

# Review of: "Numerical Study of Thermal Performance on Fin and Tube Heat Exchanger with Flat Rectangular and Sinusoidal Winglet Vortex Generators"

Kafel Azeez<sup>1</sup>

<sup>1</sup> University of Anbar

Potential competing interests: No potential competing interests to declare.

Dear Editor-in-Chief,

*My comment is;*

1. There are several language and typographic errors in the present form of the manuscript. Typographic errors and word spacing can be fixed in the revised version.
2. The abstract should be briefly written to describe the purpose of the research, the principal results, and major conclusions. The authors should revise it.
- 3- Authors should write the Cartesian form of the governing equation as well in a revised version.
4. Why did you analyze the influence of Reynolds numbers from 400 to 1100 in a present model?
- 5- Geometrical figures should be explained clearly.
- 6- The mesh independence test is necessary for spatial coordinates and time.
- 7- Figures are of low quality which causes difficulty in reading. Improve the quality of figures.

8. It is suggested that this subject be introduced in the introduction of the paper as a method to improve the problem of nanoparticle deposition or even to improve heat transfer. The following articles will be useful in this regard.

Their, K. M., Azeez, K., & Mohsin, M. A. (2023). Thermohydraulic performance study of the effect of winglet inserts and a corrugated wall in a rectangular channel. *Case Studies in Thermal Engineering*, 52, 103707.

AZEEZ, K., AHMED, R. I., OBAID, Z. A., & AZZAWI, I. D. (2021). Heat transfer enhancement and applications of thermal energy storage techniques on solar air collectors: A review. *Journal of Thermal Engineering*, 9(5), 1356-1371.

Azeez, K., Obaid, Z. A. H., & Their, K. M. (2023). Investigating the experimental parameters of a rib triple pipe heat exchanger. *Case Studies in Thermal Engineering*, 44, 102859.

Obaid, Z. A. H., Azzawi, I. D., & Azeez, K. (2023). The experimental study of energy features for solar air heaters with different turbulator configurations. *Heat Transfer*, 52(2), 1380-1394.

Azeez, K., Abd Rahim, A. B. U., & Ahmed, R. I. (2022). Heat transfer enhancement for corrugated facing step channels using aluminium nitride nanofluid- numerical investigation. *Journal of Thermal Engineering*, 8(6), 734-747.

Azeez, K., Their, K. M., & Ibrahim, Z. A. (2022). Evaluation of flat plate solar heater filling in nanofluid under climatic of Iraq conditions. *Case Studies in Thermal Engineering*, 39, 102447.

Mohammed, K., & Saleem, A. (2021). Numerical investigation of Nusselt number for nanofluids flow in an inclined cylinder. *Frontiers in Heat and Mass Transfer (FHMT)*, 16.

