

# OXERAM

## Optimisation of flocculation for tertiary filtration processes and evaluation of sustainability of tertiary wastewater treatment

### Background

The OXERAM projects aim at the development of a cost and energy efficient advanced tertiary wastewater treatment for disinfection and advanced phosphorus removal. The most sustainable solution to meet the goals of the Water Framework Directive and to ensure the bathing water quality in Berlin surface waters will be identified.

OXERAM 2 is a long term project which will include the assessment of pre-ozonation as pre-treatment to reduce membrane fouling and the assessment of the disc filter technology for advanced phosphorus removal. Additionally the sustainability of different processes for advanced wastewater treatment such as rapid filtration, membrane filtration, UV disinfection and ozonation will be evaluated.

The goals of OXERAM 2 are:

### Goals

- Quantification of the benefits of pre-ozonation for membrane filtration
- Development of a new strategy for online fouling monitoring and process optimization
- Assessment of the possible effluent quality and the process reliability of the microsieve technology
- Compare the ecological impact of tertiary treatment
- Creation of a knowledge based decision tool for tertiary treatment



microsieve unit (Hydrotech)



WWTP Ruhleben

### Project Partners



### Funded by



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(European Regional Development Fund)

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Project budget: 2.174.478€

### Contact

**ULF MIEHE**  
Kompetenzzentrum Wasser Berlin gGmbH  
[Ulf.Miehe@kompetenz-wasser.de](mailto:Ulf.Miehe@kompetenz-wasser.de)

**REGINA GNIRß**  
Berliner Wasser Betriebe  
[Regina.Gnirss@bwb.de](mailto:Regina.Gnirss@bwb.de)



[www.kompetenz-wasser.de](http://www.kompetenz-wasser.de)