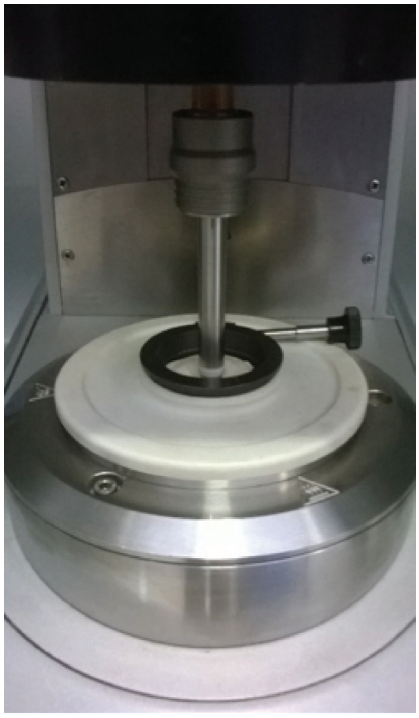
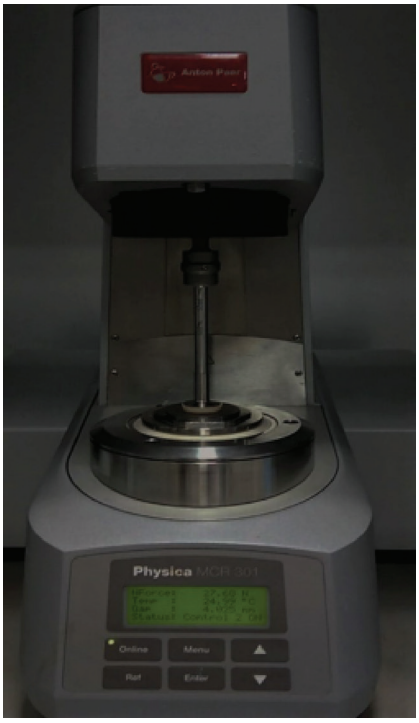
Rheology of soils





Planning developmental activities in locations having clayey (fine-grained) soil has always been a challenge to geotechnical engineers. Rheological approach, capable of small strain measurements, to understand the micro-mechanical process enables in revealing the response of such soils to external stresses. Correlations between soil specific and rheological parameters are being developed which would aid in obtaining quick first-hand information about site conditions. The research would aid in, predicting the phenomena of slope failures involving frequent landslides, debris flows, and mud flows caused due to uncertain and extreme weather conditions; stabilisation of the soft grounds for infrastructural development; mixing and handling of soils slurries for bulk movement as in transportation of dredged materials for various nearshore and inland utilisation; mineral processing industries; and in restoration of water treatment plants.

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