution, its causes, consequences, trends and solutions; Mentoring of the students to make them torch bearers and Champs.

E. Other Trainings:

- Training on Entrepreneurship ‘under Council of Scientific and Industrial Research (CSIR)’s CSIR-IICT, Hyderabad.
- Science and Engineering Research Council (SERC) School on —Atmospheric Chemistry and Air Pollution at NPL, New Delhi
- Training under Quality Improvement Programme on —Environmental Pollution & Control at Dept. of Applied Mechanics, IIT Delhi.
- Training on —Solid Waste Management organized by Indo-French Unit for Water & Waste Technologies (IFUWWT), I.I.T. Delhi.
- Training on —Emerging Water & Waste Treatment Technologies: Needs & Objectives organized by Indo-French Unit for Water & Waste Technologies (IFUWWT) at IIT Delhi
- Training on —Water Pollution & its Control organized by Indo-French Unit for Water & Waste Technologies (IFUWWT), IIT Delhi.
- Training on —The Concept of Sustainable Development, its Internationalization and Issues of Concerned at National Institute of Science Technology & Development Studies (NISTADS), New Delhi

F. Countries of Work Experience: Primarily in India. However, visited U.K., USA, France, and Finland for short term projects and assignments

G. Publications

1. Goyal, Radha R., Krishna Mohan, M. and Kansal, Arun (June 2003), “*Treatment of Dyeing and Printing Effluent Using Photo-Assisted Fenton Reaction*”. J. of Nature Environment and Pollution Technology, Vol. 2, pp 179-182.
2. Gupta, Hari Shanker, Goyal, Radha R. and Khare Mukesh (2006), “*Tracer Transport Study in Fly ash Using as Landfill Material*” Asian J. of Water Environment and Pollution (AJWEP), Vol. 3, No. 2, pp 23-28.
3. Gupta, Sanjeev, Khare, M. and Goyal, Radha (2007), “*Sick Building Syndrome—A Case Study in a Multistory Centrally Air Conditioned Building in the Delhi City*” Building & Environment, Vol 42 (8), pp 2797 – 2809.
4. Goyal Radha and Khare Mukesh (2009), “*Indoor-Outdoor Concentrations of RSPM in Classroom of a Naturally Ventilated School Building near an Urban Traffic Roadway*” Atmospheric Environment, Volume 43 (38), pp 6026-6038.
5. Goyal, Radha R., Khare, M. and Sreekrishnan, T.R., Yadav, Sushil Kumar and Chaturvedi, Meha (2010), “*An Experimental Study on Color Removal from Textile Industries Using the Rotating Biological Contactor*” Journal of Hazardous, Toxic and Radioactive Waste Management, American Society of Civil Engineers(ASCE), [http://dx.doi.org/10.1061/\(ASCE\)HZ.1944-8376.0000038](http://dx.doi.org/10.1061/(ASCE)HZ.1944-8376.0000038).
6. Goyal Radha and Khare Mukesh (2011), “*Indoor Air Quality Modeling for PM₁₀, PM_{2.5}, and PM_{1.0} in Naturally Ventilated Classrooms of an Urban Indian School Building*” Environmental Monitoring and Assessment, Vol 176 (1) (2011), pp 501- 516, DOI 10.1007/s10661-010-1600.
7. Goyal Radha and Bassin, J.K. (2011). “*Natural Ventilation in Schools*”. Air Conditioning and Refrigeration Journal, ISHRAE, Vol. 14 (3), pp 72-78
8. Goyal Radha, Khare Mukesh and Kumar, Prashant (2012), *Indoor Air Quality: Current Status, Missing Links and Future Road Map for India*. J. of Civil and Environment Engineering, Vol. 2 (4) - 1000118.
9. Goyal Radha and Khare Mukesh (2012). *Simulation of Airflow and wind pressure coefficient in a naturally ventilated classroom model using Environmental Wind Tunnel and CFD modelling*. Special issue on “Urban Air Pollution: Measurements, Physicochemical

characteristics, Exposure, Health and Dispersion Modelling” of J. Civil and Environmental Engineering, S:1, <http://dx.doi.org/10.4172/2165-784X.S1-001>

