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Journal Name:	Asian Journal of Chemical Sciences
Manuscript Number:	Ms_AJOCS_31015
Title of the Manuscript:	Numerical study of Soret, Dufour and Viscous dissipation parameter's Effects on steady magnetohydrodynamic Casson fluid flow through non-Darcy porous media
Type of the Article	<u>Original Research Article</u>

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	In this paper author studied the Soret, Dufour and Viscous dissipation effects on flow of Casson fluid through non-Darcy porous medium. With the help of dimensionless variables, the governing flow equations are reduced to a system of non-linear ordinary differential equations. This system has been solved numerically by using bvp4c. The influence of pertinent parameters on velocity, temperature and concentration profiles are graphically underlined and discussed. The paper is well organized and well written. Before a possible consideration for publication in Asian Journal of Chemical Sciences, the following comments need be adequately responded: [1] In Abstract author should expose the important results of the study. [2] The author used dimensionless variables in (Eq. 6), relevant reference number is more welcomed. [3] Nomenclature of the study should be given. [4] In Key word, Casson fluid should be "Casson fluid". [5] There have been used different forms of Nusselt number or local Nusselt number everywhere.. It should be "local Nusselt number". The Nusselt number should be replaced by "local Nusselt number" in whole manuscript. [6] The word "Sherwood number" should be replaced by "local Sherwood number". [7] Some new published results related flow of viscoelastic fluids, Soret and dufour effects, porous medium effects due to stretching surface should be added in the revised manuscript. For instance a) Hydromagnetic flow and heat transfer of a Jeffrey fluid over an oscillatory stretching surface, Zeitschrift für	Sir, thank you for the valuable comments on the research paper . In the abstract, it is mentioned that results are exposed through tables and graphs. The relevant reference number for non dimensional numbers in equations (6) is added Nomenclature have been added In key words, csson number is replaced by casson number. Nusselt number is replaced by local nusselt number. Sherwood number is replaced by local Sherwood number. Following references, as mentioned by the author, are added in the reference section: 1. N Ali, S Ullah Khan, Z Abbas, Hydromagnetic flow and heat transfer of a jeffrey fluid over an oscillatory stretching surface, Zeitschrift für Naturforschung A , 70(7)a: 567–576 (2015)



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	Naturforschung A , 70(7)a: 567–576 (2015). b) MHD flow and heat transfer over a porous oscillating stretching surface in a viscoelastic fluid with porous medium, Plos One, 10(12): e0144299 (2015). c) Unsteady Flow of Third Grade Fluid over an Oscillatory Stretching Sheet with Thermal Radiation and Heat Source/Sink, Nonlinear Engineering, 4(4): 223–236 (2015). d) Soret and Dufour effects on hydromagnetic flow of viscoelastic fluid over porous oscillatory stretching sheet with thermal radiation, Journal of the Brazilian Society of Mechanical Sciences and Engineering, 38: 2533-2546 (2016). e) MHD flow and heat transfer of couple stress fluid over an oscillatory stretching sheet with heat source/sink in porous medium, Alexandria Engineering Journal, 55: 915–924 (2016). f) Flow and heat transfer of MHD Oldroyd-B fluid in a channel with stretching walls, Nonlinear Engineering, 5(2): 73–79 (2016).	2. SU Khan, N Ali, Z Abbas, Hydromagnetic flow and heat transfer over a porous oscillating stretching surface in a viscoelastic fluid with porous medium , Plos One, 10(12): e0144299 (2015). 3. N Ali, SU Khan, Z Abbas, Unsteady Flow of Third Grade Fluid over an Oscillatory Stretching Sheet with Thermal Radiation and Heat Source/Sink, Nonlinear Engineering, 4(4): 223–236 (2015). 4. N Ali, SU Khan, Z Abbas, M Sajid ,Soret and Dufour effects on hydromagnetic flow of viscoelastic fluid over porous oscillatory stretching sheet with thermal radiation, Journal of the Brazilian Society of Mechanical Sciences and Engineering, 38: 2533-2546 (2016). 5. N Ali, SU Khan, M Sajid, Z Abbas, MHD flow and heat transfer of couple stress fluid over an oscillatory stretching sheet with heat source/sink in porous medium, , Alexandria Engineering Journal, 55: 915–924 (2016). 6. A Nasir, SU Khan, M Sajid, Z Abbas Flow and heat transfer of hydromagnetic Oldroyd-B fluid in a channel with stretching walls, Nonlinear Engineering, 5(2): 73–79 (2016).
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<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments		