

## Review Form 1.7

Journal Name:	Current Journal of Applied Science and Technology
Manuscript Number:	Ms_CJAST_112025
Title of the Manuscript:	Monitoring the Air-Fuel Ratio (AFR) of a biomass gasification process with an Arduino Uno 3 and a narrow band Lambda oxygen sensor
Type of the Article	Original Research Article

### 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)
<p><b>Compulsory</b> REVISION comments</p> <ol style="list-style-type: none"> <li>1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript)</li> <li>2. Is the title of the article suitable? (If not please suggest an alternative title)</li> <li>3. Is the abstract of the article comprehensive?</li> <li>4. Are subsections and structure of the manuscript appropriate?</li> <li>5. Do you think the manuscript is scientifically correct?</li> <li>6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</li> </ol> <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<ol style="list-style-type: none"> <li>1. What is the significance of differentiating between first-generation 4-wire Lambda sensors and second-generation 5-wire wideband Lambda sensors in the context of monitoring biomass gasification?</li> <li>2. Could you elaborate on the setup shown in Figure 5 and explain its role in assessing the Lambda sensor's response to continuous electrical power?</li> <li>3. In the conclusion, the paragraph mentions a preliminary heating time of 5 minutes. Could you explain why this heating time is required and its role in stabilizing the resistance of the heating element?</li> <li>4. In the conclusion, rephrase "this work present simples methods" to "this work presents simple methods" for grammatical accuracy. Please check grammatical accuracy throughout the paper.</li> </ol>	
<p><b>Minor</b> REVISION comments</p> <ol style="list-style-type: none"> <li>1. Is language/English quality of the article suitable for scholarly communications?</li> </ol>	<ol style="list-style-type: none"> <li>1. While you mention that the final temperature of the heater element depends on power energy and heat radiation in the flue gas, it might be helpful to explain how and why the flue gas temperature impacts the heater resistance in a bit more detail for a clearer understanding.</li> <li>2. Are there any potential applications or implications of this method for small-scale industries, particularly in developing countries, where traditional flue gas analyzers may not be feasible?</li> </ol>	
<p><b>Optional/General</b> comments</p>	<p>Overall, the Paper is informative and well-structured, but these suggestions aim to enhance clarity and provide additional context for the reader</p>	

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**PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> <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>
<b>Are there ethical issues in this manuscript?</b>	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

**Reviewer Details:**

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