

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

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Potential competing interests: No potential competing interests to declare.

Comments to authors

Entitled:

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

The main observations are listed below. The acceptance of the manuscript would depend on the revision. The author needs to provide a point-by-point response or provide a rebuttal.

1. The authors need to highlight the specific applications of this study in real-world engineering and industry. Authors should cite at least one concrete potential application where the present results are likely to be relevant, howsoever remotely, over this range of conditions, including the boundary conditions adopted.
2. Improve the discussion section.
3. The basic governing equations should be discussed term by term and also supported by past studies.
4. A nomenclature must be added into the text.
5. It is recommended to add some suggestions for future work in this area to improve the conclusion.
6. Highlight the main findings and novelties of the study in the abstract.
7. Validation in terms of streamlines and isotherms required.
8. What is the importance of this study?
9. What is new and innovative in this study (compared to other studies)?

10. Which method is used to find the solution to the given problem? Add a separate section on solution methodology.
11. Authors should improve the results and discussion section because in a few of the results, physical justifications are not written properly. The authors have written only the straightforward graphical analysis of the few results, but why this kind of variation along with the parameter?
12. Can you add some experimental verification related to isotherms, streamlines, Nusselt number? If yes, then it will enhance your manuscript.
13. Geometry and figures need to improve.
14. The introduction section should be rich by citing the following important studies:

<https://doi.org/10.1016/j.aej.2021.12.071>

<https://doi.org/10.3390/math10030342>

<https://doi.org/10.1016/j.aej.2022.08.031>

<https://doi.org/10.1080/10407782.2023.2200045>

<https://doi.org/10.1016/j.rinp.2023.107267>

<https://doi.org/10.3390/coatings12010016>