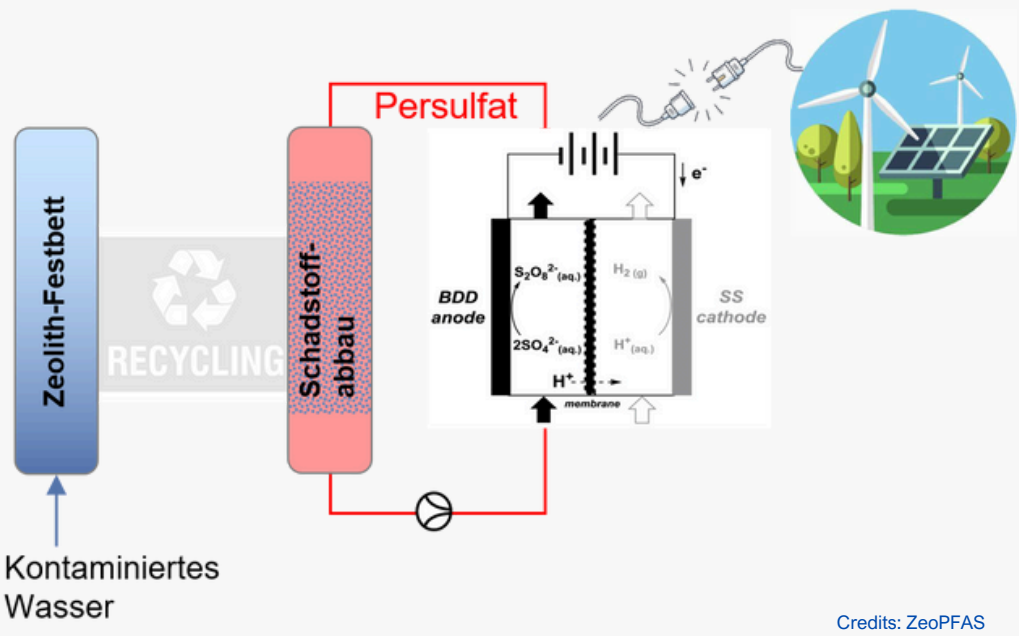
transfun Project

Idee fördern | Umsetzung beschleunigen

ZeoPFAS

On-site regenerable zeolite adsorber for the removal of per- and polyfluorinated chemicals (PFAS) from waste water



Credits: ZeoPFAS

Project:

Per- and polyfluorinated alkyl compounds (PFAS) have been used in a variety of applications since the 1940s. ZeoPFAS offers an efficient method for the purification of (waste) water containing PFAS.

Financial Volume / Term:

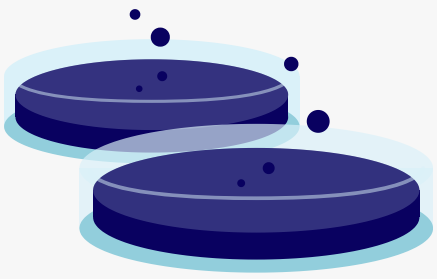
75.000€ / 15 months

Team:

Project leader: Ariette Schierz & Anett Georgi
Mentor: Natalie Hammer (winning plastics)

Patents:

Patent familiy: EP3873659A1, US20210346862A1, CA3115010A1, AU2019373567A1



Status Quo:

PFAS are non-degradable and hazardous but also widely used and distributed in our environment.

Challenge:

Recycling of PFAS in production processes and remediation of damage.

Solution:

ZeoPFAS sees the solution to PFAS pollution in the use of zeolites as stable, efficient and regenerable inorganic adsorber materials. The efficiency of the universally applicable process is to be demonstrated using the example of electroplating waste water. The team developed a two-stage process.
First, PFAS are adsorbed and concentrated in a fixed-bed reactor. Second, PFAS are degraded using persulfate. The process has now been implemented at partner winningplastics and is being jointly tested on a pilot scale with real waste water.

Partner:

winningplastics

If you are also interested in funding, please get in touch with us by email, phone or in person!

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