Annexure 1

Sponsored Research Projects (Completed/Ongoing)

Title	Funding Agency	Amount (Rs. in Lacs)	Duration
Ozone precursors and relationships in atmosphere at a semi-arid site Co-PI till 2020 & PI from 2021	ISRO-GBP	250.26	2007-Ongoing
Socio-economic Empowerment of the in the Rajaborari Estate Madhya Pradesh through Scientific and Technological Interventions PI	DST-SEED	219	2021- Ongoing
From Waste to Wealth: Establishment of method for the recovery of precious metal from e-waste Co-PI	DEI	3.5	2019- Ongoing
Generation of Reactive Oxygen Species in size fractionated ambient particulate matter: Association with metals, polyaromatic hydrocarbons and meteorology PI	DST-SERB	30.06	2018-2021 Completed
Chemical characterization and source apportionment of ambient submicron particles Co-PI	DST-SERB	29.5	2017-2020 Completed
Gas-Particle partitioning of Polyaromatic hydrocarbons (PAHs) and nitro-PAHs at a traffic and rural site in Agra PI	DST-SERB	44.5	2014-2017 Completed
Characterization, Toxicity and Health risk assessment of PAH in Particulate Matter and Emissions from different combustion fuels	DST-SERB	26	2009-2012 Completed
Measurements of Organic carbon and Black carbon and chemical constituents of ambient aerosol at a suburban site of the Indo-Gangetic plain, Co-PI	DST-SERB	36.65	2008-2011 Completed
Chemical characterization of Nutrients and Antinutrients of a neglected wild species *Chenopodium album,* Co-PI	UGC	7.5	2008-2011 Completed
Size-resolved chemical speciation of Polycyclic aromatic hydrocarbons in an urban atmosphere, PI	DST-SERB	6.0	2004-2006 Completed
A Study on the Chemistry of Fog and Dew in Agra, Co- PI	DST-SERB	6.0	1997-2000 Completed
Measurement of air concentration and deposition flux of selected air pollutants in Agra, PI	CSIR	7.5	1991-1993 Completed

Research Publications:

- Agarwal, Muskan, Goyal, Isha, Goswami, Gunjan, Bamola, Simran, & Lakhani, Anita. (2024). Echoes of change: Dynamics of air quality and health in the new normal. Air Quality, Atmosphere & Health, 1–20. https://doi.org/10.1007/s11869-024-01599-9

- Agarwal, Muskan, Goyal, Isha, & Lakhani, Anita. (2024). Spatio-temporal analysis of carbonaceous compounds and water-soluble inorganic ions in PM2.5: Source attribution and health impacts in the Indo-Gangetic Plain. AGU24.
- Baghel, Neelam, Lakhani, Anita, Satsangi, Aparna, & Kumari, Kandikonda Maharaj. (2024). Chemical characteristics of BTEX, formaldehyde and trace gases: Concentration, ozone formation potential and source apportionment at a campus site of Agra. Environmental Monitoring and Assessment, 196(12), 1243. https://doi.org/10.1007/s10661-024-13337-5
- Bamola, Simran, Goswami, Gunjan, & Lakhani, Anita. (2024). Levels, sources, and health risks associated with particle-bound PAHs at an urban cum industrial site in Agra, India. AGU24.
- Bamola, Simran, Goswami, Gunjan, & Lakhani, Anita. (2024). Polycyclic aromatic hydrocarbons (PAHs) heterogeneity in different PM fractions in an urban air environment of an Indo-Gangetic Plain. 2024 Goldschmidt Conference.
- Bamola, Simran, Goswami, Gunjan, Lakhani, Anita. (2024). Understanding polycyclic aromatic hydrocarbons (PAHs) and derivatives: Sources, properties, and health impacts. Contemporary Advances in Science and Technology, 7(2), 65–90.
- Dewan, Surat, Bamola, Simran, Lakhani, Anita. (2024). Characterising temporal variability of PM2.5/PM10 ratio and its correlation with meteorological variables at a sub-urban site in the Taj City. Urban Climate, 53, 101763. https://doi.org/10.1016/j.uclim.2024.101763
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- Agarwal, Muskan, Goyal, Isha, & Lakhani, Anita. (2024). Oxidative potential of ambient fine aerosols during summer and winter time burning at an urban site of Agra, India. 2024 Goldschmidt Conference.
- Baghel, Neelam, Singh, Kirti, Lakhani, Anita, Kumari, K. Maharaj, & Satsangi, Aparna. (2023). A study of real-time and satellite data of atmospheric pollutants during agricultural crop residue burning at a downwind site in the Indo-Gangetic plain. Pollutants, 3(1), 166–180. https://doi.org/10.3390/pollutants3010013
- Baghel, Neelam, Kumari, Sonal, Lakhani, Anita, Satsangi, Aparna, & Kumari, K. Maharaj. (2023). Impact of COVID-19 pandemic lockdown on atmospheric concentrations of particulate matter, trace gases and volatile organic compounds at a suburban site of Agra. Journal of Earth System Science, 132(4), 169. https://doi.org/10.1007/s12040-023-0247-5
- Goyal, Isha, Agarwal, Muskan, Bamola, Simran, Kumari, K. Maharaj, & Lakhani, Anita. (2023). Comparative analysis of fine particulate matter (PM2.5) over the Indo-Gangetic Plain (IGP) in the era of Covid-19: Normal to the new normal. PARITANTRA, 16.
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Awards & Recognitions

- Collaborator for Global Burden of Disease, IJHME, since 2024.
- Received the SSI (Systems Society of India) Varshney Award for exceptional contributions to systems science, applications and technology in 2023.
- Received Best Paper Award in National System Conferences- 2023 for the paper entitled "The Impact of Biomass Burning on the Oxidative Potential of PM2.5 at Dayalbagh Agra".
- Received Best Paper Award in National System Conferences- 2022 for the paper entitled "Comparative Analysis of Fine Particulate Matter ($PM_{2.5}$) Over the Indo-Gangetic Plain (IGP) in the Era of Covid-19: Normal to the New Normal".
- Conferred the Award "Environmentalist of the Year -2014 by Foundation of Science and Environment, Kolkata in March 2015 in the International Conference on Environment and Ecology at Scientific and Environment Research Institute, Science City, Kolkata, 2^{nd}- 4^{th} March, 2015.
- Co-Convener "One day Seminar on "Recent Trends of Trace Gases and Aerosol: Their Impact on Climate" organized by Dept. of Chemistry, Dayalbagh Educational Institute, Dayalbagh, Agra on 23^{rd} Nov. 2015.
- Co-Convener "One day Seminar on Recent trends in Environmental Chemistry" organized by Dept. of Chemistry, Dayalbagh Educational Institute, Dayalbagh Agra on 10^{th} Sept. 2011
- Conferred the Award "Environmentalist of the Year -2010" by International Body of NESA (National Environmental Science Academy), New Delhi.
- Member National Academy of Sciences in India, 2009
- Best paper presentation award: "Ambient Air Pollution at Agra by Polynuclear Aromatic Hydrocarbons" in Brainstorming Workshop on Urban Air Pollution in India.
- Best paper presentation award: "Diesel generator exhaust: Characterization and Health risk assessment through polycyclic aromatic hydrocarbon measurements" in Brainstorming Workshop on Urban Air Pollution in India.
- Awarded Indian National Disaster Reduction and Awareness (INDRA) Award, Dec. 1999.
- Awarded Senior Research Fellowship by CSIR (New Delhi) for the period July, 1991 to Oct. 1993.
- Awarded Certificate for securing highest marks in M.Sc. Chemistry (Environmental), 1988.