

PhD Candidate Profile

Name:

Valeria Acevedo García

Research Group (if relevant):

Bioengineering and Sustainable Processes Group (BiosUV)

Research Centre (if relevant):

N/A

Department/School(s) (if relevant):

Department of Chemical Engineering

College:

University of Vigo, Vigo

Supervisor(s):

Dr. M^a Ángeles Sanromán Braga

Funding body:

N/A

Area (field) of study:

Chemical Engineering

Thesis Title:

Design and optimization of processes based on advanced oxidation for emerging contaminants treatment.

Abstract:

The main objective of this thesis project is the search for treatment strategies using advanced oxidation techniques, based on the BIOSUV group previous results, proposing a multi-stage treatment: Concentration-Degradation. Initially, the study will be focus on the synthesis of new functionalized adsorbents for selective adsorption. In addition, these materials can be used for electrode production, which based on the principles of electro-adsorption, can adsorb pollutants selectively. Also, the study will focus on the development of oxidation processes using as oxidizers other agents besides hydroxyl radical, such as persulphate anion, for contaminants removal in developed adsorbents. Once the performance of the various evaluated processes has been analyzed, the selected oxidation process will be optimized and scaled.

Collaborations:

N/A





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Publications:

N/A

Presentations:

N/A