

## Review of: "The Influence of Hot Extrusion on The Mechanical and Wear Properties of an Al6063 Metal Matrix Composite Reinforced With Silicon Carbide Particulates"

Samson D. Oguntuyi1

1 University of Johannesburg

Potential competing interests: No potential competing interests to declare.

## Reviewer's comments

The manuscript presents "The Influence of Hot Extrusion on The Mechanical and Wear Properties of an Al6063 Metal Matrix Composite Reinforced With Silicon Carbide Particulates." The methods, results, and discussion were meticulously analyzed, and the author presented a reasonable conclusion on the experimental work. For the manuscript to be further considered for publication, some of the following comments or recommendations need to be attended to.

- 1. What is the novelty of this work in preference to other related works?
- 2. What justification warrants the subjection of the samples to hot extrusion at 500 degrees Celsius with an extrusion ratio of 9.0?
- 3. How does the author efficiently minimize the challenges associated with the stir casting process, such as non-uniformity in the particle dispersion and gravity-controlled separation?
- 4. Kindly provide the justification why the 2 8% SiC of the individual reinforcement was chosen to compliment the alloy
  Al6063.
- 5. The author should establish morphology-property correlations in this research.
- 6. All the graphs should be labelled Figure and numbered accordingly.
- 7. Some of the images/graphs presented in this manuscript are not clear, especially Fig. 3. Hence, the author should improve them.
- 8. How does your paper contribute to the advancement of knowledge?
- 9. The conclusions should bring more profound and novel insight into the new findings and the implications of the present study for future research.
- 10. The grammatical sentences of this manuscript need to be judiciously checked and corrected. Some aspects of the sentences are lacking coherence in meaning.