# Adsorption and Transport of Arsenic and Lead in a Loessial Soil. (A05-mason062251-Poster)

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## Abstract:

The excessive use of heavy metals in agriculture and industry poses a treat to environment. Further, most studies conducted in recent years have quantified sorption and transport parameters of single trace elements in soils. It is objective of this study to quantify sorption and transport parameters of selected trace elements in a loessial soil. The trace elements, arsenic, cadmium, copper, lead, molybdenum and zinc were used in this study. Batch experiments were conducted to determine sorption of a single element or the mixture on these elements on a Memphis soil (Typic Hapludalf). A miscible displacement study was conducted to quantify transport of a mixture of these elements in large laboratory soil columns. The behavior of a trace element in the presence of the others in the batch and transport experiments will be discussed.

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