

Deepti Sharma (Ph.D.)

8 Byron Court, Windsor, SL4 4PU | 07405145132 | 22deepti@gmail.com | <https://www.linkedin.com/in/deepti-sharma-ph-d-073b8823/>

Profile

- Doctorate in energy and environment with two years of post PhD experience as a consultant
- Experience in primary and secondary data collection, analysis, and scientific writing
- Skilled in statistical analysis methods related to both qualitative and quantitative analysis
- Looking for a more focused role on air quality management, greenhouse gas emissions, data analysis, sustainable development, and project management

Skills

Technical

- Primary and secondary data collection and analysis using real-time instruments
- Air quality monitoring and management
- Personal exposure and health risk assessment
- Chemical and physical characterization of particulate matter
- Basic statistical modeling
- Basic principle and operation of GC-MS

Data analysis

- Microsoft Office tools (Word, PowerPoint, Excel, and Outlook)
- SPSS
- Origin
- Minitab

Education

PhD (Department of Energy and Environment)

Awarded: 14th November 2019

TERI School of Advanced Studies (*formerly TERI University*), New Delhi.

Thesis: "Indoor air quality and exposure assessment from biomass fuel burning in traditional and advanced cookstoves"

Financial support from Ministry of New and renewable Energy under the junior research fellowship award followed by senior research fellowship.

M.Sc. (Master of Science) in Environmental Sciences

Awarded: 2008 (CGPA: 8.63)

Guru Jambheshwar University of Science & Technology, Hisar (Haryana)

Professional Experience

Research Analyst, Ecovia Intelligence, London

July 2022-Presently Working

- Literature review of online media, articles, journal papers and websites
- Primary research: undertake telephone and online interviews with ethical businesses
- Data analysis and collation
- Company profiling: preparing competitive profiles of key companies
- Report writing and preparing briefings

Consultant, The Energy and Resources Institute (TERI), New Delhi (India)

October 2020-June 2022

Project title: Identifying and embedding mitigation opportunities for short-lived climate pollutants (SLCPs) in India (Collaboration with CCAC and Funded by UNEP)

- Literature search related to air pollution and climate change for different sectors and analysis of secondary data related to air quality, greenhouse gas emissions and short-lived climate pollutants
- To identify strategies for integrated approach of climate change and air pollution mitigation in India
- Developed a brief report on SLCPs emissions from different sectors, their impacts and mitigation strategies in India and global (CCAC initiatives)
- Development of questionnaire for stakeholder consultation
- Engaged in stakeholder meeting with area experts
- Developed a policy brief based on the stakeholder meetings and research findings
- Writing journal articles, reviewing & editing of manuscripts

Project: Building Health Sector Resilience for Climate Change (supported by NCDC, Department of Health and GIZ)

- Review of literature to assess climate-specific impacts on health and prepare a disease profile for the six geo-climatic zones of the country
- To structure questionnaire for interviews with relevant stakeholders for the collation of required activity data and other relevant information
- To develop IEC material (such as infographics and videos) on climate-sensitive health challenges

Project: FOLU India Action Agenda (FOLU India Phase II programme is supported by the Norwegian International Climate and Forest Initiative (NICFI))

- Conducted a literature survey to collect data on food security and nutritional challenges in India
- Developed a questionnaire on nutrition security and COVID-19 to take feedback through online survey
- Discussion with FPS owners, Anganwadi, and beneficiaries to check with availability of food during COVID, and other challenges
- Co-authored a Chapter on Promoting Healthy and Sustainable Diets in India

Project title: Scoping Study to identify short-lived climate pollutants (SLCPs) mitigation opportunities in India

- Developed a background report providing an overview of activities in India mainly at national level to understand the current status of activities on air pollution and climate change mitigation planning and their level of integration
- Mapping of key stakeholders for air pollution mitigation, climate change mitigation, and health policy

Project title: Assessing the respiratory health effects of exposure to ambient air pollution through survey-based study

- My responsibilities include review of literature related to air pollution monitoring, different sources, impacts, and chemical characterization of particulate matter to assess toxicity
- I assisted in data analysis of ambient air quality monitoring, writing manuscripts and generate infographics

Volunteer, The Energy and Resources Institute (TERI), New Delhi April 2020-September 2020

Assisted in review of relevant literature related to indoor air quality assessment studies, use of induction stoves in India and cookstove stacking. Also supported in data analysis, writing manuscript, reviewing and editing

Research Analyst, J.M. EnviroNet Pvt. Ltd.

