



SDI Review Form 1.6

PART 1:

Journal Name:	Physical Review & Research International
Manuscript Number:	MS: 2013_PRRI_3199
Title of the Manuscript:	THE CONVERGENCE OF NORMALIZED VEHICULAR ROLLING FRICTION COEFFICIENT (C_r) BY DYNAMIC HIGH SPEED IMAGING AND LEAST SQUARE OPTIMIZATION TECHNIQUES.

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 9 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	The title is misleading: "Convergence" points to the possibility of paper presenting an algorithm and its convergence properties. A camera is being used as a "sensor" to capture the time of travel from one point to another. I do not think "high speed imaging" plays a critical role in the paper. The study presents a way to measure the rolling resistance of a scaled vehicle using a simple setup. Experimental data is presented. The primary cause of pneumatic tire rolling resistance is hysteresis, which is the property of tire material. No mention has been made to the material, tread, tread depth etc of the scaled vehicle tire with respect to full scale vehicles. If similitude has to be preserved, one has to make sure the relevant dimensionless properties of the two systems are equal. However, tire properties have not been considered. The paper is poorly written. There are many typos and unnecessary material (for example, the section on work-energy theorem. The paragraph before that does not make any sense.) In my view, there is little novelty in the paper. The method described is very commonly used in industry to measure coefficient of rolling resistance.	The paper title was decided during a study by the Transportation Research Institute at the University of Kansas. As such, the title will not be changed, although your concern is duly noted. Concern on tire material is noted, similitude assumes similar/same material, although depth, tread and other tire properties is assumed to be negligible. This manuscript was sent before proofreading; edits will be made on language. Although it is unfortunate that the reviewer feels that there is little novelty in the current work, it has to be noted that common industry practices are not clearly explained in most previous studies for the layman. This simple method is aimed to simplify the process and clearly tabulate the results for parties of interest with intermediate understanding.
<u>Minor</u> REVISION comments		



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<u>Optional/General</u> comments		