Internship opportunity: Point-source GHG emissions from wastewater treatment plants.

Flexible starting time (MSc)

Nutrient loadings from wastewater treatment effluent that is being discharged into natural waters, is higher than the limits set for these natural systems. Therefore, the point-source loadings of effluent contributes to eutrophication at those discharge sites. It is expected that these higher nutrient concentrations cause higher greenhouse gas emissions. However, this has rarely been measured at these spots. The goal of this internship is therefore to assess emissions from these discharge sites in natural waters. Additionally, we may have the possibility to set up artificial ditches in the greenhouse behind Huygens, where we can measure greenhouse gas emissions coming from discharge of the wastewater treatment plants, and emissions coming from discharge of a post-treatment step with floating plants (an "aquafarm", see www.aquafarm.nl). Of course, other plans can be discussed as well.

I am looking for an independent and enthusiastic student, who will measure GHG emissions at several discharge sites (before discharge, at discharge point, and after discharge), and measure nutrient concentrations to see whether we can relate higher emissions to higher nutrient loading. Preferably, the student owns a drivers licence.

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