

Review Form 1.6

Journal Name:	Asian Journal of Research and Reviews in Physics
Manuscript Number:	Ms_AJR2P_83222
Title of the Manuscript:	Radiogenic Heat Production Due to Natural Radionuclides in Soil and Sediments of Coastal Communities of Okrika Local Government Area of Rivers 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:

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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)
Compulsory REVISION comments	<p>There are four radioisotopes including ²³⁵U, ²³⁸U, ⁴⁰K, ²³²Th that cause the majority of the earth's internal heat, and this heat can be a result of spontaneous disintegration and decay of the mentioned radioisotopes as well as some nuclear radiations like gamma-ray. Applying neutron activation analysis (N.A.A) is one of the best methods to find out the constituent elements existing in a composed material. One of the detectors, which may be applied for the detection of gamma-ray, is Na-I (sodium-iodide). In this paper, author (s) has (have) investigated some of soil and sediment samples in this regard in some regions of Africa (Nigeria).</p> <p>1. The title of this paper must be amended.</p> <p>2. In the Abstract section, the author (s) has (have) claimed that this research has been carried out over 36 samples. But, the author (s) has not (have not) described how these 36 samples have been extracted from the soil and sediment. It has got to be explained clearly.</p> <p>3. In the Abstract section, the word rate has been duplicated.</p> <p>4. In the Introduction section, the radioisotope ²³⁸U has been written ²²⁸U by the mistake.</p> <p>5. In the Materials and Methods section, there was no need to describe geographical information of the region in detail.</p> <p>6. The released energy because of atom disintegration is calculated according to this equation: ΔE= 931× Δm (a.m.u). This equation shall be added to the manuscript.</p> <p>7. In section 2.2 (line 8), the words: “were, air dried” must be changed to: “were air-dried”. The manuscript should be double-checked for punctuations because there are many punctuation errors throughout the manuscript.</p> <p>8. In section 2.3 (paragraph 1, line 9), the words: “are the conditions” are inappropriate, and must be removed from the text.</p> <p>9. In section 2.3, the author has mentioned: “Having known values ... can be determined using Equation 2” while there is not an equation. If the purpose of the author (s) about Equation 2 is: “1% 40K =318 Bq/kg”, it is not an equation and is not associated with the density values of the dependent variables that the authors (s) has (have) mentioned. This section must be revised.</p>	Done
Minor REVISION comments		
Optional/General comments	<p>In section 2.2 (line 15), the verb: “vacuumed” had better be written instead of airtight.</p>	Done

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)	The corrected parts are highlighted