

The paper titled "**Water chemical characteristics and genetic analysis of groundwater in Chahannur Basin**" is very fundamental research for the "State of the Art". However, the paper has serious experimental and discussion flaws. Details of experimental procedure is need. The authors does not give any information about the experimental procedure, calculation method, relative uncertainty or even source of data. The title includes genetic analysis but completely nothing mentioned in the text. This paper is not suitable in current form to publish in water. Therefore, I recommend to rewrite the manuscript, revised by a native English professional and resubmit to reconsider for publication. Herein, I have suggested the following remarks, believing they can help authors improve the updated version.

1. The title includes the genetic analysis, but nothing is mentioned in the manuscript.
2. There is no information about Kriging interpolation.
3. Please rewrite the abstract by following the MDPI instruction.

Abstract: The abstract should be a total of approximately 200 words maximum. The abstract should be a single paragraph and should follow the style of structured abstracts, but without headings: 1) Background: Place the question addressed in a broad context and highlight the purpose of the study; 2) Methods: Describe briefly the main methods or treatments applied. Include any relevant preregistration numbers, and species and strains of any animals used. 3) Results: Summarize the article's main findings. 4) Conclusion: Indicate the main conclusions or interpretations. The abstract should be an objective representation of the article: it must not contain results which are not presented and substantiated in the main text and should not exaggerate the main conclusions.

4. Please rewrite the introduction by following the MDPI instruction. The information regarding Chahannur Lake shifts it to the study area portion.

Introduction: The introduction should briefly place the study in a broad context and highlight why it is important. It should define the purpose of the work and its significance, including specific hypotheses being tested. The current state of the research field should be reviewed carefully and key publications cited. Please highlight controversial and diverging hypotheses when necessary. Finally, briefly mention the main aim of the work and highlight the main conclusions. Keep the introduction comprehensible to scientists working outside the topic of the paper.

5. Rewrite lines 49-56, 76-78, 88-90, 99-100, 106-110, 117-119, 125-128, 152-154 and so on...
6. Change caption for Figure 1, Figure 4 (also classify for the symbol).
7. The results comprise only figures without any description. The figures are described barely in the discussion.
8. Make a table with the components for a comparison.
9. There is inconsistency in representing the Figures. First, Figure 1 explains a large jump for Figure 7. Rearrange the figures and explain in the text accordingly.
10. Rewrite sections 3.1, 3.3 and 3.4.
11. Include the classification of five types of water (Class I, Class II.....)