

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

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Potential competing interests: No potential competing interests to declare.

The work certainly makes an important contribution to air quality in busy workplaces. Unfortunately, however, the presentation of the work and the processing of the data do not meet the parameters of scientifically valid work. As regards the results, apart from the tables and graphs, the text lacks references to the statistical methods indicated in the introductory part. There are some redundant phrases that could have been omitted, e.g., cfr in paragraph 1.4, or cfr paragraphs 1.1 and 1.2, points 1 and 2 with paragraph 1.4. Therefore, the paper should be rewritten taking into account the suggestions below.

Introduction: Are toxic gases such as NO₂ and SO₂ produced only by industrial processes, or also by natural combustion processes? From what is reported, it would seem that all atmospheric gases, even O₃ or CO₂, are produced only by sources of anthropogenic combustion activity. Perhaps it should be specified in what percentage human activities contribute to air pollution.

Pg. 4, line 3 – The term "timely" in what sense? There are already other studies on air pollution in various cities in the world.

The term "adequate" is not a term suitable for a scientific paper (e.g., par. 2.2.3, line 3, and par. 2.2.5).

In section 2.2.3, the times and methods of sampling must be specified in more detail.

Paragraph 2.2.4: Specify all the information relating to the data collected, the sampling methods and plan, as well as the standard procedures and any regulatory references (also indicated in other sections of the paper).

Sections 2.7.5 and 2.8 are not very relevant to the paper; they should be omitted, as they are not influential for the purposes of the presentation of the scientific work.

Paragraph 2.8.1: How were the data validation procedures implemented?

Paragraph 2.11: These critical issues should be reported and explained in the paper.

Paragraph 2.11: Hence, future studies can consider addressing these limitations to further enhance the understanding of air quality levels at Lead City University, Ibadan. This statement should be moved to the conclusions.

Paragraph 3.1: It should be moved to Materials and Methods, and the characteristics and location of the different sites should be specified.

Paragraph 4: How were the data for the variables considered in the study collected? Are they absolute or average values? In the case of average values, which range was considered?

Paragraph 2.2.5: What type of equipment was used? Which parameters were measured?

Paragraph 2.4: Specify model and type of instrument detections.

Paragraph 2.5.1: Were the samples collected at specific times or at not better-specified times over the 3 moments of the day? What is meant by 'sampling included both peak and off-peak periods'? The section "Preparation" looks like the instructions that are supplied together with the equipment to guide the operator to start up. They could be omitted and replaced with information relating to the type of data collected by the instruments, and their range of action. Also, it would be important to provide the following data: How long did the sampling last? With what detection frequency? Were there problems that generated holes in the data acquisition? If yes, what were the causes?

