|  |  |
| --- | --- |
| Journal Name: | [**Journal of Engineering Research and Reports**](https://journaljerr.com/index.php/JERR) |
| Manuscript Number: | **Ms\_JERR\_137179** |
| Title of the Manuscript: | **Parametric Study of Drone-based Gas Pollution Monitoring System Integrating Internet of Things Technology** |
| Type of the Article | **Paper** |

**PART 1: Comments**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Reviewer’s comment**   |  |  | | --- | --- | | **Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer** | | | **review.** |  | | **Author’s Feedback** (It is mandatory that authors should write his/her feedback here) |
| **Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.** | This manuscript showcases a notable progression in tracking environmental conditions by combining drone capabilities with Internet of Things technology. The system provides a flexible, expandable, and affordable method for evaluating air quality in real time, especially in challenging areas and those affected by industry, such as the Niger Delta. With exceptional sensor precision, effective data transfer, and cloud-integrated visualization tools, it serves as a formidable resource for researchers, ecological organizations, and decision-makers. By overcoming the drawbacks associated with conventional monitoring techniques and presenting a contemporary, adaptive option, this research offers important perspectives to the scientific community and aids initiatives aimed at sustainable environmental management and safeguarding public health. |  |
| **Is the title of the article suitable?**  **(If not please suggest an alternative title)** | Yes, the title of the article is suitable. |  |
| **Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.** | **Suggestions for Improvement:**   1. Structure and Flow: The abstract is long and dense, making it harder to read. It can be better structured into:   background, methodology, results, applications, limitations, and conclusion — in a coherent flow.     1. Technical Clarity: Some sentences are vague or repetitive (e.g., ―the system potential for large-scale deployment play a significant role…‖). Terms like ―system‘s potential‖ and ―reliable and efficient‖ can be quantified or exemplified.      1. Redundancies and Grammar: There are minor grammatical errors and repetitive statements (e.g., "highlight system‘s potential" and "showcasing its versatility"). |  |
| **Is the manuscript scientifically, correct? Please write here.** | With minor to moderate revisions, particularly in the methodology, statistical analysis and language, the manuscript can be made scientifically robust and publishable.  Equations and Modeling: Drone dynamics and equations are mentioned briefly, but not explained in detail. The modeling part is underdeveloped — no simulations or comparative graphs are presented. |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.** | The manuscript provides a substantial list of references, and several of them are recent (2022–2025), which is commendable and shows awareness of current developments in the field. |  |
| **Is the language/English quality of the article suitable for scholarly communications?** | The language quality of the manuscript is functional but not yet suitable for scholarly communication without revision. The manuscript demonstrates technical understanding, but it is affected by grammatical errors, awkward phrasing, and inconsistent terminology, which hinder clarity and professionalism.  The manuscript requires moderate to extensive language editing to meet the standards of a peer-reviewed scientific journal. A professional copyedit or detailed language review is highly recommended before submission. |  |
| **Optional/General** comments | The manuscript titled ―Parametric Study of Drone-based Gas Pollution Monitoring System Integrating Internet of Things Technology‖ presents a timely and relevant solution for environmental monitoring, especially in pollution-sensitive areas such as the Niger Delta region of Nigeria. The combination of drone mobility with IoTbased real-time monitoring is well-conceived and practically valuable. The study contributes to the growing body of research on low-cost, scalable environmental monitoring systems. However, there are critical areas that require improvement before the manuscript is suitable for publication in a reputable scholarly journal. |  |

**PART 2:**

|  |  |  |
| --- | --- | --- |
|  | **Reviewer’s comment** | **Author’s Feedback** (It is mandatory that authors should write his/her feedback here) |
| **Are there ethical issues in this manuscript?** | . |  |

**Reviewer details:**

**Ram Bansal, Medicaps University, India**