

## عنوان مقاله:

Application of Artificial Neural Networks to Evaluate the Influence of Internal Friction Angle and Over Consolidation Ratio on Coefficient of Earth Pressure at Rest

## محل انتشار:

دومین کنگره بین المللی سازه ، معماری و توسعه شهری (سال: 1393)

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## خلاصه مقاله:

The prediction of coefficient of earth pressure at rest ( $K_0$ ) of soil is of major importance in a wide variety of geotechnical problems. Evaluation of the effect of soil mechanical properties, such as internal friction angle ( $\phi$ ), and stress history, such as over consolidation ratio (OCR), on  $K_0$  variation looks to be necessary. Numerous investigations have been carried out and many researchers have presented their relationships based on substantial database of soil tests. This study designs an ANN model to predict the coefficient of earth pressure at rest of soil in comparison with a database. Then, the ANN model has been trained and tested with database. By validating the model, accuracy of ANN has been accepted. The sensitivity analysis of model to input variations is the other purpose of this study.

## کلمات کلیدی:

Internal Friction Angle, OCR, Coefficient of Earth Pressure at Rest, ANN

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/353099>

