**Comparison of Chezy's & Manning’s Coefficient for Open Channel Flow for different Sediments using Hydraulic Bench**

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**ABSTRACT:**

In the present scenario the distribution of water for various purpose has been without major losses a challenge. The paper discusses the variation of the Chezy's constant and Manning's rugosity coefficients being the two most important determinants for efficient transport of water. The experiment involves using different sediments that the river might carry like coarse aggregate,sand ,clay and vegetation like grasses and shrubs. The experiment is carried out using hydraulic bench or tilting flume apparatus. The literature has the Chezy’s constant directly proportional to the flow discharge while the Manning’s rugosity co-efficient is inversely proportional to actual discharge. The Manning’s and Chezy’s roughness coefficient of different canal sediments were determined using the orifice meter. The experimental value of Manning’s and Chezy's coefficient of various beds were determined and roughness coefficients table is evaluated. In accordance the relationship of Manning's (n), Chezy’s (C) with flow velocity, bed slope, and hydraulic radius were studied and evaluated.

**Key words:** Chezy’s constant, Mannings rugosity coefficient, discharge etc.,