



SDI Review Form 1.6

Journal Name:	Current Journal of Applied Science and Technology
Manuscript Number:	Ms_CJAST_43332
Title of the Manuscript:	Laboratory study of a lignocellulosic biomass as an alternative base material for brake pads
Type of the Article	Original research papers

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>)



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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) Abstract is too long, try to reduce to 150 words. Be specific with the information in abstract. Remove first three lines, till in this study. 2) Introduction, first define brake friction materials, ingredients, then say about eco friendly materials Refer the literatures and cite them in the revised manuscript - Singaravelu, D. Lenin, R. Vijay, and M. Rahul. <i>Influence of Crab Shell on Tribological Characterization of Eco-Friendly Products Based Non Asbestos Brake Friction Materials</i>. No. 2015-01-2676. SAE Technical Paper, 2015. - Akincioğlu, G., H. Öktem, I. Uygur, and S. Akincioğlu. "Determination of Friction-Wear Performance and Properties of Eco-Friendly Brake Pads Reinforced with Hazelnut Shell and Boron Dusts." <i>Arabian Journal for Science and Engineering</i> (2018): 1-11. - Ma, Yunhai, Siyang Wu, Jian Zhuang, Jin Tong, Yang Xiao, and Hongyan Qi. "The Evaluation of Physio-Mechanical and Tribological Characterization of Friction Composites Reinforced by Waste Corn Stalk." <i>Materials</i> 11, no. 6 (2018): 901. 3) Epoxy resin, is it liquid resin or phenol formaldehyde powder resin 4) Page No 3 Line 80 "The brake pads were then sintered and hardened" is it metal or it is post cured explain the manufacturing procedure clearly Ref the paper and cite in your revised manuscript Thiyagarajan, V., K. Kalaichelvan, R. Vijay, and D. Lenin Singaravelu. "Influence of thermal conductivity and thermal stability on the fade and recovery characteristics of non-asbestos semi-metallic disc brake pad." <i>Journal of the Brazilian Society of Mechanical Sciences and Engineering</i> 38, no. 4 (2016): 1207-1219. 5) For which road scenario pad this composite was developed? 6) Figure 3, Microstructure what you infer, it is unclear and the image quality is also poor. Try to show what are the ingredients with an arrow 7) How many samples were tested for each composite, each test? 8) What is the percentage error allowable? 9) Why coefficient of friction graph is not given? 10) Conclusions are too lengthy try to reduce and make it simple. Don't repeat the same content of abstract in conclusions	- The abstract has been reduced to 200 words in order not to expunge key findings from the abstract. The first three lines of the abstract have been removed. - Brake friction materials have been defined. The literatures provided have been cited in the revised manuscript. - Liquid resin was used for this work. - The brake pads were sintered for effective curing in an oven (see highlighted text in line 80) The Ref given has been read and cited in the revised manuscript. - It has been specified in the manuscript. The brake pad was developed for light load braking system and to aid the conversion of sawdust (or waste) to wealth. - The discussion was based on the visual revelation of the micrographs. The sawdust is brownish in nature/colour and this pictorial evidence is revealed in the micrographs. - The average of three tests was reported as the actual test result in the paper. - The percentage errors were relatively insignificant (varying from 0.001-0.06) for the hardness, compressive strength, ash content and porosity tests. As a result, this was not reported in the manuscript. - Coefficient of friction graph is not given. Coefficient of friction was not tested because it was not included in the scope of the research. - The conclusions have been reduced and the same content in the abstract is not directly stated in the conclusions.
Minor REVISION comments	Page No. 4 Line 90 Microstructure If polishing is done using grit paper, then there will be marks of the polishing how the images will be good. Already during manufacturing grinding is done, why again it is done here?	The images shown in Fig.3 were the results obtained after following standard metallographical technique but without etching.
Optional/General comments	Add latest references related to the work	Other references have been added.