



SUPER – Stuttgart University Program for Experiencing Research Project Information

Institute's Information

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

Contact Person PD Dr.-Ing. Claus Haslauer

Phone +49 (0) 711 685 – 64716

e-mail jobs.vegas@iws.uni-stuttgart.de

Duration of Project/Number of Students

June/July x

June/July/August x

Number of Students 2

Name of Project Fate and Transport of PFAS in the Unsaturated Zone and Remediation Approaches

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 point sources (e.g., firefighting foam) and 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, lysimeter, and large tank experiments. The SUPER-students will be involved in the set-up, operation, sampling, and evaluation of these experiments. If motivated, numerical modelling of PFAS transport is an option.

