

SUPER – Stuttgart University Program for Experiencing Research Project Information

Institute's Information

Name of Institute Research Facility for Subsurface Remediation (VEGAS), University of Stuttgart

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Duration of Project/Number of Students

June/July x

June/July/August x

Number of Students 1

Name of Project Mobility of Contaminants

Testing Immobilization Approaches with PFAS-contaminated Soils

Beneficial Skills
& Knowledge Experimental/practical work in our test facility and analytical laboratory

mathematical/numerical modelling can be explored if this is desired

Description of Work

Per- and polyfluorinated alkylated substances (PFAS) are ubiquitous and pose a threat to groundwater quality. Typical sources are large scale non-point pollution related to agricultural practices and point pollution originating from firefighting foams.

Due to the mobility and persistence of PFAS with more than 4000 compounds, research regarding their environmental fate, transport in the subsurface, and innovative remediation approaches is necessary.

Our project addresses the challenges to immobilize PFAS in the soil. Therefore, we conduct experiments on various scales and under various saturation conditions. These include batch as well as column and lysimeter experiments. The SUPER-student will be involved in the set-up, operation, and evaluation of batch-, column and pilot scale experiments. If motivated, numerical modelling of PFAS transport is an option.

