

Proposition of internship for international students in Chemical Engineering and Chemical Technology: **“Simulation of sustainable processes using Aspen Plus”**

This proposition is open for students who wish enlarge their knowledge in numerical simulation of chemical installation using Aspen Plus program. The purpose of numerical simulation is to model and predict the performance of a process. The process performances could be predicted using computer-aided process simulation tools. The ASPEN Plus is one of the most powerful and widely used software.

The aim of training is to produce some “step by step” documents of simulations of industrials plants. These documents are intended to be helpful tools for students and could explain how we can perform the simulations using Aspen Plus. The candidate will perform the numerical simulations of some industrial installations or simple industrial plants and after will describe how to do the simulation in details in “step by step” document. Several major industrial processes for bio-fuels will be simulated. Practical examples of specific processes will be analysed by numerical simulation

Therefore, a basic understanding of the chemical engineering principles is required to supply reasonable values of input parameters and to evaluate the suitability of the results obtained.

Prerequisites:

1. Basic knowledge in Unit Operations in Chemical Engineering, like heat and mass transfer
2. Basic knowledge of thermodynamics, thermodynamics of solutions, phase equilibria
3. Basic knowledge in numerical programming
4. Good English skills

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Level of studies: minimum 3rd year

Duration: 2 to 12 months

Keywords: Aspen Plus, numerical simulation, heat and mass transfer, Erasmus

No funding available from the laboratory. See Erasmus placement fundings from your institution if you are a UE student.

9th June, 2018