# Review of: "Analytical Study and Amelioration of Plastic Pavement Material Quality"

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Potential competing interests: No potential competing interests to declare.

Dear Qeios team, good day.

I wish you well.

I'm pleased to be considered for reviewing the article "Analytical Study and Amelioration of Plastic Pavement Material Quality." After carefully reviewing the article, I suggest that the article cannot be accepted in its current edition. The article can only be accepted after major revision. Found below are selected comments to be improved:

1. The structure of the article (mainly the results and discussion section), as well as the content, needs to be restructured and reviewed;
2. The abstract is too long; it is suggested to be shortened (250 words);
3. Several grammatical errors were observed in the article; please rectify the mistakes;
4. In general, the figures need to be improved (please use high-resolution figures). The figures' font type must be the same as the main text. Additionally, the font size should be lower than the main text body;
5. The cited references through the text are not properly referenced. Which reference style was used? There are references and Other References; what is the difference between them, and why doesn't Other References have numbers?
6. Error bars should be included in all figures' results;
7. An Experimental Flowchart should be added;
8. In the experimental setup, it is mentioned that the compressive strength was determined at two time points: 2 days and 7 days; however, in the results section, only the 7-day results were presented.
9. There is no discussion of results. The authors only present and interpret the obtained results. However, for this level of work, the drawn conclusions from the results should be made after discussion of the findings. This discussion should be coherent, balanced, and compelling.
10. The best formulations found in the study can be used in a real situation? Is there a standard for compressive strength for this material? Please explain.
11. How do porosity and water absorption influence the compressive and flexural strength of the specimens?
12. Figure 6 shows that adding PP 30% leads to high compressive strength (CS), however more PP content leads to lower CS values, and from 45 to 50%, there is an increase of 6.8 MPa. This should be explained.
13. Figure 8 shows a different trend for flexural strength; this difference should be explained also.

Overall, the article needs major revisions to be acceptable for publication. Further comments and observations can be found in the Supplementary data attached.