

Tiphaine CLEMENT

Research Engineer in Fermentation and Microbiology

Chaire ABI- AgroParisTech
CEBB, 3 rue des Rouges Terres
51100 POMACLE
03.52.62.04.68

Tiphaine.clement@agroparistech.fr

Present & previous positions

- Jan 2013 - present** **Research engineer**
- Laboratory management
 - Supervision of pHD and master students
 - Conception of research projects related to (i) Lignocellulosic biomass valorization through fermentation (ii) Antimicrobial effect of biosourced phenolic compounds
- Jun 2009- Sept 2012** **phD student/ Teaching assistant, SPO-INRA/ Supagro – Montpellier, FRANCE**
- Multidisciplinary european project CAFE (Computer Aided Food Processes for Control Engineering)- FP7 KBBE
 - Use of a multistage continuous fermentation system for the study of the nitrogen metabolism of *Saccharomyces cerevisiae* in winemaking conditions
- Mars 2008- Apr 2009** **Engineer in fermentation SPO – Montpellier, FRANCE**
- Multidisciplinary project led by the *French Institute of Cider Industry* (IFPC)
 - Study of feasibility for the cultivation and drying of *Hanseniaspora valbiensis*
- Sept 2007- Jan 2008** **Quality Manager Assistant, Vignerons du Pays d'Ensérune – Carcassone, France**
- Detection of *Brettanomyces* species yeast during the process of vinification
- Sept 2006- Apr 2007** **Project Engineer** for the creation of a training center for pastry bakers, CFSE – Niamey, NIGER
- May 2005- Sept 2006** **Internship (M.Sc.), CTCPA (Technical Center for Agricultural Products Conservation) – Avignon, FRANCE**
- Technical study of new apricot species for the industrial production of canned apricots
 - Evaluation of in-line stone detection optical device in the process of canned fruit production

Education

- 2012 **PhD** – Montpellier'Supagro
- 2006 **M.Sc.** (Engineer in Science and Technology of Agro-Food Industry) - Polytech'Montpellier
- 2003 **B.Sc. in Biochemistry** – University Claude Bernard - Lyon

Research topics

- Valorization of Ligno-cellulosic biomass
- Bioconversion & Fermentation process
- Antimicrobial activity of phenolic compounds
- Microbial physiology

Scientific production

Publications in peer-reviewed journals:

Wheat and Sugar Beet Coproducts for the Bioproduction of 3-Hydroxypropionic Acid by *Lactobacillus reuteri* DSM17938

Julien Couvreur, Andreia R. S. Teixeira, Florent Allais, Henry-Eric Spinnler, Claire Saulou-Bérion and Tiphaine Clément. (2017) *Fermentation*

Metabolic responses of *Saccharomyces cerevisiae* to valine and ammonium pulses during four-stage continuous wine fermentations Clement T., Perez M., Mouret J.R., Sanchez I., Sablayrolles J.M., and Camarasa C. (2013). *Applied and Environmental Microbiology* 79, 2749–2758.

Use of a continuous multistage bioreactor to mimic winemaking fermentation Clement T., Perez M., Mouret J.R., Sablayrolles J.M., and Camarasa C. (2011). *International Journal of Food Microbiology* 150, 42–49.

Communication in congress

Effet antimicrobien de molécules dérivées de vanilline et d'eugénol Julien Couvreur, Bastien Kauffmann et Tiphaine Clément (2017) Congrès de la Société Française de Cytométrie, Reims 7 et 9 Novembre

Growth medium development based on wheat and sugar beetroot extraction by-products for the cultivation of *Lactobacillus reuteri*. Optimization for the bioconversion of glycerol Couvreur J, Teixeira A., Juste K. & Clement T. (2015) ISGC2015, La Rochelle, 4-7 mai

Use of a multi-stage continuous bioreactor for the study of microbial physiology in enological conditions Clement T., Perez M., Mouret J. R. Sablayrolles J.M. & Camarasa C. (2012) 10^e rencontre Levure Modèles & Outils. Toulouse, France.

Other contributions

Chemo-enzymatic synthesis and properties evaluation of new bio-based macrobisphenols derived from ferulic acid Reano A. F.; Chérubin J.; Wang Q.; Pion F.; Clément T.; Maillard M.-N.; Ducrot P.-H.; Domenek S.; Allais Florent 248th ACS National Meeting, San Francisco, CA, August 10-14, 2014

Synthesis, characterization, biological properties and polymerizations of new bio-based macrobisphenols derived from ferulic acid Pion F.; Reano A. F.; Wang Q.; Clément T.; Maillard M.-N.; Domenek S.; Ducrot S.; Allais Florent XVIth Florida Heterocyclic and Synthetic Chemistry Symposium, Gainesville, FL USA, March, 2-5 2014

Synthesis and characterization of new degradable polymers with antiradical & antimicrobial activities Amandine L. Flourat, Abderrahim Rekla, Bastien Kauffmann, Tiphaine Clément, Andreia R. S.Teixeira, Florent Allais, ISGC2017, La Rochelle (FR), 16-19 mai 2017

Synthesis and characterization of new degradable polymers with antiradical & antimicrobial activities Amandine L. Flourat, Abderrahim Rekla, Bastien Kauffmann, Tiphaine Clément, Andreia R. S.Teixeira, Florent Allais, Biopolymer Congress, Paris (FR), 7-9 sept 2017