



SDI Review Form 1.6

PART 1:

Journal Name:	<u>International Research Journal of Pure and Applied Chemistry</u>
Manuscript Number:	2013_IRJPAC_3927
Title of the Manuscript:	Determination Of Optimum Reaction Temperature And Reaction Time For Biodiesel Yield From Coconut (Cocos nucifera) Oil.
Type of the Article	Research paper

General guideline for Peer Review process is available in this link:

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

- This form has total 7 parts. Kindly note that you should use all the parts of this review form.



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PART 2: 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)
<u>Compulsory</u> REVISION comments	1. The work presented is a very preliminary work. 2. Base for the selection of parameters other than time and temperature is not made clear. 3. Since the acid value and FFA contents are not falling under standard limits, Biodiesel confirmation tests need to be carried out using analytical techniques like HPLC or GC-MS. 4. There are publications wherein scientists have tried with high FFA content feedstock and got high yield, as mentioned in paper also "two stage process". 5. Methanol balance is very much important when you are dealing with reaction temperature 60 degC or above. It is not shown in paper. 6. The trend shown in the Fig 1 indicates that biodiesel volume increases constantly after 55 degC . Hence, one should study further above 65 degC using good reflux condition. Also, the possible reason for such behaviour of the reaction is not explained in the discussion part. 7. The reason for constant decrease in the biodiesel volume production after 45 minutes of reaction time is not discussed in depth.	To be carried out in another study Still under investigation and will form another report Under investigation Under investigation Has been corrected



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	8. As shown in Fig 2, the biodiesel volume at 30 minutes is almost equal to the 45 minutes result. Then why 45 minutes are considered as optimum time? 9. Fig 1 and Fig 2 are not discussed under the results and discussion. It needs to be. 10. Composition analysis of feedstock is not carried out by the authors. They have accepted the published composition.	The volume at 45min is still higher (88% as against 86.8%). Done It has been carried out by other authors and is widely accepted.
<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments		