

## **MAGNETIC PARTICLES AS A NEW ADSORPTION MATERIAL FOR THE PURIFICATION OF LIQUID MEDIA**

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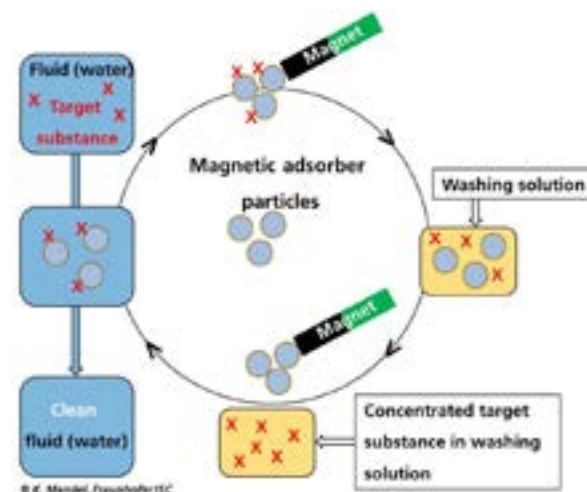
## Innovative liquid treatment

The removal of dissolved substances from aqueous solutions is a field of research that has gained much attention lately. Usually the target substance is harmful for the environment and/or of great value. At the Fraunhofer IWKS magnetic particles are used to selectively remove these target substances from aqueous solutions.

### Our Magnetic Adsorber particles:

- specifically tailored for the desired target substance
- removal of valuable substances as well as pollutants from fluids
- reversible adsorption/desorption process
- separation from the fluid via magnetic separation methods
- easy and inexpensive preparation

## Particles can be used in several successive adsorption-desorption-cycles



### Examples for already realized applications:

- removal and recovery of phosphate from wastewater
- adsorption and removal of heavy metals such as Hg, Cu, Ag, Zn etc. from water
- removal of pollutants