

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

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Potential competing interests: No potential competing interests to declare.

In the abstract, authors say several times that the results are interesting. I would omit this word; if they is not for publication, sure they are interesting, so just cut those sentences and state your results.

The first phrase of the abstract sounds odd; try to reformulate.

For the materials used, you need to give some more data. It would be nice to know the T_g of the polymers used if you have any way to measure it. This would give the way to choose the temperature you use for melting the polymer and prepare the composite.

Can you provide images of samples prepared for testing, their microstructure to see the distribution of the filler in the matrix? This is very important for the characterization of the composite.

For water absorption, you say that you use a high precision balance. You must give the precision of the instrument, even the producer of the instrument.

For compressive testing, you should give the dimensions of the specimens used. How many specimens did you produce for testing? The serial number of the press is not so important; the type of press and range of force applied is needed.

For a 3-point bending test, you must use the moment of force and the moment of the cross section; the formula is a bit more complicated, not the simple formula you gave in the paper.

https://mi.eng.cam.ac.uk/IALego/bender_files/bend_theory.pdf

Once you interpret your measurements with this theory, you can rewrite the results and resend the paper for review.

The results for density and water absorption are interesting and are OK.

You need microstructure images of your specimens to prove that there is contact between the matrix and the filler.

Also, the durability of the material should be estimated. Some images of the material after exposure to the sun or some wear should be discussed.

The idea is nice and seducing, so I wish you good luck, and those improvements could be of help.

