



SDI Review Form 1.6

Journal Name:	Chemical Science International Journal
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

	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)
<p>Compulsory REVISION comments</p>	<ol style="list-style-type: none"> 1) Poor English and many grammatical errors are present throughout the manuscript. 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. 3) The study is just physiochemical analysis of few rainwater samples. 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. 5) Many statements are mentioned without any references and cited references are not aligned and as per any standard. <p>Abstract:</p> <ol style="list-style-type: none"> 1) Line#10-11: 'Volcanoes also...' → The sentence doesn't make any sense 2) Line#11: 'The resultant fluoride' → Result of what? 3) Line#13: 'To monitoring' → Incomplete sentence and grammatical error <p>The section covers more generic part and doesn't talk about the outcome of the study.</p> <p>Keys words:</p> <ol style="list-style-type: none"> 1) Shouldn't be a sentence, it should be a set of key words <p>Introduction:</p> <ol style="list-style-type: none"> 1) Line#27,28: 'fluorine' → it should be fluoride 2) Line 29-30: 'largest contributing' → contribution of what? HF or F-? 3) Line#31,32: 'Total air emissions of hydrogen' → reference ? 4) Line 37-38: Reference? 5) Line 40: 'coal combustion' → repeated 6) Line#43: '...F_ and As,....' → grammatical error and invalid symbol used 7) Line#78,80: double full stops. 8) Line#80: Latitude and longitude range? 9) Line#79: annual rainfall? 10) anthropogenic sources of fluoride and their influences are poorly explained. Authors may refer to https://doi.org/10.1007/s10653-018-0096-x <p>Sampling of rainwater</p> <ol style="list-style-type: none"> 1) Line#87: Total no. of samples 33. But in abstract section it is mentioned as 57 2) Line#87: Samples were collected from the same location? 3) Line#91: 'between two rainfall events' → ? 4) This section doesn't mention about the precautions followed during sample collection, transportation and storing. 	<p>Grammatical corrections have been made</p> <p>Manuscript has been upgraded by considering the reviewer's comments</p> <p>In text references have been incorporated and cited properly</p> <p>Corrections done and effected</p> <p>Corrections done</p> <p>Effected and highlighted in the revised paper</p>



	<p>Methods of Analysis of cations and anions in Aquatic Environment</p> <ol style="list-style-type: none"> 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. <p>Electrochemical Characterization of Rain Water</p> <ol style="list-style-type: none"> 1) Line#129: the (pH) mean mentioned here is simple arithmetic mean. But it is mentioned that the authors have used weighted arithmetic mean. <p>Anions Chemistry of Aquatic Environment</p> <ol style="list-style-type: none"> 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? <p>Cations Chemistry of Aquatic Environment</p> <ol style="list-style-type: none"> 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. <p>Fluoride Distribution in Aquatic Environment</p> <ol style="list-style-type: none"> 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. <p>Correlation Study of Fluoride with Chemical Composition 189 and Weather Parameters</p> <ol style="list-style-type: none"> 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? <p>Conclusion</p>	<p>Corrections referred in the manuscript</p> <p>All corrections done</p> <p>Corrections done and manuscript has been upgraded</p> <p>Corrected</p> <p>Conclusion part has been corrected as stated</p>
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	<ol style="list-style-type: none"> 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? 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? <p>References</p> <ol style="list-style-type: none"> 1) References are not uniform and as per standard. 	<p>Reference part has been formatted</p>
<p>Minor REVISION comments</p>		
<p>Optional/General comments</p>		