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Réseau d'excellence
des sciences de l'ingénieur
de la Francophonie

EFFECT OF ANTIBIOTIC DOSAGE ON THE PERFORMANCE OF SPONGE MEMBRANE BIOREACTOR

Context

Trace contaminants from medical waste, hospital wastewater can have adverse effects to the environment. Antibiotics are one of the pharmaceutical compounds having potential health risk to living organisms and humans. Membrane bioreactor technology can effectively remove organic and nitrogen compounds and also certain amount of micro pollutants. Therefore, the study on effect of antibiotics dosage on the behaviour of water and sludge quality is proposed.

Objectives

The research objectives are as follows:

- Evaluate the impact of antibiotics concentrations on performance of Sponge MBR
- Evaluate of the impact of antibiotics concentrations on water and sludge characteristics.
- Investigate membrane fouling behavior.

Overall research content

- Study on physio-chemical and biological parameters of water and sludge at various antibiotic dosage adding into MBR.

Qualification requirement

- Passion for research, honest and responsibility

Length of the internship: 3-5 months

Coaching institution: Ho Chi Minh City University of Technology (HCMUT) & CARE-RESCIF

Location of the internship: HCMUT