

Advanced biological treatment for the removal of nutrients



Introduction

Climate change and the continuous population growth are key contributing factors to clean water shortage worldwide. One way to mitigate the rise of water scarcity is by improving the efficiency of wastewater treatment process and the possibility for water reuse.

The conventional biological processes for wastewater treatment are proven and robust solutions. However, in many cases there are existing better alternatives, which can deliver attractive and sustainable solutions to our clients.



Nutrients in the wastewater it's an extended issue in environment. Due to stricter regulations, Industries & Municipalities need to come up with solutions to remove nutrients from wastewater to comply with regulations while having a compact and economic solution.

Objective

The goal of this internship is to compare different advanced biological systems with specific biomass growth. The assignment will include a literature review, after which lab scale experiments will be performed to verify the outcomes of the desk study. Wastewater from various origin will be tested and data will be collected, analysed, and translated in use for a full-scale design. Finally, an estimation of the investment and operational costs will be made based on the experimental data.

#missionwater



Internship specifications

Type of education: BSc or MSc Chemical, (Bio)Process or Environmental Engineering

Supervisor: Iñigo De Eguren

Location: Doetinchem

Duration: 4 – 6 months

Application

If you are interested in this internship at Nijhuis Saur Industries please send the following to Iñigo De Eguren at Internship.NWT@nijhuisindustries.com:

- your motivation
- CV
- the period and duration of your internship