

## Reinforcement Effect on Dynamic Properties of Saturated Sand

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**Abstract :** Dynamic behavior of soil are evaluated relative to a number of factors including: strain level, density, number of cycles, material type, fine content, geosynthetic inclusion, saturation, and effective stress. This paper investigate the dynamic behavior of saturated reinforced sand under cyclic stress condition. The cyclic triaxial tests are conducted on remolded specimens under various CSR which reinforced by different arrangement of non-woven geotextile. Aforementioned tests simulate field reinforced saturated deposits during earthquake or other cyclic loadings. This analysis revealed that the geotextile arrangement played dominant role on dynamic soil behavior and as geotextile close to top of specimen, the liquefaction resistance increased.

**Keywords :** dynamic behavior, reinforced sand, triaxial test, non-woven geotextile

**Conference Title :** ICSRD 2020 : International Conference on Scientific Research and Development

**Conference Location :** Chicago, United States

**Conference Dates :** December 12-13, 2020