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Journal Name:	Asian Journal of Physical and Chemical Sciences
Manuscript Number:	Ms_AJOPACS_51444
Title of the Manuscript:	RADIOLOGICAL RISK ASSESSMENT OF DRINKING WATER FROM IGNATIUS UNIVERSITY QUARTERS
Type of the Article	

General guideline for Peer Review process:

This journal's peer review policy states that <u>NO</u> manuscript should be rejected only on the basis of '<u>lack of Novelty'</u>, 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:

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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)
<u>Compulsory</u> REVISION comments	This manuscript describes the assessment of the natural radioactivity and its associated health risk in tap water from university quarters of Ignatius University of Education, Rivers State, Nigeria. Such research is of some interest to the field of environmental radiology and radionuclide pollution. However, there are a number of issues with this manuscript. In particular, there are a number of grammatical and language problems, also there are a number of points throughout the manuscript that will need to be corrected, clarified and/or rephrased.	
	Specific comments:	
	Abstract: Tap water: replace by: tap water. The residue were transferred to small cylindrical containers were kept sealed: replace by: The residue were transferred to small cylindrical containers which were kept sealed	
	Use comma in between the words: The predominant radionuclide found in water include radium (and its decay products), Uranium (and its decay products), radon (and its decay product), thorium (and its decay product).	
	Introduction In introduction, need to add more references from around the world water radioactivity and radioactivity risk assessment calculations.	
	 2. Materials and Methods 2.1 Study Area Rumuolumeni in Obio/AkporLocal Government Area: Rumuolumeni in Obio/Akpor Local Government Area nitric acid (HNO³) → nitric acid (HNO₃) Applying of nitric-→ Applying of nitric acid 	
	Figure 1 – more detail is needed in the figure legend. Add another figure showing Nigeria map with the location of the study area located in the map.	
	Standard Radiological Risks Assessment	
	DCF_{ing} is dose conversion coefficient of a particular radionuclide ith in Sv/Bq for a particular age category, A_{spi} is the specific activity concentrations of radionuclide	
	The estimated effective dose for different age groups were ranged from 0.073 to 317.58 mSvy⁻¹ for infants,-→ The estimated effective dose for different age groups ranged from 0.073 to 317.58 mSvy⁻¹ for infants,	
	litres→ liters	
	USEPA → US EPA	
	Conclusion. → Conclusion	
	Discussion There is no mention of the limitations of using radiological risk assessment due to natural	

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radioactivity, nor is there a discussion of what affects these, including water characteristics. As a discussion, this section requires much more detail in general.	
References There is inconsistency in formatting of the references. In general, the journals names are some places italic, some places it is not. Also, there is full stop (.) after some references, but for some there is not. Name formatting is not consistent for all, need major revision of the references. Some references do not have year, some do not have page numbers, Use proper formatting of the journal and make corrections for the references. For example: [4] Abusini, M., Al-ayasreh, K. and Al-Jundi, J. (20070. Determination of Uranium, Thorium and Potassium Activity Concentrations in Soil Cores in Araba Valley, Jordan. Radiation Protection Dosimetry. 128920: 213-216??? Abusini M, Al-Ayasreh K, Al-Jundi J. (2007). Determination of uranium, thorium and potassium activity concentrations in soil cores in Araba valley, Jordan. Radiation Protection Dosimetry. 2008;128 (2):213-216. Also, need more recent references especially from well-known high impact journals related to this research work.	
	References There is inconsistency in formatting of the references. In general, the journals names are some places italic, some places it is not. Also, there is full stop (.) after some references, but for some there is not. Name formatting is not consistent for all, need major revision of the references. Some references do not have year, some do not have page numbers, Use proper formatting of the journal and make corrections for the references. For example: [4] Abusini, M., Al-ayasreh, K. and Al-Jundi, J. (20070. Determination of Uranium, Thorium and Potassium Activity Concentrations in Soil Cores in Araba Valley, Jordan. Radiation Protection Dosimetry. 128920: 213-216??? Abusini M, Al-Ayasreh K, Al-Jundi J. (2007). Determination of uranium, thorium and potassium activity concentrations in soil cores in Araba valley, Jordan. Radiation Protection Dosimetry. 2008;128 (2):213-216. Also, need more recent references especially from well-known high impact journals

PART 2:

	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)
	(If yes, Kindly please write down the ethical issues here in details)	
Are there ethical issues in this manuscript?		

Reviewer Details:

Name:	Munima Haque
Department, University & Country	Relevant Science and Technology Society, Bangladesh

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