

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.

This manuscript mainly includes the computation of the increase in the Nusselt number and pressure losses due to the consideration of flat and sinusoidal winglets. The results are obtained due to the use of a CFD software called ANSYS. I have the following criticism of this manuscript:

1. The Abstract and the Introduction do not clearly present the aims and objectives of this study. Otherwise, the rise in the Nusselt number due to the insertion of such winglets is a trivial fact, and the computation of such a rise in the Nusselt number with the aid of a CFD package is not a big deal. In this perspective, the authors have completely failed to present the aims and objectives of this study.
2. The style they adopted to write the Introduction part has created a great mess. It is hard to understand what the authors are wishing to convey. This part too lacks in presenting some clear goals of this study that are also worth investigating.
3. Dimensionless quantities are not given. How can one ensure the correctness of the governing equations?
4. There seem to be some typos in the momentum equation.
5. While dealing with a viscous flow, the authors ignored the wall boundary conditions. Why? No justification was given.
6. The authors considered the turbulence model in such a way that is appropriate to capture flow separation. However, in the Discussion part, no considerable discussion is given about flow separation and its impact on the heat transfer phenomenon.
7. The Discussion part is mainly concerned with the rise in Nusselt number and pressure loss, along with the percentage rise or loss.
8. The Discussion part completely ignored the physical aspects of the ongoing phenomena.
9. The authors did not point out the potential areas of application of this study.
10. There are several typos throughout the text.

On the basis of the above comments, I do not find this manuscript to be appropriate for publication. Therefore, my recommendation is to REJECT it.