## Design of 300 m high artificial mountain using geosynthetics



The study presents reinforcement parameters for a 300m high artificial sand mountain. It is first attempt to design such huge structure with geogrid reinforced soil in the world. Limit equilibrium method is used in this study. Hit and Trial method is then used to optimize the reinforcement parameters and achieve desired factor of safety. The obtained reinforcement details can be helpful in designing high rise reinforced soil structures. The reinforced soil structure is stable, economic and easy to construct as compared to unreinforced one.

Prof. J. N. Mandal, Department of Civil Engineering, cejnm@civil.iitb.ac.in