



SDI Review Form 1.6

Journal Name:	British Journal of Applied Science & Technology
Manuscript Number:	2013_BJAST_8772
Title of the Manuscript:	Performance Analysis of Parabolic Trough Collector in Hot Climate
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 <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>
<u>Compulsory</u> REVISION comments		
<u>Minor</u> REVISION comments	This work is very studious, and represents a major contribution to the use of free solar energy to fulfil daily energy needs. It is scientifically sounded and shall be published. However, I have minor points to raise. Shorten the abstract Work on the English Lines 20- 31 There is needs for references. No reference up to the 40th line for a paper of such importance is just unacceptable. Part of the methodology in the introduction, making it unnecessarily long while the methodology does not exist all as visible part of the article, or is spread all over the article. A better document structure is needed. From line 47, results discussion seems to start, which is wrong in a scientific paper Theoretical calculations (the present model) validated by experimental data from Sandia National Laboratory seems backward to me. I will rather want the authors to apply the model to the case study using data from their own measurements.	• Grammar and spelling mistakes are corrected to improve English in the whole text. • Abstract is shortened. • English throughout the manuscript is revised. • Long sentences are divided into two sentences instead of on long, un-understandable. • Theoretical calculations (the present model) are validated by experimental data from Sandia National Laboratory as the present work is theoretical one and there is no measurement data. • No results are presented from line 47. The results mentioned are related to the previous studies in literature review. Present results are presented in Results and Discussion section 4 starting from line 363.



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	Fig 6, the maximum gap between vacuum and air percent energy to total collected is approximately 0.025, but the document shows the gap is more enhanced. Given the cost to keeping the vacuum, and given what is achieved, is it economically interesting to opt for the vacuum in the system? In other words, I have the feeling that the gap is underestimated. I cannot comprehend the link between the developed method and the Case study. Is the collector used in the Case studied designed according to the developed model so that it being in line with this latter is proven? Sentences are too long. See room for two sentences instead of on long, un-understandable sentence (lines 194, and subsequent ones	• Fig 6, the maximum gap between vacuum and air percent energy to total collected is more enhanced only at elevated temperatures. • In our opinion, the case study demonstrates the reliability of integrating parabolic trough collector in building especially in hot climate of Kuwait. As demonstrated by the obtained results, heating and cooling load can be satisfied by employing parabolic trough collectors. In addition to investigating the feasibility of integrating a parabolic trough collectors. So, this can encourage building designers to convert existing building to nearly net zero energy building. In addition to demonstrating the environmental impacts of integrating parabolic trough collectors in building. • Long sentences are divided into two sentences instead of on long, un-understandable.
<u>Optional/General</u> comments		