عنوان مقاله:

Prediction of chloride penetration in the concrete containing magnetite aggregates by using Adaptive Neural Fuzzy (Inference System (ANFIS

محل انتشار:

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خلاصه مقاله:

This paper aims at predicting chloride penetration in the concrete containing magnetite aggregates by using Adaptive Neural Fuzzy Inference System. The study studied the effect of aggregation types on chloride penetration at 90 days by considering four aggregation types for fine aggregates with fixed soft modulus and making some tests and maintaining them in vitro. In order to establish the terms of the standard chloride, the built prototypes were kept in a solution of water and sodium chloride, and then the experiment of chloride penetration was performed by grinding of the samples at different depths. The results used to predict the chlorine ion penetration by using Neural Fuzzy system. The results of the testing phase of the model have a correlation coefficient above 90% and the error rate is 5%. It indicates that ANFIS can be used in the prediction

کلمات کلیدی:

Concrete, Magnetite, permeability, Adaptive Neural Fuzzy Inference System

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