Authors' Response to Reviewer Comments

For

Manuscript Titled

Application of Fractional Derivative Without Singular and Local Kernel to Enhanced Heat Transfer in CNTs Nanofluid Over an Inclined Plate

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Ref: symmetry-764108

Revised Version

Dear Editor,

We would like to express our sincere thanks for the careful reading and helpful remarks. We had rewrite and modify the revised version guided by the received editor's and reviewer's comments as follows:

Reviewer #1

This area of research is one that is current and interesting to the wider scientific community.

My comments are:

1. ***Receiver Concern:*** *There are two Figure 1 shown. Figure 1 is quoted on page 3 with the caption "Configuration and ..." and again on pg 11 with the titled caption" Consequences of...and". Clearly this needs to be corrected.*

Authors Response: In the revised manuscript, Figure 1 is just one time on page 3 with the caption "Figure 1 physical configuration and coordinates system". On page 11 it is deleted. This was a typo mistake which is corrected in the revised manuscript.

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2. ***Receiver Concern:*** *The axes of the graphs in Figs 1-10 need labelling so that they are clearly identified.*

Authors Response: The axis of Figures 1-10 (In the revised manuscript these are Figs. 2-11) are clearly labeled. In the revised manuscript the axis are clearly identified.

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3. ***Receiver Concern:*** *Has the model been validated to determine its accuracy and therefore its sensitivity? If yes, then it should also be included in this article*.

Authors Response:

i. For $\alpha = 1$, the model presented in Eqs (10) and (11) is reduced back the classical form exhibited in Eqs. (2) and (3). This validated the time-fractional model proposed for CNT's-blood nanofluid.

ii. It is important to mention that the model in Eqs. (11) and (11) is valid for only for $0 < \alpha \leq 1$. Furthermore, the exact solutions presented in Eqs. (15), (16), (20),(24), (25), and (26) exist only for $0 < \alpha \leq 1$.

iii. The proposed model is solved for exact analytical solutions which can be used by numerical solver to check the accuracy of their solutions.

iv. The exact expressions for velocity and temperature fields are plotted. It can be clearly seen from Figures (2) and (11) satisfy the imposed physical initial and boundary conditions. All the arguments can be found inside the revised manuscript.

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4. ***Receiver Concern*** *It would be beneficial to include a section titled "Discussion of results" after the section titled "Parametric Study". This new section needs to contain a detailed critical analysis of the results of the parametric study. This vital aspect is missing from this article. The result of this parametric study should be compared and contrasted with current research literature to highlight its significance.*

An in depth explanation is also required to highlight the vital arguments presented by the generated outputs of this parametric study

Authors Response: "Parametric study" and "Discussion of Results" both are same things in the present case. In the revised manuscript this section is renamed as "Discussion of Results". This section is further improved in terms of depth physical explanation. The trends and features of various flow parameters are highlighted in with physical arguments. Most importantly, the behavior of numerous flow parameters are validated with the current literature see for example Refs [40, 45, 16, 46, 42, 43, 35] in the same section.

Reviewer #2

Receiver Concern :*The authors proposed a fractional Casson fluid model for human blood-CNTs nanofluid using the Laplace transform technique. The analytical results are displayed in 10 graphs. The obtained results are with physical model.*

Authors Response: The manuscript is revised in the light of reviewer concerns. Importantly, methodology is improved. The reviewer is please referred “Section 3” on page 6.

Finally, we wish our modifications would achieve your acceptance. Waiting for your kind response.

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