

## عنوان مقاله:

Study of Effect of Lime on Uniaxial Compressive Strength of CL-ML Soil Containing Sodium Chloride

## محل انتشار:

چهارمین همایش بین المللی مهندسی ژئوتکنیک و مکانیک خاک ایران (سال: 1389)

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## خلاصه مقاله:

Development of civil and structural activities and extension of good quality lands into low resistance lands, cause necessity of establishment of foundation on loose and problematic soils more than before. Soil stabilization by lime is one of the common methods of soil improvements which has been considered and used from far periods. In most parts of Iran, especially in tropical areas, sodium chloride can be found naturally in the soil which it's interaction by soil is ionic and weak. Considering that this weak ionic band can break quickly by score erosion and cause low resistance and more settlement, soil stabilization of salty soils by lime can be taken into account as an effective method because of lime effects on improving fine grained soil strength. Soil used in this study is CL-ML which was made to evaluate the effect of lime on soil containing sodium chloride with 2, 4, 6 and 8 percent lime and 1, 2, 3 and 5 percent sodium chloride so in the states of mixed and separate in the compaction mold on optimum soil moisture. By providing laboratory samples and mixing lime and sodium chloride separately and together and uniaxial testing of samples after 7 and 28 days, It was shown that increasing lime percentage and time of curing on samples containing lime increase unconfined compressive strength. Besides, by increasing sodium chloride about 3 percent and after 28 days unconfined compressive strength will grow and before that low strength was seen. Also mixing lime and sodium chloride together at days of 7 and 28 make unconfined compressive strength increase

## کلمات کلیدی:

Stabilization, Fine grained soil, Sodium Chloride, Lime, Compressive Strength

## لینک ثابت مقاله در پایگاه سیویلیکا:

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