عنوان مقاله:

Effect of changing shear strength in clay soils in result of leaching salt of soils on the slope stability

محل انتشار:

دومین کنفرانس بین المللی یافته های نوین پژوهشی در شیمی و مهندسی شیمی (سال: 1395)

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خلاصه مقاله:

Leaching in soils is the important subject in the chemical engineering In matters relating to water and soil. Leaching resulted in removal salts of soils and resulted reduction strength and physical properties of soils. Lixiviation of soluble salts cause the change of physical properties as unit weight, void ratio, atterberg limit, hydraulic conductivity and specific gravity (Gs). In result of have become loose the soil structure, strength parameters are reduct. One of the effects of reduction strength in soils is instability slopes that finally cause sliding. In this study with carry out series of chemical, physical and strength tests effect of leaching have been appointed and investigated on the north of Iran's clay soils. This study indicated that in result of leaching the soil structure have been porous and removal the soluble salts and part of the fine particle change the dry unit weight, void ratio, Gs and hydraulic conductivity. Also leaching cause the reduction of mechanical properties content of unconfined compressive strength, Elasticity of modulus, Cohesion and friction angle in two condition as drained and undrained have been changed. Then with use as result of laboratory test and consideration a case study and with use of the software (Geo-slope) effect of leaching in sliding has been investigated.

کلمات کلیدی:

Leaching, Clay Soils , Modulus of Elasticity , Stability , Salt of Soils