Review Form 1.6

Journal Name:	**Chemical Science International Journal**
Manuscript Number:	**Ms_CSIJ_79371**
Title of the Manuscript:	**Estimation of Dynamic Viscosity for Cobalt Oxide/Glycol Nano fluid**
Type of the Article	**Original Research Article**

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	The methods and results presented in the paper seem to be correct, but numerous improper and/or reader-unfriendly formulations occur; their correction is necessary. a) The list of references is acceptable, but mismatched, at least formally, as e.g. 2 items supplied by number 4, consequently some references from Introduction are incorrect. Namely Einstein [5] should be [4], Garg et al. [6] should be [5], corrected from [4], several other references are not transparent. This must be checked and revised carefully, together with the non-unified form of References, probably copied from various other papers. b) Only 1 mathematical formula is contained in the text, namely the Debye-Scherrer one (2 misprints in its name occur!), but its presentation is imperfect: the reader (who may be not expert in this field) must guess the physical units of presented quantities to understand the evaluation of D, moreover the same symbol D is used also for dynes (as a relict from CGS systems of units, used parallel to SI). The correct form of the right-hand side of such formula is $K\lambda/(\beta \cos \theta)$ with certain numerical factor K, taken as 0.9 here. The vague reference to [1] is not helpful. c) Figures 2 and 3, presenting the dependences of viscosity on shear rate and temperature, show some non-negligible oscillations for all samples, whose source is not quite clear from the discussion.	
Minor REVISION comments	The article contains a rather large number of misprints and typographical errors, in addition to non-unified notations and physical units, strange formulations in English, etc. The following comments cannot include their complete list, only some typical cases and related recommendations. a) The English spelling should be checked everywhere. Even the last sentence of Abstract should be reformulated (at least there is no reason for writing a capital letter in the 2nd occurrence of The), °C is expected instead of C°, the abbreviation XRD (X-Ray Diffraction, at the beginning of Section 3 presented as XDR) is not explained at all, etc. The applied rule for writing capital letters is not transparent, as ethylene vs. Ethanol in Subsection 2.1.1. In Subsection 2.3 the whole 1st formulation Used Brookfield … Rhemoter (Rheometer ?) has no reasonable sense. Then Subsection 2.3 finishes using a strange (seemingly incomplete) sentence without trailing dot. In the last paragraph of Results and discussion one can expect: In different conditions where the shar rates is equal to 40 and heating range varies between 0 and 80…. Similarly in Conclusion: The suitable shear rate … was determined by testing…. b) Examples of evident misprints: viscsity inside Figure 3, K-0.154 in the 2nd paragraph of Section 3, the redundant closing parenthesis in the same paragraph, Jappl Phys as the incorrect abbreviation for Journal of Applied Physics in the 5th item of References (numbered as the 4th one), – instead of - in the page range of the 6th item, …. c) In the last column of Table 1 all values are the same, thus this table could be simplified. d) References to figures are not unified: cf. fig. 1 in the 1st paragraph of Section 3 with fig (1) in its 2nd paragraph. e) The text alignment to the right in the 2nd paragraph of Subsection 2.3 is bad. f) Wrong typesetting of indices occurs: see Co2O4 in the 2nd paragraph of Section 3, as well as Co2O3 in its last paragraph, or m2 and cm2 in the 2nd number item contained in Subsection 2.3, moreover the "reciprocal seconds" there should be presented as 1/s or s^{-1}. g) Decimal dots are replaced by commas frequently, even Figures 2 and 3 are not unified. h) Examples of improper punctuation: missing comma after the introduction of λ following the Debye-Scherrer formula, missing trailing dots in most items of References and	

	non-unified form of writing 1st and 2nd names of authors there. i) Table 1 and Figures 1, 2, 3 are not centred in the text. j) Numerous white spaces are redundant or missing: e.g. and40 KV in the 2nd paragraph of Section 3, 44, 8 nm in the text following the Debye-Scherrer formula, a missing empty line between numbered items 2 and 3 in Subsection 2.3, or between 13th and 14th items of References, as well as below the caption of Figure 1	
Optional/General comments	The submitted 6-page article presents the experimental study of the dependence of viscosity on temperature and shear rate for certain class of Co_3O_4/glycol-based nano-fluids. It contains 4 standard sections: 1. Introduction, 2. Material and methods, 3. Results and discussion 4. Conclusion, supplied with 18 items of References. The experimental results and their discussion seem to be correct and original, this the publication of the article could be recommended. Nevertheless, the text needs substantial improvements, as evident from 2 preceding blocks of reviewer's comments.	

PART 2:

	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)*
Are there ethical issues in this manuscript?	*(If yes, Kindly please write down the ethical issues here in details)*	

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