



SDI Review Form 1.6

Journal Name:	Physical Science International Journal
Manuscript Number:	2014_PSIJ_13222
Title of the Manuscript:	Slip Effects on MHD Stagnation Point-Flow and Heat transfer over a Porous Rotating Disk
Type of the Article	Research Paper

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.

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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	<ol style="list-style-type: none"> 1. MHD term should also appear in Eq. (4), see ref. (3). 2. Eqs. (1) - (5) are transformed into ODEs using similarity transformations, however, the transformed system of equations consist of only four equations. It does not include the equation obtained as a result of applying similarity transformation to Eq. (4). That's why the effects of parameters on pressure gradient, which is also an important physical quantity, are missing. 	<p>1. The appeared term in the Eqs. 2-5 of Ref (3) is the porosity term and doesn't refer to the magnetic effects. Please also consider that the magnetic field effect appears in the momentum equation in the form of cross product with the velocity field. Since the magnetic field effect appears in the z direction, the magnetic effect only appears in the x and y directions of momentum equations.</p> <p>2. In this paper, we just investigate the effects of velocity and temperature distributions, which are the same behaviour as several previous articles such as: Refs. [3-4, 9, 15, 18, 23]. Therefore, in this paper and several similar articles the pressure gradient effects are not studied.</p>
Minor REVISION comments	<ol style="list-style-type: none"> 1. Page 4, sign of MHD term in Eq. (2) should be negative, see ref. (3). 2. In Results and Discussion section, it is inferred that all the velocity components decrease, however, figure 3 (b) shows increase in radial component of velocity. Same is the case for figures 4 and 6. 	<p>1. The appeared term in the Eqs. 2-5 of Ref (3) is the porosity term and doesn't refer to the magnetic effects. And also consider that</p> $\dots = \dots + \frac{\sigma B_0^2}{\rho} (u_e - u) \text{ is equal to}$ $\dots = \dots - \frac{\sigma B_0^2}{\rho} (u - u_e)$ <p>2. From that statement, the authors mean that all the velocity boundary layer decrease. The authors have changed these statements and have corrected them in the paper text.</p>



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<u>Optional/General</u> comments	<p>This is a worthwhile manuscript which investigate the MHD stagnation flow past a porous rotating disk in the presence of the velocity slip condition. The article is suitable for publication if the above comments are well justified.</p> <p>Authors discussed flow of viscous fluid over a rotating disk; they may select to refer a recent studies on the topic if they wish</p> <p>S. Asghar, M. Jalil, M. Hussan and M. Turkyilmazoglu, Lie group analysis of flow and heat transfer over a stretching rotating disk, International Journal of Heat and Mass Transfer 69 (2014) 140–146</p>	<p>We have added this reference to introduction part of this paper.</p>
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