

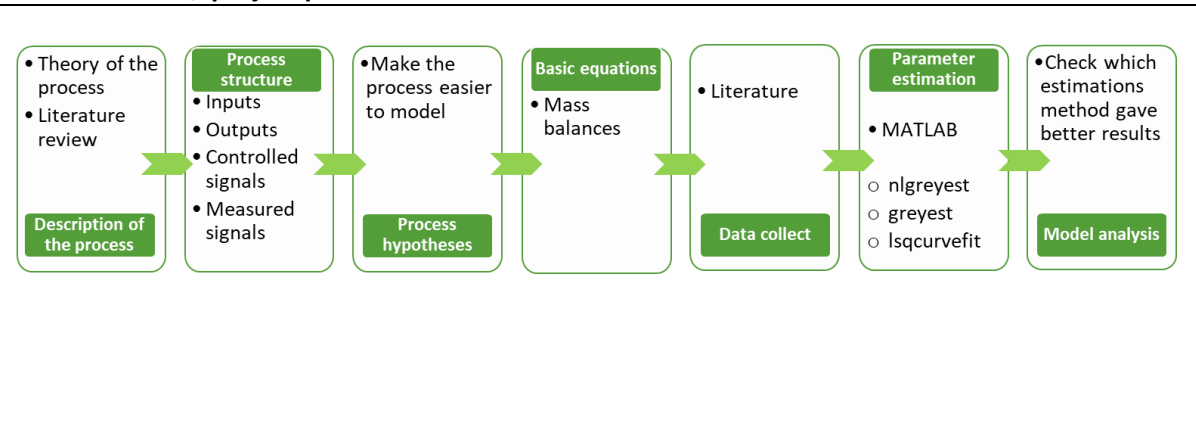


Start- end date: 01/03-26/07/2019	 
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Problem / assignment

Implementation of technologies for recovery of resources from urban wastewater can be tedious however mathematical modelling could speed up this process. Thus, the goal of this project is build grey-box models of the processes from the Evides pilot plant (NEREUS project), from various types of urban wastewater streams, in order to predict the quality and quantity of the effluent and recoverable products.

Used methods / project phases



Results

Was possible to make a parametric estimation with MATLAB using the methods: nlgreyest, greyest and lsqcurvefit. Based on the results a prediction the quality of the effluent and recoverable products were found allowing to decide which method gave better results. However, poor and unrealistic results for some processes (e.g. negative concentrations) was found. Thus, as recommendations for future work are: (i) improvement of the equations; (ii) try new estimation methods and (ii) test different data set.

Extra info / advice / link to final document and presentation

https://docs.google.com/presentation/d/17-LTzWchRr5xMuzt1rOkoi-wBUQFrAeaJn_Ahln1D_A/edit?usp=sharing

<https://drive.google.com/file/d/1sDy5VKKS6H5VlScwqYGBgBqcXbdn5psh/view?usp=sharing>

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