



**SDI Review Form 1.6**

Journal Name:	<a href="#">Physical Science International Journal</a>
Manuscript Number:	Ms_PSIJ_31625
Title of the Manuscript:	NATURAL RADIOACTIVITY AND RADIOLOGICAL RISK ESTIMATION OF DRINKING WATER FROM OKPOSI AND UBURU SALT LAKE AREA, EBONYI STATE, NIGERIA
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.

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)
<b>Compulsory</b> REVISION comments	<p><b>79-85.</b> Figures 1a and 1b are not clear enough; they do not reveal the study areas quickly.</p> <p><b>95-97.</b> There is contradiction in the sampling, line 95 indicates that the water samples collected were 2 litters, nevertheless line 97 indicates that large volumes of water 20 litters is required. It is necessary to clarify the volume used and the procedure, how this was done.</p> <p>The technique gamma ray spectrometry is not the right technique to determine radioactivity in water samples. There is a special method to determine this, called "liquid scintillation". That is the reason why most of the calculated values they got from the water samples were below the limits detection, this restrict them to do the proper calculations of adequate doses.</p> <p>Statistically the results are not valid because the numbers of samples were small. Of the 12 samples in uranium, 5 samples were below the limit detection, for thorium 4 samples were below the limits detection, and for the element potassium 11 samples were below the limits detection.</p>	Thanks for the review. It took me time to return the corrected version because we went back to the field to collect more samples and repeat the analysis. A better result were obtained and corrections were made following your suggestions.
<b>Minor</b> REVISION comments	<p><b>Aim (abstract)</b> Delete the word activity</p> <p><b>39.</b> Specify World Health Organization (WHO)</p> <p><b>46.</b> Delete the word activity</p> <p><b>47-48.</b> Delete the paragraph "and high radiation damage such as kidney atrophy, leukaemia as well as cancer of the bladder kidney and lungs"</p> <p><b>54-55.</b> Remove the comma from the references: Nguyen et al.[11], Wallner et al. [12], Elena Botezatu et al.[13].</p>	



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	<p>62. Change the word caner by cancer</p> <p>79. Separate the word <u>and</u> from figure <u>1a</u></p> <p>94. Change concentrated trioxonitrate (v) acid (<math>\text{HNO}_3</math>), only for nitric acid (<math>\text{HNO}_3</math>)</p> <p>95-96 Delete "and also to prevent microbial activities"</p> <p>102. Change <math>^{238}\text{U}</math>, <math>^{232}\text{Th}</math> and their daughter progenies and <math>^{40}\text{K}</math></p> <p>102. Change <math>^{232}\text{Th}</math> for <math>^{232}\text{Th}</math></p> <p>125. Change <math>^{226}\text{Ra}</math> for <math>^{224}\text{Ra}</math> corresponding to <math>^{232}\text{Th}</math></p> <p>160. Specify the International commission on radiological protection (ICRP)</p> <p>175. Indicate reference used for the effective dose in infants, children and adults.</p>	
<b><u>Optional/General</u></b> comments		