**SOIL STABILIZATION AND REINFORCEMENT**

**ABSTRACT**

The geotechnical engineers design foundations and other structures on the soil after investigation of the type of soil, its characteristics and its extent. If the soil is good at shallow depth below the ground surface, shallow foundation such as footings and rafts, are generally most economical. However if the soil just below the ground surface is not good but a strong stratum exist at a great depth, deep foundations, such as piles, wells and caissons are required. Deep foundations are quite expensive and are cost effective only in the where the structure to be supported is quite heavy and huge. Sometimes the soil conditions are very poor even at greater depth and it is not practical to construct even deep foundation. In such cases various methods of soil stabilization and reinforcement technique is adopted. The objective is to improve the characteristics at site and make soil capable of carrying load and to increase the shear strength decrease the compressibility of the soil.