



**SDI Review Form 1.6**

Journal Name:	<a href="#">Physical Science International Journal</a>
Manuscript Number:	<b>Ms_PSIJ_25287</b>
Title of the Manuscript:	<b>Reduction of Environmental Impact of Fixed Bed Nuclear Reactor (FBNR) Waste</b>
Type of the Article	<b>Original Research Article</b>

**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><u>Compulsory</u></b> REVISION comments	<b>This paper is sound from the perspective that it presents another option for nuclear power production, based on a new shape and distribution of nuclear fuel. However, the proposition to use fission products as a reliable and sure enough radiation source for food preservation, sterilization and hospital infection, I think is quite erroneous. Particularly, I find disastrous the picture showing a Medical Doctor who receives a free radiation dose to sterilize both hands, simply because sterilization doses are lethal for human beings.</b>	I am afraid that the reviewer has misunderstood our proposal. It is not that the medical doctor will handle the spent fuel by his hand to sterilize his hands. The proposal is to use the FBNR spent fuel elements inside the "irradiator equipments" to serve as the source of radiation. Irradiators exist in the world market and the method of their applications can be seen in the International Atomic Energy Agency's (IAEA) numerous documents.
<b><u>Minor</u></b> REVISION comments	<sup>14</sup> C as nuclear waste is quite easy to shield with practically any material (minus beta emitter, 0.156MeV)	The problem of the radioactive C-14 here is not to shield against its direct emitting radiation. The problem is in the complex recycling process that creates problems. This problem is being studied at the Oak Ridge National Laboratory in USA.
<b><u>Optional/General</u></b> comments		