



SDI Review Form 1.6

Journal Name:	Physical Science International Journal
Manuscript Number:	Ms_PSIJ_43500
Title of the Manuscript:	Estimation of the calorific power of a heating element
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:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)

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>This is a very confusing paper. The title and part of the discussion Suggests it deals with calorific power of a heating element which Should just be the electrical heating energy deposited in the heater. But elsewhere the authors talk about Determining heat conductivities. So there is some disconnect and The ultimate goal isn't clear.</p> <p>In the model, as articulated in Eq. (3) for instance, it appears that The authors are considering the temperatures within the Water and the container to be isothermal. This certainly isn't the Case.</p> <p>What is the physical meaning of the lambda terms? Are these Masses multiplied by heat capacities?</p> <p>The temperatures measured in Figure 3 are at some specific location They are not volume averages, for instance. This should be made clear To the reader.</p> <p>How is heat loss to the environment handled?</p> <p>So, one is left with the question of what this paper accomplishes. I am sorry to Say not much.</p>	<p>We believe that the introduction of the section corresponding to conclusions clarifies the goal of the paper.</p> <p>The model considers an initial steady state followed by and transitory evolution when the heating source is acting. For the considered temperatures the process is slow so that the temperatures of the container and water can be considered equal.</p> <p>Lambda coefficients correspond to calorific gains and losses of the system (water+vessel+accessories). Lambda coefficients have heat capacity dimensions (energy/time×temperature).</p> <p>This heat loss is handle by the losses coefficient lambda 2.</p>
Minor REVISION comments		



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Optional/General comments		

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>	