PhD Candidate Profile

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Research Group (if relevant):
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Funding body:

Conselho Nacional de Desenvolvimento Científico e Tecnológico (Cnpq) - Brasil

Area (field) of study:
Removal of micropollutants by biological and advanced oxidation processes

Thesis Title:
Removal of organic matter, nutrients and endocrine disrupters in aerobic granular sludge systems combined with advanced oxidation processes

Abstract:

Micropollutants are compounds that are found in water in low concentrations (in order of micrograms or nanograms per liter) and which have serious issues in aquatic organisms. Endocrine disrupters are a type of micropollutants that exhibit changes in the endocrine system of organisms such as fishes.
Aiming the removal of α-Estradiol and β-Etinilestradiol (natural and synthetic endocrine disrupters) were tested the biological process of aerobic granular sludge and the oxidative process of photocatalysis with UVC and TiO_2 using permeation of different concentrations of peroxide in

alumina membrane, to remove this type of micropollutants. After testing the two processes both were evaluated to find the best removal or degradation results.

Collaborations:

Publications:

Presentations: