

Present & previous positions

- Jan. 2015 - Present** **Graduate student** at Chaire AgroBiotechnologies Industrielles (ABI) – AgroParisTech, Pomacle, France
- Production of bacterial fermentation substrates through the detoxification of pre-treated lignocellulosic biomass using membrane filtration processes.
- March 2014- Aug. 2014** **Internship** at Narbonne INRA, France
- Study of microalgae growth kinetics on dark fermentation digestate
- Heterotrophic cultures of microalgae in pure conditions, or mixed with facultative anaerobic bacteria.
 - Characterization of growth kinetics using modeling and microbiological (qPCR, SSCP, ...) and physico-chemical analysis (HPLC, GC-FID)
- June 2013- Aug. 2013** **Internship** at Grignon INRA, France
- Downscaling of an industrial process of sulfur compounds production through fermentation of *Saccharomyces cerevisiae*
- Realization of nine fermentations
 - Implementation of standard monitoring tools and automation of the regulation of some fermentation parameters

Education

- 2015 –** **PhD student**, UMR GENIAL, Chaire Agro-Biotechnologies Industrielles (ABI) Pomacle, France.
- 2011 – 2014** **Engineer Diploma** (Msc equivalent), AgroParisTech engineering school (Paris Institute for life, food and environmental sciences), specialization in biotechnologies and process engineering, Paris, France.
- 2008 – 2011** **Preparatory class for the grandes écoles**, Lycée Chaptal, Paris, France.
- 2006 – 2007** **B. Sc.**, with honors, Cergy, France

Scientific production

Publications in peer-reviewed journals :

[1] V. Turon, E. Trably, A. Fayet, E. Fouilland, J.-P. Steyer, Raw dark fermentation effluent to support heterotrophic microalgae growth: microalgae successfully outcompete bacteria for acetate, *Algal Research*, Volume 12, 2015, Pages 119-125, ISSN 2211-9264, <https://doi.org/10.1016/j.algal.2015.08.011>.

Oral Communication :

2017 – Study of phenolic compounds inhibition mechanisms on *B. subtilis* 168 through flow cytometry, AFC, 7-9th November, Reims, France FAYET A., BREHM D., DELFAU-BONNET G., CLEMENT T., BOUIX M..

2016 - Production of fermentescible substrate from pretreated lignocellulosic biomass, JJCC, 20th - 21th January, Reims, France, Fayet A.; Teixeira A.; Clement T.; Bouix M. and Lameloise M-L..

Poster :

2017 - Production of fermentescible substrate from pretreated lignocellulosic biomass, ICOM 2017, 29th July - 4th August, San Fransisco, USA, Fayet A.; Teixeira A.; Clement T.; Bouix M. and Lameloise M-L..

2016 - Production of fermentescible substrate from pretreated lignocellulosic biomass, RRB 12, Ghent, Belgium, Fayet A.; Teixeira A.; Clement T.; Bouix M. and Lameloise M-L..

Skills

Analytical Methods :

- ✓ Chromatography (HPLC)

Microbiology :

- ✓ Cell cultures
- ✓ Fermentation
- ✓ Genetics
- ✓ Bio-Chemistry

Process engineering :

- ✓ Nanofiltration
- ✓ Scale-up

Computing skills :

- ✓ Python (Numpy, Pandas, SciPy, Matplotlib, Flask, ...)
- ✓ Javascript (ES6), HTML5, CSS
- ✓ C/C++
- ✓ Databases (SQL and No-SQL)
- ✓ LaTeX
- ✓ Linux

Language

French : Native Language

English : Professional

Chinese : Beginner

Spanish : Beginner