

## Research Internship

11.01.2022

# Commissioning of a Laser Induced Fluorescence Measurement System and other workshop tasks

Research Internship Master CS0294, 5 ECTS (150 hours) or CS0297, 10 ECTS (300 hours)

### Description

In our workshop, the commissioning of a Laser Induced Fluorescence Measurement System (LIF System) needs to be done. The System consists of a UV-Laser and a camera and will be used to investigate the mixing of gas streams. One gas stream is infused with acetone and its fluorescence will be activated by the UV Laser. The captured images will then be analyzed to find concentration fields. Therefore several engineering and mounting tasks need to be performed.



Figure 1: Long axis agitator [1]

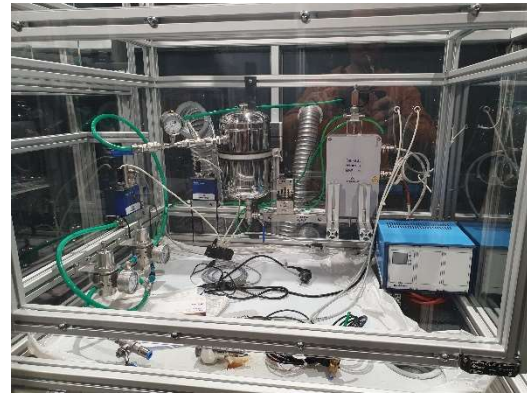


Figure 2: CFD Simulation Long axis agitator [1]

### Tasks

- Literature research
- Solid works design
- Mounting the designed components
- Checking all the System Components
- Commissioning of the trial facility

### Requirements

- Solid works
- Mechanical engineering with a practical orientation
- Hands on mentality

If you think you are the right candidate to solve this task, please contact me.  
You can **start the research internship anytime**.

I am looking forward to get to know you.

### Contact

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