Adriana PEREIRA CONTRERAS SÁNCHEZ

PhD student

Project: Characterization of the surface properties of the microalgae *Chlorella vulgaris* to optimize its harvesting by Microfluidics

Supervisor(s):

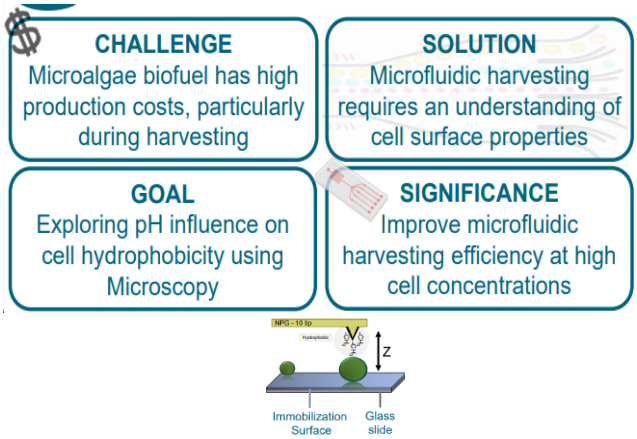
Cécile Formosa-Dague - (TIM) - TBI

Bruno Lartiges (GET) – Paul Sabatier Université

Funding: POSSEIDON Project - CNRS

Keywords: Microalgae · Atomic Force Microscopy (AFM) · Microfluidics Harvesting

Background



This project aims to understand better the interactions that occur on the surface of microalgae cells. By doing so, we aim to modulate the physical and chemical properties of the cell wall to prevent clogging and aggregation inside microfluidic platforms during harvesting. To achieve this, Atomic Force Microscopy (AFM) will be used to measure different parameters of the cell wall.

Currently working on

- ✓ Cell Surface Interactions – Investigating the hydrophobicity properties of the microalgae cell wall by AFM.
- ✓ Atomic Force Microscopy Analysis – Using AFM to measure and characterize physical and chemical parameters of the cell wall.

Scientific communications

Poster presentation at Linz WinterWorkshop (01/2025)

Contact me

- LinkedIn https://www.linkedin.com/in/adrianapcsanchez/
- Orcid https://orcid.org/0009-0005-7117-0167
- Website https://adrianapcsanchez.wixsite.com/adrianapcsanchez

Université de Toulouse

135 Avenue de Rangueil I 31077 Toulouse Cedex 4

I Email: adriana.sanchez@insa-toulouse.fr

www.toulouse-biotechnology-institute.fr