10. Goyal Radha and Kumar, Prashant (2013). The effects of environmental and occupancy parameters on particulate matter inside a mixed use commercial building environment. Communicated to “Building & Environment” BAE No. BAE-D- 13-00225.
11. Jincy Mathew, Radha Goyal, K K Taneja & Naveen Arora (2014). Air pollution and respiratory health of school children in industrial, commercial and residential areas of Delhi, Air Qual Atmos Health, DOI 10.1007/s11869-014-0299-y
12. Praveen Babu, Mukesh Khare and Radha Goyal (2014), “Application of Renewable Energies in HVAC Systems”, Cooling India, Vol. 10 (No.2), pp. 62-66
13. Babu, P., Khare, M. and Goyal, R. (2015). "Chemical Characterization of Airborne Particles Collected in an Underground Metro Station Platform in Delhi City", Athens: ATINER'S Conference Paper Series, No: ENV2015- 1690.
14. Ashish Jain, Radha Goyal, Shyamli Singh and Lolita Pradhan (2016). Municipal Solid Waste Management in India: A case study of post consumed tetra pak cartons in Delhi NCR. IIOABJ, 2016; Vol. 7 (11): 54-59

H. Books and Chapters Published

1. Khare Mukesh and Goyal Radha, R. (2006), “*Industrial Pollution, Global Warming and Threats to Biodiversity*”, in a book on “Human Rights, Gender and Environment, published by Allied Publishers, New Delhi, India.
2. Radha Goyal and Mukesh Khare (2010), “*Indoor Air Quality in Naturally Ventilated Schools*”, ISBN 978-3-639-25234-7, By VDM publisher, Germany.
3. Goyal Radha and Khare Mukesh (2010), “*Indoor Air Pollution and Health Effects*” in a book on Air Pollution: Health and Environmental Impacts, Edited by Gurjar, B.R., Luisa, T. Molina and Ojha, C.S.P., CRC Press, U.S.A, ISBN: 978-1- 4398-0962-4
4. Goyal Radha and Khare Mukesh (2010), “*Indoor Air Quality: Monitoring and Modeling Protocol for Urban School Buildings*” Chapter 10, in a book, titled, “Sick Building Syndrome in Public Buildings and Workplaces” , Edited by Dr. Abdul-Wahab Suleiman, Springer Publishers, (ISBN 978 -3- 642- 17918-1).
5. Goyal Radha, Mandal Papiya and Bassin J.K. (2013), “Air Pollution from Solid Waste and its Impact on Climate Change” Chapter submitted in a book, titled, “Solid waste and Climate Change” Edited by Dr. Shyamli Singh, Gyan Publishers, N. Delhi, India.
6. Shyamli Singh, Radha Goyal and Ashish Jain (2017), "The Urban Environmental Crisis in India: New Initiatives in safe water and waste management by Cambridge Scholars Publishing, UK. ISSN No. 1-4438-7960-6.
7. Arun Sharma, Radha Goyal & Richie Mittal (2020), " Indoor Environmental Quality: Proceedings of 1st ACIEQ” Lecture Notes in Civil Engineering book series (LNCE, volume 60), Springer Publishers, [Indoor Environmental Quality | SpringerLink](#)
8. Akansha Gupta, Radha Goyal, Priyanka Kulshreshtha, Ashish Jain (2020), “[Environmental Monitoring of PM_{2.5} and CO₂ in Indoor Office Spaces of Delhi, India](#), Chapter, 8, Pages 67-76, in book on " Indoor Environmental Quality: Proceedings of 1st ACIEQ” Lecture Notes in Civil Engineering book series (LNCE, volume 60), Springer Publishers, [Indoor Environmental Quality | SpringerLink](#)
9. Pratima Singh, Renu Arora, Radha Goyal (2020), “[Impact of Lighting on Performance of Students in Delhi Schools](#), Chapter 11, Pages 95-108, in book on " Indoor Environmental Quality: Proceedings of 1st ACIEQ” Lecture Notes in Civil Engineering book series (LNCE, volume 60), Springer Publishers, [Indoor Environmental Quality | SpringerLink](#)
10. Pratima Singh, Renu Arora, Radha Goyal (2020), “ [Classroom Ventilation and Its Impact on Concentration and Performance of Students: Evidences from Air-Conditioned and Naturally Ventilated Schools of Delhi](#), Chapter 13, Pages 125-137, , in book on " Indoor Environmental Quality: Proceedings of 1st ACIEQ” Lecture Notes in Civil Engineering book series (LNCE, volume 60), Springer Publishers, [Indoor Environmental Quality | SpringerLink](#)

I. Certification:

I understand that any willful misstatement described herein may lead to my disqualification or dismissal, if engaged.

A handwritten signature in blue ink, appearing to read "Radha Goyal", written over a horizontal line.

RADHA GOYAL

Date: 09/01/2023