



Maëlle NISOLLE

Ph.D. student in Chemical Sciences

My interest for research led me to pursue a Ph.D., and my thesis further developed my appetite for tackling complex challenges that engineers must address, especially challenges relatives to climate changes.

EDUCATION

Ph.D. in Chemical Sciences

Claude Bernard University / IFP Énergies Nouvelles (France) | Nov 2023 - Ongoing

Master in Chemical engineering and Materials Science - Specialising in processes, energy and environment: Highest distinction

UMons - Faculté Polytechnique, Mons (Belgium) | Sep 2021- June 2023

WORK EXPERIENCE

Ph.D. - Precipitating solvents for CO₂ capture: reactional mechanism investigation and kinetic study

Claude Bernard University / IFP Énergies Nouvelles (France) | Nov 2023 - Ongoing

Director: Pr M. TAYAKOUT (LAGEPP); Supervisors: Dr G. PÉTAUD, Dr É. LÉCOLIER (IFP Énergies Nouvelles)

- Development of microfluidics analysis tool and method
- Solvent characterization
- Test bench commissioning and experimental campaign design
- Equilibrium and kinetics modelling of three phases systems

Internship - Nitrosamine synthesis within the context of CO₂ capture

IFP Énergies Nouvelles, Solaize (France) | July 2022 - Oct 2022

Supervisor: Dr É. GIREL (IFP Énergies Nouvelles)

- Studied different nitrosamine synthesis pathways
- Characterization of products by GC-FID and NMR

COMPLETED PROJECTS

Development of a agited photobioreactor for shear stress sensitive microalgae's culture | Oct 2022 - June 2023

Simulation of volatile organic compounds by adsorption (Aspen adsorption) | Oct 2021 - June 2022

Monitoring of volatile fatty acids in anaerobic digester | Nov 2020 - May 2021

PERSONAL DETAILS

 02/05/2000


 Lyon - France

 [linkedin.com/in/maëllenisolle](https://www.linkedin.com/in/maëllenisolle)

 maelle.nisolle@gmail.com

 Driving license

TECHNICAL SKILLS

 ASPEN adsorption (intermediate)
ASPEN plus (notions)

 Chromeleon (advanced)

 TopSpin (intermediate)

 Python (intermediate)

 Microsoft Office 365 (advanced)

LANGUAGE SKILLS

■ French (mother tongue)

■ English (B2)

HOBBIES

■ Artistic swimming: 12 years of practice, 5 years as a coach

■ Environmental preservation