



Graduation place

**Subject: Smart biofilm repellent pipe system**

**Background**

In water carrying pipes, biofilm is often present. Nowadays, with increasing temperatures, this might become more of a problem in the future. Being able to control this biofilm would be beneficial for water quality. In this assignment you are going to investigate whether a new technique could be used to control biofilm formation in water carrying pipes, involving a newly developed type of pipe, which can either repel or remove a biological layer with the help of electro physical effects. You are working in the Smart Water Grids theme of Wetsus, with highly motivated researchers and involved companies. See also <https://www.wetsus.nl/research/research-themes/smartwatergrids> for more information.

**Your profile**

The ideal candidate has a background in electro technical/environmental/chemical or a similar field, and looking for an internship or BSc/MSc thesis. Having experience with biology or engineering and relevant lab experience is an advantage.

**Our profile**

Wetsus, European Centre of excellence for sustainable water technology is a facilitating intermediary for trendsetting know-how development. Wetsus' scientific research program is defined by the private and public water sector and conducted by leading universities.

**Your tasks**

- Develop a prototype of water carrying pipe, together with the help of pipe manufacturing companies.
- Carrying out experiments, analyzing and reporting the results.
- Experimenting with different scenarios for optimizing results

**Our offer**

- Working in an international and multidisciplinary environment.
- Working on a disruptive new technology with high tech instruments
- Monthly allowance for living expenses of €350/month.
- Opportunity to develop your analytical and experimental skills.

**Duration and Logistics**

The project will be carried out in Wetsus, Leeuwarden. Duration of the project is foreseen as minimum 3 months. Starting date is flexible.

**Applications**

The interested candidates should contact Doekle Yntema ([doekle.yntema@wetsus.nl](mailto:doekle.yntema@wetsus.nl)). Please provide your CV, your transcript and your motivation letter (A4).