



SDI Review Form 1.6

Journal Name:	<a href="#">Chemical Science International Journal</a>
Manuscript Number:	Ms_CSIJ_44742
Title of the Manuscript:	Fluoride Distribution in Aquatic Environment in Vicinity of Aluminum Industry and its Correlation with Rainwater Chemistry and Weather Parameter. A case study of Renukoot, District Sonbhadra, Uttar Pradesh
Type of the 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. 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**

	<b>Reviewer's comment</b>	<b>Author's comment</b> (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)
<b>Compulsory</b> REVISION comments	<p>1) Poor English and many grammatical errors are present throughout the manuscript.</p> <p>2) This study doesn't explain the purpose of the study and issues and current scenario of the study area and what value would be added by this study.</p> <p>3) The study is just physiochemical analysis of few rainwater samples.</p> <p>4) The data analysis done for this study is contradicting with results such as no. of samples, statistical data etc. as mentioned in detail comments.</p> <p>5) Many statements are mentioned without any references and cited references are not aligned and as per any standard.</p> <p><b>Abstract:</b></p> <p>1) Line#10-11: 'Volcanoes also...' → The sentence doesn't make any sense</p> <p>2) Line#11: 'The resultant fluoride' → Result of what?</p> <p>3) Line#13: 'To monitoring' → Incomplete sentence and grammatical error</p> <p>The section covers more generic part and doesn't talk about the outcome of the study.</p> <p><b>Keys words:</b></p> <p>1) Shouldn't be a sentence, it should be a set of key words</p> <p>Introduction:</p> <p>1) Line#27,28: 'fluorine' → it should be fluoride</p> <p>2) Line 29-30: 'largest contributing' → contribution of what? HF or F-?</p> <p>3) Line#31,32: 'Total air emissions of hydrogen' → reference ?</p> <p>4) Line 37-38: Reference?</p> <p>5) Line 40: 'coal combustion' → repeated</p> <p>6) Line#43: '...F_ and As,...' → grammatical error and invalid symbol used</p> <p>7) Line#78,80: double full stops.</p> <p>8) Line#80: Latitude and longitude range?</p> <p>9) Line#79: annual rainfall?</p> <p>10) anthropogenic sources of fluoride and their influences are poorly explained. Authors may refer to <a href="https://doi.org/10.1007/s10653-018-0096-x">https://doi.org/10.1007/s10653-018-0096-x</a></p> <p><b>Sampling of rainwater</b></p> <p>1) Line#87: Total no. of samples 33. But in abstract section it is mentioned as 57</p> <p>2) Line#87: Samples were collected from the same location?</p> <p>3) Line#91: 'between two rainfall events' → ?</p> <p>4) This section doesn't mention about the precautions followed during sample collection, transportation and storing.</p> <p><b>Methods of Analysis of cations and anions in Aquatic Environment</b></p>	



- 1) Line#94-95: 'Since pH is influenced by extreme values of rainfall amount' → Reference?
  - 2) Line#95: 'rainfall weighted mean values of pH' → How it was calculated? Specify the formula along with used weightages. Why simple arithmetic mean will not be useful and weighted mean is required?
  - 3) Line#110-111: 'increased by 2% per degree centigrade' → Reference?
  - 4) Line#120-124: mentioned earlier.
- Electrochemical Characterization of Rain Water**
- 1) Line#129: the (pH) mean mentioned here is simple arithmetic mean. But it is mentioned that the authors have used weighted arithmetic mean.
- Anions Chemistry of Aquatic Environment**
- 1) Line#143: precipitation problems?? What kind of problems? How they are related with RSC?
  - 2) Line#145: Why are the authors talking about ?
  - 3) Line#146: '...For example studies conducted at CSSRI has revealed...' → reference?
  - 4) Line#147: where it will be used?
  - 5) Line#148: the study was conducted at Renukut but suddenly why are the authors talking about Varanasi? From where the data was adopted?
- Cations Chemistry of Aquatic Environment**
- 1) Line#154-155: Poor English and grammar
  - 2) Line#158: in giant size range??
  - 3) Line#158: 'The cations are mainly of soil origin...' → based on it is mentioned?
  - 4) Line#169: As described in the study area section, 1036.6 mm is the average rainfall (although is it annual or session specific – not mentioned), authors need to explain the about annual rainfall patter in the study area to indicate whether the study area receives enough rain.
- Fluoride Distribution in Aquatic Environment**
- 1) Line#174-175: reference?
  - 2) Line#182-183: poor English
  - 3) Line#180-188: shouldn't be in this section. Can be moved to introduction section.
- Correlation Study of Fluoride with Chemical Composition 189 and Weather Parameters**
- 1) Line#192: correlation table indicates that correlation factor between Ca and F is 0.782, which indicates that they are positively correlated, and correlation is very high. This value contradicts with the statement mentioned here and raises a question of proper analysis.
  - 2) Can authors explain the significance of table 3?
- Conclusion**
- 1) Line#198: '...heavy air pollution...' → how this can be concluded?
  - 2) Line#198-199: poor English and grammar
  - 3) Line#200: '...the Aluminum plant in Renukoot..' → The study mentioned that availability of cations in rainwater is from soil source (line#158), here the authors are saying Aluminum plant as main source!
  - 4) Line#201-202: '...The standard method to be used of analysis...' → doesn't make any sense.
  - 5) Line#202: 'The fluoride in rain water was analyzed by ion selective electrode meter' → why it is mentioned here?



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	6) Line#210: 'Rainwater can be treated by applying appropriate technology to remove the impurities' → authors should specify why treatment is required! If treated, what purpose will be served? <b>References</b> 1) References are not uniform and as per standard.	
<b>Minor</b> REVISION comments		

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