

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

Emrehan Gürsoy

Potential competing interests: No potential competing interests to declare.

Reviewer's Comment: It is obvious that the study was prepared without care. Additionally, there are many studies on this subject in the literature. If the recommendations given below are fully implemented and **the novelty of the study** is clearly stated, its status can be determined precisely by performing a second-stage evaluation. The general opinion on the subject is that the study needs **major revision**.

- 1. In order to attract the attention of the readers, the abstract section of the manuscript has to include the numeric results and percents.
- 2. Transitions between sentences in the introduction section should be meaningful.
- 3. There are numerous studies in this research area. Due to this, the novelty of this study has to be emphasized, and significant differences have to be identified.
- 4. The detailed mesh domain has been presented as both explanation and figure.
- 5. Was the y+ value taken into account, and what was it set to?
- 6. View quality of Figure 1, Figure 2, and Table 1 should be improved.
- 7. Equations should be revised as needed. The equation talent of the Word or MathType program can be used.
- 8. Although the flow regime of the system is laminar, a turbulence model has been used. The reason for this selection has to be explained in more detail and cited with existing studies in the literature.
- 9. To describe the boundary condition of the fluid domain, a schematic figure can be added to the manuscript.
- 10. Mesh quality values have been mentioned in the explanations.
- 11. Validation is not seen in the study. Validation of the fluid domain and solution procedure must be explained in the manuscript. The studies that have no validation study cannot be accepted.
- 12. In order to conduct a perfect comparison in Figure 4 and Figure 5, the legend scales have to be the same as each other. Example: The legends of Figure 4 (a), (b), and (c) can be the same. Also, Ansys Fluent Post Processing can be used to obtain the figures to provide more visible results.
- 13. Performance Evaluation Criterion can be evaluated in this study. This parameter shows us which heat transfer enhancement method is more suitable than others.