

### Review Form 3

Journal Name:	<a href="#">Asian Journal of Research and Reviews in Physics</a>
Manuscript Number:	Ms_AJR2P_129452
Title of the Manuscript:	Desirability of Reduced mass Concept, Conflicting CODATA Values of some Constants: Variants of Fine structure constant and Rydberg constant Equations
Type of the Article	

#### **General guidelines for the 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 guidelines for the Peer Review process, reviewers are requested to visit this link:

<https://r1.reviewerhub.org/general-editorial-policy/>

#### **Important Policies Regarding Peer Review**

Peer review Comments Approval Policy: <https://r1.reviewerhub.org/peer-review-comments-approval-policy/>

Benefits for Reviewers: <https://r1.reviewerhub.org/benefits-for-reviewers>

### Review Form 3

#### PART 1: Comments

	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.	The study addresses important aspects of the subject, and the findings appear to be incremental. While the manuscript contributes to the ongoing discourse in the field, its overall impact might be more limited, and further research or a more comprehensive analysis could enhance its relevance. Nevertheless, the work offers valuable insights for specialists interested in this specific area of study.	
Is the title of the article suitable? (If not please suggest an alternative title)	Title is informative but somewhat cumbersome and could be refined to capture the core theme of the abstract better. Here are some alternative suggestions from my side <b>“Reduced Mass and Rest Mass in Rydberg Constant and Fine Structure Constant Equations: A Comparative Analysis”</b> or <b>“Exploring the Variants of Rydberg Constant and Fine Structure Constant with Reduced and Rest Mass Approaches”</b>	
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.		
Is the manuscript scientifically, correct? Please write here.	The explanations of key concepts and equations are generally clear, and the data analysis is handled appropriately. Once the minor clarifications and corrections are made, the manuscript will reflect a high standard of scientific rigor.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	The references cited in the manuscript are generally appropriate, but some additional recent studies would enhance the overall context and relevance of the work.	
Is the language/English quality of the article suitable for scholarly communications?	A careful review and revision of these typographical errors will ensure that the language is polished and meets the high standards expected for scholarly publications.	
<u>Optional/General</u> comments	<p>(1) The equations presented in section 9, 10a, and 10b are quite difficult to understand. It seems that the calculation of the effective nuclear charge is being repeated multiple times, but the underlying purpose and methodology behind this need further clarification. In addition, please provide appropriate references that can support the methodology and reasoning used here.</p> <p>(2) After Equation 14, you introduce the equation "Given the equation: (8EH a...". However, the source or origin of this equation is not mentioned. provide the relevant reference to enhance the credibility of your work.</p> <p>(3) There are some typographical errors in the manuscript that need to be corrected. For example, on page 15, line 10, the word "other" is used instead of "order". Please review the manuscript thoroughly for such errors and correct them to improve the clarity and professionalism of your work....</p> <p>(4) Inconsistent Referencing Style: The referencing style throughout the manuscript is inconsistent. At times, you have included DOI numbers, while at other times, these are omitted. For consistency, please follow the journal's reference formatting template.</p> <p>After Equation 28b, you present a value for 'v', but there is no clear explanation of where this value comes from. Kindly provide a detailed explanation of how you obtained the value of 'v' and the reasoning behind it.</p>	

#### PART 2:

	Reviewer's comment	Author's comment <i>(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)</i>
<u>Are there ethical issues in this manuscript?</u>	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

#### Reviewer Details:

Name:	Rishabh Sharma
Department, University & Country	Central University of Jharkhand, India