

## ***Interactive comment on “The effective porosity and grain size relations in permeability functions” by K. Urumović and K. Urumović Sr.***

### **Anonymous Referee #1**

Received and published: 1 September 2014

General comments: The presented research study aimed to investigate the relation between mean grain size and effective porosity with permeability. It discusses an interesting idea to evaluate different indication of grain size which can be used as universal parameter for all grain type ranging from gravel to silty-clayey deposit. The manuscript, however, requires a significant revision to be read and understood easy. The body of manuscript needs to be reconsidered to be more intuitive and consistent and it also needs proof reading.

Specific comments:

The information provided into the manuscript by section 3-1 and specifically equations 1 and 2 are not clear and if true it is suggested that they are removed.

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The parameters of Daa, Dag, and Dah were used in the text, table, and figures but never defined in the text.

Figures caption needs to be more informative with detailed explanation of each graph. Figures 2, 8, and 10 do not seem to be required.

Figures 11 and 12 are not used!!

Table 1: Please provide absolute values not percentage in difference

Table 2: Better to keep the same parameters presented in Table 1. What Geom. and Arithm. means and where they came from? It needs to be explained in the text or preferably in the caption of the table.

Section 4.1.3 and Table 4: It would be easier and more informative if these data are presented in a figure. No need for table as it does not provide any information more than R value.

Detailed comment:

6677: Line 1-3: Needs to be rewrite.

6678: Lines 14: Average mean or mean?

6678: Lines 18-20: Long sentence needs to be re-write to be read easier.

6678: Line 22: researches =>research studies

6681: Line 11: specific surface area

6681: Line 16: end => and

6683: Line 11: specific surface area

6683: Line 18: then => than

6684: Lines 19-24: duplicated

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6684: Line 20: Fig 4 is used before Fig 3

6690: Table 4 comes before Table 3

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Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 11, 6675, 2014.

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