



Center for Atmospheric And Climate Sciences

Environmental Engineering Division
Department of Civil Engineering, IIT Madras



About Me

I am a researcher at the Center for Study of Science, Technology and Policy (CSTEP) in Bengaluru, India. I lead the India Sensor Evaluation and Training (Indi-SET) facility and am the Principal Investigator for a multi-pollutant low-cost sensor network project in Bengaluru. I'm awaiting my Ph.D. and M.Tech in Environmental Engineering from IIT Madras, having submitted my doctoral thesis on the role of bioaerosols in India. I am a member of IGAC-iCACGP ECR, EGU, BioAirNet, and WAQSA, and served on the ASIC 2025 Technical Planning Committee. In addition, I contribute to the scientific community as a peer reviewer for several journals, including Frontiers in Microbiology and Nature Communications Engineering.

Research Interest

- Achieving clean air for all through interdisciplinary research and evidence-based policy interventions.
- Atmospheric composition observations leveraging both reference-grade instruments and low-cost sensor networks.
- Role of bioaerosols on ecosystem-health interaction using advanced online and offline techniques.

Skills

- Proficient in Python, R, C, C++, MATLAB, Visual Basic, Igor Pro, PostgreSQL, Ansys Fluent, and QIIME 2.
- Hands-on experience with aerosol and gas measurement instruments including SMPS, UV-APS, BAM, FIDAS, gas analyzers, PCR thermocycler, MOUDI, fluorescence microscope, and aerosol generator.
- Experienced in project management, data analysis and visualization, DNA analysis using NGS, atmospheric composition observations lab setup, and applying machine learning to air quality monitoring.



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Early Career Researcher

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