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PART 1:

Journal Name:	British Journal of Applied Science & Technology
Manuscript Number:	**2013_BJAST_3655**
Title of the Manuscript:	**Performance, Emissions and Combustion Characteristics of Waste Fried Vegetable Oil Based Biodiesel in High Grade Low Heat Rejection Diesel Engine**

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)

- 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)*
Compulsory REVISION comments	1) There is a large number of papers published studying the effects of biodiesel derived from different sources on engine performance and exhaust emission. However, this work does not review the key papers giving specific information associated with the use of biodiesel in conventional and LHR diesel engines. 2) The experimental data were presented poorly; e.g., the presentation of the effects of properties of waste fried vegetable oil methyl ester on the combustion. How do its properties and fuel injection timings effect on the peak cylinder gas pressure, the start of combustion timing etc.? 3) Absolutely, the abbreviations must be added the manuscript. 4) The figure lines are very complex for readers. Figure lines should be rearranged with attribute characteristics. 5) Coated engine part regions should be illustrated on an image. This will enable the reader to understand more easily. 6) The sound quality and smoke density was not mentioned up to page 11 anywhere (abstract, introduction, and experimental setup) in the	

	manuscript, but suddenly the sound level and smoke values was given at page 11 and 12. This situation is not acceptable for a scientific article. The information presented in the article should be defined in previous sections. 7) The conclusion needs to be more clearly written in accordance with the manuscript content.	

Minor REVISION comments	8) Page 2; line 60-77: the references should be given. 9) Kinematic viscosity is should be given on Table 1 due to this study related with injection parameters. 10) Bulk modulus of biodiesel and petroleum diesel fuel can be shown on Table 1 by taking from the literature. Bulk modulus is important parameter, especially for studies with mechanical injectors. 11) The experimental error percentages should be given for injection pressure and timing on a Table. 12) It seems that the figure of experimental setup have been copied from a source, the original figure should be given. 13) NT and PT units (degree or other temperature units) should be showed on the Tables. 14) Page 4; line 148-152 has some spelling errors. 15) Page 5; line 191-193: I did not understand. 16) Page 6; line 241-242: as if the crude (not refined) vegetable oil used in this study, But no experimental results on the use of crude oil. 17) Page 7, (line 266): How the initiation of combustion at earlier period was determined? or Was it received from literature? It should be explained. 18) Page 7; line 268-275 there are phrases such as heat release rate, the duration of burning, ignition delay	

	etc., but no experimental result related with these values. 19) Page 8; line 301; how were the gas temperatures determined. 20) Page 9; line 310; I did not understand. What does meant by the effect of deposit formation or oxidation on volumetric efficiency in the sentence? 21) Page 10; line 352; the experimental results about the air-fuel ratio and the cylinder gas temperature were not given. Air-fuel ratio values should be added or this sentence should be removed. 22) What are the specifications of smoke emission and sound intensity device? Devices should be described at experimental-setup section. 23) Page 12; line 402-413; smoke density, soot, smoke level statements are separate concepts. Which of these were measured? 24) Page 13; line 417: "crude vegetable oil" it is not understanding. Has been used the crude vegetable oil in this study? If it was used, where are the experimental results or the properties of crude vegetable (sunflower, palm, nut or other) oils?	

Optional/General comments	This manuscript deals with the comparative effects of biodiesel produced from waste fried vegetable oil on the performance and emission characteristics of conventional and LHR diesel engines. This study shows many similarities the pervious paper of authors "Performance Evaluation of a Low Heat Rejection Diesel Engine with Mohr Oil Based Biodiesel" published at British Journal of Applied Science & Technology. In the manuscript, there are most independent statements of each other. therefore, to be given in manuscript is not clearly understood. My recommendation, the manuscript can be published in British Journal of Applied Science & Technology after above issues have been corrected or answered.	

Note: Anonymous Reviewer