Review of: "Evaluation of Ambient Air Quality Level at Various Locations within Lead City University, Ibadan"

Arghadeep Bose[1]

1 University of North Bengal

Potential competing interests: No potential competing interests to declare.

Review of "Evaluation of Ambient Air Quality Level at Various Locations within Lead City University, Ibadan"

The manuscript titled *"Evaluation of Ambient Air Quality Level at Various Locations within Lead City University, Ibadan"* provides a detailed analysis of air quality monitoring within a university environment, addressing the impact of various pollutants on the health and well-being of the university community. While the study is comprehensive, several areas require improvement for better clarity, accuracy, and impact.

Major Revisions:

1. The title is not good enough. Please modify it so that international readers will find it very impactful.
2. The abstract clearly states the research objectives and findings but lacks emphasis on the implications of high pollutant levels on health and potential mitigation strategies. Including these aspects will provide a broader context and relevance.
3. The introduction provides a solid background but can be enhanced by explicitly stating the significance of air quality studies in university environments. Highlight the health impacts and relevance to the student and staff population.
4. The manuscript needs a thorough literature review to highlight the novelty and contributions of the study. Mention prior studies as citations that are associated with air quality and environmental quality analysis in top-quality, peer-reviewed journals and their findings, such as:

- https://link.springer.com/article/10.1007/s40808-022-01670-6
- https://www.sciencedirect.com/science/article/abs/pii/S1309104223003306
- https://www.cwejournal.org/vol15no2/analysis-of-ambient-air-quality-based-on-exceedance-factor-and-air-quality-index-for-siliguri-city-west-bengal
- https://www.tandfonline.com/doi/full/10.1080/10106049.2022.2153932
- https://www.mdpi.com/2071-1050/15/12/9788

1. Explain the rationale for choosing specific air quality parameters and sampling locations. Justify the selection of these parameters based on their relevance to the study.
2. The manuscript contains several grammatical errors and awkward phrasings. A thorough proofreading is necessary to improve readability and professionalism.
3. The maps (Location maps) should include a north arrow and proper labels to enhance orientation and context for the

readers.

4. Provide detailed reasoning for including or excluding specific environmental and meteorological parameters. This will justify their relevance to the study.

5. Explicitly discuss the limitations of the study, such as the constraints on sampling size and duration, to provide a balanced view of the findings.

6. Propose directions for future research in the conclusion section, such as the application of more advanced analytical techniques or the integration of additional data sources like higher-resolution satellite data.

7. The results are presented systematically, but the discussion should delve deeper into the implications of the findings. Compare the results with other studies and discuss the potential health impacts in detail.

8. The conclusion should summarize the key findings and their implications succinctly. The recommendations are practical but can be expanded to include specific strategies for reducing pollutant levels, such as the implementation of green spaces or the promotion of alternative transportation modes within the university.

9. Ensure all references are current and relevant. Add citations to support statements made in the introduction and discussion sections.

These revisions and expansions will significantly enhance the manuscript's clarity, scientific rigor, and relevance. The reviewer appreciates the authors' efforts and looks forward to a thorough and thoughtful rebuttal, anticipating the manuscript's acceptance after the necessary revisions.