

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

Dalia Saber¹

1 Zagazig University

Potential competing interests: No potential competing interests to declare.

Comments to Authors:

Overall, this is a nice study that provides information on the mechanical and wear behaviour of aluminium 6063 alloy reinforced with different weight fractions of silicon carbide for 'as-cast' and 'hot extruded' conditions.

Before publication, there are some things that need to be addressed as follows:

- 1. The English needs to be further polished.
- 2. Some sentences are very long and need rephrasing.
- 3. Missing numeric values are present in the abstract. The abstract needs some improvement.
- 4. At the end of the introduction section, the main objectives should be rewritten to describe the work in more detail and to be more clear.

The fabrication process of the composites needs an explanation (Insert a flow chart that describes the fabrication process).

- 1. Could the authors please elaborate on the formulae for calculating the theoretical and actual densities and give the material properties of aluminium 6063 and SiC used in this paper? Also, is the calculation method of porosity used in this paper accurate?
- 2. The microscopic characterization of the prepared specimens has not been done. It is required to evaluate the success in the distribution of particles in the fabricated samples.
- 3. Some figures are in low resolution; please replace them with good resolution images.
- 4. Insert the stress-strain diagram (Tensile and compression tests).
- 5. Missing numeric values are present in the conclusion. The conclusions need some improvement.
- 6. References need updating.