April 2009 - November 2009

- Laboratory testing of air, water and soil samples
- Results interpretation and reporting to supervisor
- Supervise and guide the interns in analysis
- Log maintaining and writing SOPs

Memberships

- Full Member of Institution of Environmental Sciences (IES)
- Associate Member of the Institute of Air Quality Management (IAQM)
- Full Member of Organization for Women in Science for the Developing World (OWSD)

Achievements

List of Publications

- **Sharma, D.**, Jain, S., 2020. Carcinogenic risk from exposure to PM_{2.5} bound polycyclic aromatic hydrocarbons in rural settings. *Ecotoxicology and Environmental Safety*, 190, 110135.
- **Sharma, D.**, Jain, S., 2020. Reduction in black carbon concentration and its exposure in rural settings of Northern India: An intervention analysis. *Chemosphere*, 247, 125838.
- Arora, P., **Sharma, D.**, Kumar, P., Jain, S., 2020. Assessment of clean cooking technologies under different fuel use conditions in rural areas of Northern India. *Chemosphere*, 127315.
- Arora, P., Rehman, I. H., Suresh, R., Sharma, A., **Sharma, D.**, Sharma, A., 2020. Assessing the role of advanced cooking technologies to mitigate household air pollution in rural areas of Solan, Himachal Pradesh, India. *Environmental Technology & Innovation*, 101084
- **Sharma, D.**, Jain, S., 2019. Impact of intervention of biomass cookstove technologies and kitchen characteristics on indoor air quality and human exposure in rural settings of India. *Environment International*, 123, 240-255.

Publications Under Review

Suresh R, **Sharma D**, Arora, P., Sharma, A., Pal, R.C., 2022. Indoor PM characterization and real-time assessment during cooking in rural settings of Kanpur, India. *Aerosol Science and Engineering* (accepted with revision- ASEN-D-22-00023)

Awards

- Awarded Junior Research Fellowship from Ministry of New & Renewable Energy during PhD (2011-2016)
- Best paper presentation award at National conference on "Sustainable management of Environment & Natural resource through Innovation in Science and Technology (SMTST 2020)".

Trainings and Academic Participations

- Virtual Workshop: Capacity Development Program on Air Quality Management and Emission Reduction on PM_{2.5} for Asian Countries hosted by Regional Resource Centre for Asia and the Pacific (RRC.AP) (13-17 September 2021)
- Virtual Workshop: Advancing health-climate action through improved vulnerability and adaptation assessment and planning hosted by World Health Organization South-East Asia Regional Office (August 17-19 and 25, 2021)
- Certified in "Basic principles and operations of GC-MS" from Institute of Pesticides Formulation Technology, Gurugram, Haryana (2-6 December 2019).
- Certified in "Writing Quality Research Papers in the field of Social Sciences Using SPSS and AMOS" from New Delhi Institute of Management during a Faculty Development Program (2-7 July 2019)
- Attended a two-day conference on "EU India Air Quality Initiative" National Clean Air Programme (NCAP) on May 21 & 22, 2018 at Hotel Grand, Vasant Kunj, New Delhi.
- Attended workshop on "Environmental sustainability through science-based tools and approaches" at TERI School of Advanced Studies from 15-16 February 2018.
- Certified in "Remote Sensing and GIS" from HARSAC, CCS Haryana Agriculture University.

Conference and Poster Presentations

- Presented and co-authored a paper on 'Effect of cookstove stacking on indoor air quality in rural households of Solan, Himachal Pradesh: A pilot study' in A National conference held at UPES Dehradun, India. 7-8 August, 2020.
- Paper presentation at National Environmental Conference 2019, held at IIT, Bombay on Indoor air pollution from solid biomass burning in cookstoves: An intervention analysis to assess the benefits and co-benefits in rural settings.
- Delivered Poster presentation on "Evaluating health effects and risk characterization due to emissions from biomass energy based traditional and advanced cookstoves in rural communities" at 14th Delhi Sustainable Development Summit organized by TERI School of Advanced studies from February 6-8, 2014.
- Delivered Oral presentation of paper titled "Evaluating health effects and risk characterization due to emissions from biomass energy based traditional and advanced cookstoves in rural communities" at National Convention of National Renewable Energy fellows, organized by Ministry of New and Renewable Energy (MNRE), New Delhi on March 6-7, 2013.
- Delivered Oral presentation on paper titled "Addressing the impacts of indoor air pollution with respect to socio-economic and health" at National Workshop on Multidisciplinary Approach in Frontier areas of Environmental Science and Engineering (MAFAESE- 2011) organized by Guru Jambheshwar University of Science and Technology, Hisar, Haryana on March 4-5, 2011.