



SDI Review Form 1.6

Journal Name:	British Journal of Applied Science & Technology
Manuscript Number:	2014_BJAST_10026
Title of the Manuscript:	Determination of friction factor over a pool reach, using double-average method
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>)



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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		
Minor REVISION comments	-In all the paper there are many mistakes about writing (i.e. line 15 (areach), line 17 (offlow)); through all the text, please control and correct the manuscript. Moreover, I would like to substitute "percent" with % Line (13-15): This sentence is not so clear; please rewrite it. Line 17- References not also about river bed but also about riverbanks are suggested; for example the instability of the riverbank due to the stress velocity in particular hydrogeological settings (Colombo et al, 2011 Hydrogeological critical settings for stability of riverbanks: The Case of the pioverna river (Valsassina, Lecco, Italy; Crosta, G., Di Prisco, C, 1999 On slope instability induced by seepage erosion) Line 23 - "computations" Line 25: "What is the Navier Stokes equation used? I think it is better write the equation briefly" Line 33- "For each variable depending on time, a Reynolds decomposition can be write as..... where u' is the spatial fluctuation in the time-averaged flow variable" (Gray, 1975)	Done, lines 13, 15, 17, 26, 76, 90, 114 and 172 The sentence was modified. Purpose of this research is not about the effect of friction factor on riverbank or riverbed instability, but it is about double-average method to determine friction factor. This sentence was removed from the text. Done, line 37



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	Line 47 “ the water slope....” The water slope is the gradient of river From line 62 to line 76: the parameters are without dimensions: Please integrate the paragraph with the dimensions of all the parameters. Line 64: There are presented the equation 2 and 4. Where is the equation 3? Please check it. The variable f must be clarify in this sentence. Line 73: Equation of De Saint Venant (???) Line 79-80: this sentences is not so clear. Please rewrite it. Why have you use geometric standard deviation? By definition geometric standard deviation is the exponential of a square root of the variables. Please try to explain why you use this statistical variable and why you change the formulation. Line 82: the point (1) is not so clear. Please rewrite it Line 85: equation (11): by definition time average is computed in the same point? It is not so clear. Line 112-114: You say that the Figure 5a shows the uniformity in the sizes particles; This is equivalent to tell that distribution grain particle is mono-granular? Line 116-118: What are the parameters which govern the linear behaviour of the figure 6(a)?? Please clarify it.	The water slop was used instead of gradient of river. Done Done, page 6, line 74 The Saint venant equation was used to calculate the friction factor. Please address to references of (1) and (3) for more details. The geometric standard deviation is defined as equation (9) in all river engineering text. For example, Please address to reference [2], in the revised manuscript. Done Done This means that with time variations, the grain size distribution remain stable and fix during the data collections. It is very difficult to recognize such parameters by current meter, however, the velocity distribution is not linear, but is concave. The linear distribution is seldom observed in rivers due to turbulence and mixing effects.
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		Done
<u>Optional/General</u> comments	Fig. 1 : the capture is not correct about a) and b). I think capture a) is for the second picture and capture b) is for the first	Done
	Fig. 2 : the capture is not consistent. Please change it (there are only 2 pics, what is the c) capture?)	Done
	References: 7, 11,13,19 are not referenced in the text. Please provide it.	Done
	I think can be very interesting if this preliminarily computation could be applied also for the riverbanks. The importance of the shear velocity is more relevant in the riverbanks instability. So, why don't explain something about it? What can be the interaction between the shear velocity (friction) and the instability of the riverbanks?	Thank you for your suggestion. Purpose of this research is not about the effect of friction factor on riverbank or riverbed instability, it is about investigation of double average method at determination of friction factor. However, the authors will investigate the reviewer's suggestion in future work.