



भारतीय प्रौद्योगिकी संस्थान कानपुर
INDIAN INSTITUTE OF TECHNOLOGY KANPUR
सिविल अभियांत्रिकी विभाग
DEPARTMENT OF CIVIL ENGINEERING

पत्रालय : आई.आई.टी., कानपुर-208016(भारत)
P.O.-I.I.T., KANPUR - 208016 (India)

Date: 26-07-2022

To,
The Regional Officer
U.P. Pollution Control Board, Varanasi.

Subject: Identification of Air Pollution Sources and their Percentage Contribution to the Ambient Air through Source Apportionment Studies and Remedial Measures for Non-Attainment Varanasi city in the State of Uttar Pradesh.

Dear Sir,

The following tasks are completed:

1. Concentration of particulate matter PM_{2.5} and PM₁₀ for the winter and summer season.
2. Concentration of gaseous pollutants SO₂ and NO₂ for the winter and summer season.
3. Concentration of PM carbons (OC and EC) for the winter and summer season.
4. Chemical analysis for elements, PAHs, ions and molecular markers for winter and summer season.
5. VOCs concentration for the winter and summer season.
6. Digital Data Generation and Land-use Map.
7. Emission Inventory of the city.

The following tasks are under progress:

1. Compilation of chemical analysis data for elements, PAHs, ions and molecular markers for winter and summer season.
2. The second progress report will be submitted after compilation of data by 31 August 22.
3. Reconstruction of PM based on chemical species (of PM) and assessment for primary and secondary sources of air pollutants.
4. Receptor source modeling for source apportionment
5. Source apportionment will be done after all chemical analysis.
6. Preparation of action plan for control of air pollution in the city
7. The final draft report will be submitted by October 31, 2022.
8. The final report will be submitted by December 31, 2022.

Thanking you

Mukesh Sharma, PhD
Professor