

Review Form 3

Journal Name:	Asian Journal of Research and Reviews in Physics
Manuscript Number:	Ms_AJR2P_128386
Title of the Manuscript:	ASSESSMENT OF BACKGROUND IONIZING RADIATION OF ENGINEERING LABORATORIES OF FEDERAL POLYTECHNIC NEKEDE OWERRI, IMO STATE.
Type of the Article	

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PART 1: Comments

	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.		
Is the title of the article suitable? (If not please suggest an alternative title)		
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.		
Is the manuscript scientifically, correct? Please write here.		
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.		

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<p>Is the language/English quality of the article suitable for scholarly communications?</p>		
<p>Optional/General comments</p>	<p>ABSTRACT</p> <ul style="list-style-type: none"> The author should rephrase the statement and clearly indicate the results for each laboratory and parameters measured. <p><i>The outdoor exposure dose rate varies from 0.006 - 0.017 mR/hr, 0.006 - 0.015 mR/hr, 0.008 -0.015 mR/hr, 0.009 mR/hr with mean value of 0.011 mR/hr ,0.009 mR/hr,0.014 mR/hr, 0.014 mR/hr for Computer Engineering Laboratory, Mechatronics Laboratory, Mechanical Engineering Laboratory and Automatic Laboratory respectively</i></p> <p><i>Or</i></p> <p><i>The outdoor exposure dose rate varies from 0.006 - 0.017 mR/hr, for Computer Engineering 0.006 - 0.015 mR/hr, for Mechatronics Laboratory, 0.008 -0.015 mR/hr, for Mechanical Engineering Laboratory and 0.009 mR/hr for Automatic Laboratory with mean value of 0.011 mR/hr ,0.009 mR/hr,0.014 mR/hr, 0.014 mR/hr for Computer Engineering Laboratory, Mechatronics Laboratory, Mechanical Engineering Laboratory and Automatic Laboratory respectively</i></p> <ul style="list-style-type: none"> However the author should check the range of Automatic laboratory only 0.009mR/hr was stated The results should state clearly which results and parameter belong to a particular laboratory <p><i>and the indoor exposure dose varies from 0.009 - 0.015 mR/hr, 0.009 – 0.019 mR/hr, 0.006 - 0.015 mR/hr, with mean of 0.013 mR/hr,0.012 mR/hr,0.012 mR/hr. The outdoor absorbed dose rate varies from 52.2 -130.5 nGy/hr, 52.2-130.5 nGy/hr, 87-130.5 nGy/hr,78.3 -121.8 nGy/hr, with mean value of 96.76 nGy/hr, 79.75 nGy/hr,111.86 nGy/hr and 100.69 nGy/hr and indoor absorbed dose rate varies from 78.3-130.5, 78.3- 130.5 (nGy/hr) with mean 111.65 nGy/hr, 109.72 nGy/hr, 101.79 nGy/hr respectively. The absorbed dose rate varies from 52.2 -130.5 nGy/hr, 52.2-130.5 nGy/hr, 87-130.5 nGy/hr,78.3 -121.8 nGy/hr, with mean value of 96.76 nGy/hr, 79.75 nGy/hr,111.86 nGy/hr and 100.69 nGy/hr respectively</i></p> <ul style="list-style-type: none"> The world standard values should be stated for each parameter. There are various world standard values (you can state UNSCEAR as in the table of results) Keywords should be arranged in alphabetical order <p>INTRODUCTION</p> <ul style="list-style-type: none"> The objectives of the study should reflect in the introduction Avoid picture 1 and use <p>Figure 1: A map showing</p>	

MATERIALS AND METHODS

3.1 Materials

- A well calibrated Radiation meter (It was omitted) was utilized for the In-situ measurement of indoor and outdoor radiation exposure level of the selected engineering laboratories of federal polytechnic Nekede
- Justify the sampling method used in selecting the points
- Indicate the name and type of survey meter with its calibration factor
- Label the equations accordingly

Eg

$$\text{Absorbed Dose} = \text{Exposure Dose Rate} \times 8.7 \text{ (nGy/hr)} \dots\dots\dots(1) \quad [11].$$

$$\text{AEDE (Outdoor) (mSv/yr)} = \text{Dose rate (nGy/h)} \times 8760 \text{h} \times 0.75 \text{Sv/Gy} \times 0.25 \dots\dots (2)$$

$$\text{AEDE (Indoor) (mSv/yr)} = \text{Dose rate (nGy/h)} \times 8760 \text{h} \times 0.75 \text{Sv/Gy} \times 0.25 \dots\dots (3)$$

$$\text{Equivalent Dose} = 1 \text{mR/hr} = \frac{0.96 \times 24 \times 365}{100} \text{ (mSv/yr)} \dots\dots\dots (4)$$

$$\text{ELCR} = \text{AEDE} \times \text{Average Duration of Life (DL)} \times \text{RISK factor (RF)} \dots\dots\dots (5)$$

RESULTS AND DISCUSSION

- In the labelling the graphs write the word **figure** in full not fig.

CONCLUSION

OK

REFERENCES

OK

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PART 2:

	Reviewer's comment	Author's comment <i>(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)</i>
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

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