

Keeping electrokinetic phenomena in tropical peat into perspective

ABSTRACT

In order to conceptualize the electrokinetic phenomena in tropical peat soils, a comprehensive review of the literature got into perspective. Peat soils represent an accumulation of disintegrated plant remains which have been preserved under condition of incomplete aeration and high water content. Electrokinetic techniques are innovative ground improvement methods for soft soils. In this technology with minimal disruption can cause electrochemical effects in soft soils, leading to changes in soil's geomechanical properties. The high water content, net negative charge, high specific surface area, the fully pH dependent of the charge surface, and high resistivity of peat soils all make suitable environment for utilization of electrokinetic techniques and coax researchers into resolving peat's difficulties from geotechnical and geoenvironmental viewpoint.

Keyword: Colloids, Electrokinetic phenomena, Tropical peat soils