Review of: "Conceptual Differentiation of Heat: The Entropic Promise of a Post-Pyrocene World"

Amir Abbas[1]

1 University of Gujrat

Potential competing interests: No potential competing interests to declare.

This study is interesting and has entire new information in the existing literature. Some observations are listed below. I can recommend its publication, but before publication, I suggest the following major revisions.

1. What is the basic advantage of this study?
2. The application of the proposed problem and main fallout must be highlighted in the manuscript.
3. The authors are advised to look into the entire manuscript in terms of grammar and spelling mistakes.
4. The validation of the numerical results is absent in the manuscript. Add the comparison of the results with previously published. Moreover, it should be highlighted in the abstract.
5. Use the same font size in the entire document. There is a difference between the abstract and the rest of the document in font and style of font.
6. Statement of the problem is weak; authors should revise it.
7. Please first write the real-time applications of all the characteristics, then write the literature review.
8. Add the nomenclature if required.
9. The literature review is insufficient; it can be richer by including the following relevant studies.

https://doi.org/10.1016/j.seta.2022.102606, **https://doi.org/10.3390/pr10061221**,

https://doi.org/10.3390/magnetochemistry8060061, https://doi.org/10.1016/j.anucene.2022.109218

,https://doi.org/10.1080/17455030.2022.2075957, **https://doi.org/10.3390/pr10050906**,

https://doi.org/10.3390/pr10040776, **https://doi.org/10.3390/sym14040779**,

https://doi.org/10.1016/j.csite.2021.101640), https://doi.org/10.1038/s41598-021-92409-3,

https://doi.org/10.1002/htj.22232 https://doi.org/10.1016/j.aej.2021.01.038,

https://doi.org/10.1063/5.0018674,DOI:10.2298/TSCI190518137A),

https://doi.org/10.32604/cmc.2020.011404, **https://doi.org/10.3390/molecules25112694**

1. Describe in the text each term, symbol, and parameter appearing in the flow model in dimensional and non-dimensional models.

2. More computational details are required (i.e., methodology, convergence, validation, type of distribution of mesh, the utilized discretization scheme).
3. The range of defined parameters needs to be added.
4. The authors should do a better job of commenting on the results. A reasonable physical explanation should be provided for the observed trends, not only report what is graphically seen in the figures. More physical insight of the Discussion section is needed.
5. Write the conclusion more precisely. It should highlight novel findings in the current study. The current conclusion is very poorly written.