

Water-quality based control of urban wastewater systems



Real Time Control of urban wastewater systems is widely used to reduce the environmental impacts of these systems. Traditional control are based on hydraulic parameters ("how much water is going to arrive?"), but recent development in monitoring devices open the way to water-quality based control strategies ("where is the most polluted water"? "where can we send it, so that the environmental impact is minimized"?).

The project will investigate the potential of developing/using new control strategies that consider water quality parameters. This can be tested in different case studies (Copenhagen, Kolding, Luxemburg)

Tools: WEST-IUWS library, tools for statistical data analysis (MATLAB or R).

Project type

Topic is suitable for MSc project

Pre-requisite

General understanding of water quality process modelling & urban drainage, interest in modelling

Group size

1-3 students (separate projects)

Department of supervisors

Main supervisor: DTU Environment

Co-supervisor: DTU Environment/Krüger A/S

Contact person

Assistant professor Luca Vezzano, DTU Environment (luve@env.dtu.dk)

