

# Experimental modeling of the effect of the chemical action on the mechanical behavior of clays

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## **Abstract**

The work presented in this article, contribute to the improvement of methods of modeling unsaturated soil, and more specifically the study of the influence of the presence of chemical substance on the overall mechanical behavior of soils. To this end, we conducted in laboratory a series of permeation oedometric tests with loading various, on the clay and in the presence of chemical contamination. The ground deformations are a function of mechanical stress, suction (non saturation) and the mass concentration of the contaminant. This work thus allows us to answer the following questions: (i)What is the influence of mechanical loading on the change in concentration by the effect of consolidation? (ii)What is the influence of the chemical on the mechanical properties?

**Keywords:** behavior law, saturated soil, unsaturated soil, contamination, model, modeling