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.

By incorporating these suggestions, you can significantly improve the quality and credibility of your manuscript's introduction.

The work does not possess validation over the use of prior experimental and numerical data that is accessible in the existing literature. To confirm the validity and reliability of this study, it is crucial to compare and contrast its results with prior studies.

Consider replacing a few older, less critical references with recent ones that offer a stronger impact.

It would be helpful to know the specific variable(s) assigned a zero gradient at the outlet. Common choices include velocity components or pressure.

Depending on the complexity of the simulation, additional boundary conditions might be needed at the inlet (e.g., specifying a flow rate or velocity profile).

Turbulence creates chaotic fluid motion, leading to increased mixing between hot and cold regions. This significantly improves heat transfer compared to laminar flow (smooth, layered flow).

By accounting for turbulence, you can obtain more accurate heat transfer coefficients. These coefficients predict the rate of heat transfer between the fluid and the tube wall.

(Optional) Since neglecting turbulence can significantly impact heat transfer results, incorporating a turbulence model like RANS or LES is highly recommended.