

Experimental Evaluation of Workability and Compressive Strength of Concrete With Sediments From Dam

Authors : Khouadjia Mohamed Lyes Kamel, Bensalem Sara, Abdou Kamel, Belkadi Ahmed Abderraouf, Kessal Oussama

Abstract : The experimental study was conducted on sediments dredging from the dam of Bni Haroun, the most important and the largest dam in Algeria. The first phase of the work was to substitution of crushed sand with sediments to study the workability and compressive strength of ordinary concretes. The second phase of the work is to study the behavior of concrete with sediment under the effect of the freeze-thaw cycles. The results showed that the mechanical performance of concretes with sediments is better with a substitution rate of 10%.

Keywords : sediments, concrete, dam, workability, compressive strength, freeze-thaw cycles

Conference Title : ICACSE 2023 : International Conference on Advances in Concrete Surface Engineering

Conference Location : Istanbul, Türkiye

Conference Dates : February 16-17, 2023