



SDI Review Form 1.6

Journal Name:	<u>British Journal of Applied Science & Technology</u>
Manuscript Number:	Ms_BJAST_19827
Title of the Manuscript:	Simulation of low energy neutron shielding by GEANT4 and MCNP4C cod
Type of the Article	Original research papers

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)
Compulsory REVISION comments	The English language used in the manuscript is seriously deficient. For example, word "cod" in the abstract should be "code", the sentence "These rays have high permeability, while not undermining the beam with appropriate shielding, these can be serious and irreversible horses to human" probably means something like „These rays have high penetration ability and without appropriate shielding could lead to serious and irreversible harm to humans.“. The rest of the manuscript is extremely modest in any explanation, but still the general feeling is that English language should go through major check procedure. Much more details should be given on GEANT4 model used for the experiment, 252Cf characteristics as the neutron source, MCNP options used for the experiment, etc. The conclusion that "There is not much difference between the results of GEANT4 and those of MCNP4C" is not supported with the results presented in figures 5 to 7. The difference in relative flux of 20% or 30% does not seem to be "not much difference". The source of figures 2 to 4 is not clear, is it GEANT4 or MCNP. Please clarify the ethical issue: The sentence "physicists use simulation to optimize detectors and software algorithms with the goal to measure, with utmost efficiency, marks that previously unobserved particles predicted by new theories would leave in their experimental devices." In section 2 of the manuscript is identical to the sentence in web article (http://www.fnal.gov/pub/today/archive/archive_2014/today14-10-21.html) which is not cited or quoted	



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<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments	In general, the subject is potentially interesting and publishable. It is partially similar to the work "GEANT4 and PHITS simulations of the shielding of neutrons from ^{252}Cf source" by Shin, et al. This manuscript has potential, but after some serious work added to it.	

Reviewer Details:

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