



SDI Review Form 1.6

Journal Name:	Asian Journal of Applied Chemistry Research
Manuscript Number:	Ms_AJACR_43051
Title of the Manuscript:	Performance evaluation of ecofriendly biolubricant obtained from waste cooking palm oil
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	(1) Paper TITLE (it should read as "Viscosity and selected physico-chemical properties of ecofriendly") (2) Line 215: should be complemented with considerations to the lack of actual performance testing, MAINLY regarding likely (and unknown) chemical interactions with other typical antiwear additives (e.g., ZDDP) (1) The paper does NOT report any lubricant PERFORMANCE, but rather viscosity and physico-chemical properties that INDICATES (by comparison to typical properties of other oils) the "likely" performance (lubricant performance must be actually tested by tribometry and standard tests)	(1) The authors strong agreed with the reviewer's comment and have modified the title to read 'Assessment of quality performance of ecofriendly biolubricant from waste cooking palm oil' in the manuscript. (2) The authors strong noted the advice of the reviewer and the manuscript has been updated with the following additives used for the production of ecofriendly biolubricant from waste cooking oil: Triethylenetetramine, TETA (used as dispersant and anti-oxidant) Zinc dialkyldithiophosphate, ZDDP (used as viscosity index improver, pour point depressant and anti-foam) Poly alkylmethacrylate, PAMA (used as anti-oxidant, anti-wear and detergent)
Minor REVISION comments:	Some considerations to how the excessive water content of the bio-oil (which is mentioned in the paper, and is result of the higroscopic behaviour of bio-oils) and to their aging (shelf life) as compared to that of mineral oils can also enhance this paper.	The authors strongly consider the advice of the reviewer and the effects of water on lubricating oil, such as oxidation reactions of methylene double bonds and hydrolysis of ester-based biolubricating oil resulting in acid and alcohol, have be updated on the manuscript.
Optional/General comments:	It is a good paper that advances the knowledge in the field, but it should be toned down with regards to some non-justified performance predictions. It should be published after above revisions be implemented.	