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| Journal Name: | Journal of Engineering Research and Reports |
| Manuscript Number: | **Ms_JERR_41543** |
| Title of the Manuscript: | **Minimizing scour of contraction stepped spillways** |
| Type of the 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)

SDI Review Form 1.6

**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)* |
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| **Compulsory** REVISION comments | **In general:** The English version of the manuscript needs to be improved in order to fully understand the main idea of the manuscript. Some of the sentences need to be rewrite. They need to use the same criteria for all figure captions, references and in general, the text needs to have the same criteria for the citations. They need to check the punctuation marks. In its present version, the manuscript is confusion and hard to follow.<br><br>**Abstract section:**<br><br>This section need to be rewritten in order to express the main idea of the manuscript. Several sentences are hard to understand.<br><br>**Experimental work section:**<br><br>This section also needs to be rewritten in order to express the main idea of the manuscript. Several sentences are hard to understand.<br><br>**Figure 5**<br><br>In figure 5, if you do not have a breaker (i) why is it not symmetric, could you explain.<br><br>**I considered that the manuscript has a good experimental approximation; the paper may be suitable for publication. However I considered that they need a mayor revision of the English version of the manuscript in order to transmit their ideas, since in its present version the manuscript is hard to follow and confusing.** | |
| **Minor** REVISION comments | **Abstract section:**<br><br>Page 1 "their failure..." … "Paper of The" … "beakers. the best number" … "54.51 %.in" please check the spaces and punctuation marks<br><br>Page 1 "16.2 m length, 65cm depth and 66 cm" … "by 2,4,6 and 8 of beakers" leave a space between the number and the units and between numbers.<br><br>**Introduction section:**<br><br>Page 1 "in order t drain water" complete the word "to"<br><br>Page 1 "Balachandar and Kells (1998) showed that the dynamics of local scour is dependent on the tailwaterdepth." Use the same type of text as in the rest of the text, at least in the pdf version it looks lighter<br><br>Page 1. Rewrite the sentence "E. Fadaei-Kerman and G.A. Barani (2014), study, numerical simulation of flow over a chute spillway is presented using the Computational Fluid Dynamics (CFD) method."<br><br>The literature cited in the introduction section needs to be in the same format, example | |

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| | "Giuseppe Oliveto (2013)," … "E. Fadaei-Kerman and G.A. Barani (2014)" … "Dey and Raikar (2007)"<br><br>Check the punctuation marks, example "apron, It was" … "…2016), study, the volume of…"<br><br>**Experimental work section:**<br><br>Put a space between the numbers and the units, example "flume 16.2 m length, 65cm depth and 66 cm width as"<br><br>Use the same criteria to mention the "Photo" and check the punctuation marks in general, example "photo(2) ," … "Photo (1)." … "Fig.(1) Sieve analysis of the sample" … "Fig.(2) Fig.(2) Ratio of maximum to equilibrium scour depths (ds/ds Equilibrium) . versus time" … "in fig.(2), It was found"<br><br>**Figure 3**, please clarify the fact that one of the figures is from a lateral view and the other from an aerial or top view.<br><br>**In general** use the same criteria to write all sentences, example "Froude number (F0)" … "Froude Number".<br><br>**Figure 5, 7,** please put your axes label (example, distance, etc)<br><br>**Conclusion section:**<br><br>This sentence is hard to follow "Increasing contraction ration increase scour depth increases."<br><br>**Reference section:**<br><br>Please use the same criteria for the references, example<br>"5- Dey, S. and Raikar, R. V. (2007). "Scour below a high vertical drop." J .Hydraul. Eng., Vol. 133, No. 5, pp. 564-568.<br>6- E. Fadaei-Kerman and G.A. Barani (2014), Numerical simulation of flow over spillway based on the CFD method, Scientia Iranica A, 21(1), 91-97.<br>6- Giuseppe Oliveto (2013), Local scouring downstream of a spillway with an apron, Water Management Volume 166 Issue WM5.<br>7- Hamidifar, H.,Omid,M.H., & Nasrabadi, M.(2011).Scour downstream of a rough rigid apron. World Applied Sciences Journal, 14(8), 1169–1178.<br>8- Jiemin Zhan, Jianbo Zhang, Yejun Gong (2016), Numerical investigation of air-entrainment in skimming flow over" | |
| **Optional/General** comments | **Figure 9**, could you calculate standard deviation, in order corroborate that the 10% angle is significantly different to the 15% angle. This is not strictly necessary, but it can help to confirm that the 10% angle has a significant difference with the 15% angle. | |

**Reviewer Details:**

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| Name: | ***David Salas-Monreal*** |
| Department, University & Country | ***Universidad Veracruzana, Mexico*** |