Improving the Properties of Concrete using Seawater with High Reactive Metakaoline and Sodium Mono Florophosphate

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Improving the Properties of concrete using seawater with high reactive metakaoline and sodium mono florophosphate. issue : Processing of concrete consumes lot of desalinated water, which is not available, especially in Qatari environment. Also concrete exposed to corrosion factors such as soil salts and CO2 in atmosphere, causing damage to buildings in Qatar. Hypothesis: (1) We will use the seawater in the processing of concrete with higher resistance to pressure. (2) There is a positive impact to use seawater and metakaoline to resistance of concrete to humidity (decreasing permeability). (3) There is a positive impact to use seawater and metakaoline in formation of concrete crystals. (4) There is a positive impact to use seawater and metakaoline to resistance. Substances: Portland cement - Fresh Water - Seawater. High reactive metakaoline - Sulfuric acid of concentration 4%- Nitric acid of concentration 4%. Used curriculum: Experimental curriculum. As well as we are studying physical and chemical properties for different samples by measuring equipment and chemicals. Variables: - Independent variable: seawater, fresh water and metakaoline. - Dependent variable: concrete properties (resisting pressure- crystals formation-permeability -resistance of acid impact). - Rogue variables: Temperature-type of cement-degree of salinity of the water-impurities in the seawater. The experiments were done as follows: 5 times and excluding the greatest and lowest results to ensure the greatest accuracy. (Note that in the permeability experiment, a sample was ruled out due to the lack of quality test). Data analysis of compression test: Using the seawater with high reactive metakaoline increases the strength of the sample holed pressure compared to rest samples. The repor

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