Review Form 1.7

Journal Name:	**Asian Journal of Physical and Chemical Sciences**
Manuscript Number:	**Ms_AJOPACS_108187**
Title of the Manuscript:	**Age-dependent Radiological Risk Assessment of Radon (222Rn) in Samples of Commercial Bottled Water from Benin City, Nigeria**
Type of the Article	**Original Research Article**

Review Form 1.7

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)*
Compulsory REVISION comments **1. Is the manuscript important for scientific community?** (Please write few sentences on this manuscript) **2. Is the title of the article suitable?** (If not please suggest an alternative title) **3. Is the abstract of the article comprehensive?** **4. Are subsections and structure of the manuscript appropriate?** **5. Do you think the manuscript is scientifically correct?** **6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.** **(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)**	**Yes. The paper may be interesting as a regional research** **Yes.** **Yes** **Yes** **Yes** **Yes**	
Minor REVISION comments **1. Is language/English quality of the article suitable for scholarly communications?**	Yes	
Optional/General comments	I recommend the following minor revision. INTRODUCTION - "Radioactivity is a natural phenomenon and natural sources of radiation are features of the environment. Exposure of human tissues or organs to radiation can induce the death of cells on a scale that can be extensive enough to impair the function of the exposed tissue or organ (IAEA 2014). Radon is a radioactive, colourless, odourless, and tasteless gas that is formed through the breakdown of uranium in soil and rocks (Opoku-Ntim et al. 2019)." → "The quality of drinking water is carefully monitored. One of the aspects of control is a control of the content of radioactive elements in water, especially radon." - "It occurs at low levels in most rocks, soil, water body, plants, and animals (Kamba and Okunade 2016)." → "It occurs in most rocks, soil, water body, plants, and animals (Kamba and Okunade 2016)." - "Many uses of water release radon into the indoor air because radon is easily released by agitation in water. This contributes to the total indoor airborne radon concentrations." – delete. - "…water is also thought to pose…" → "…water is thought to pose…" - "In spite of this, radiation levels in the environment need to be continuously monitored." → "In spite of this, radiation levels in the drinking water need to be continuously monitored." Sampling and preparation - The process of transfusion three vials (75 ml each) into a 1.5-liter bottle is not very intelligible. Describe it in more detail. Radon measurement using RAD7 - "Having obtained the values for the radon activity concentrations of each of the natural radionuclides in the bottled water, a calculation of the yearly effective dosage of radon from ingestion () based on equation (1) was made (UNSCEAR 2000; Oni et al. 2016; Yong et al. 2020; Kadhim et al. 2021; and Sukanya et al. 2021)" → "Having obtained the values for the radon concentrations in the bottled waters, a calculation of the yearly effective dosage of radon from	

	ingestion (???) based on equation (1) was made (UNSCEAR 2000; Oni et al. 2016; Yong et al. 2020; Kadhim et al. 2021; and Sukanya et al. 2021)" - "The total Annual Effective Dose (???) as a result of ingestion and inhalation of radon through the use of the bottled water in the study area was obtained using equation (3)" Radon concentration - The radon concentration values shown by the authors are surprising. Such accuracy is hardly achievable with the use of RAD 7 and in 20 minutes of measurement. Check this data. CONCLUSION - "Nevertheless, the water factories should improve on the purification process by employing a more effective radon reduction methods to ensure radon free water for consumption." - delete.	

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

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