

Analytical Chemist

Assistant Engineer

Present & previous positions

- Dec. 2016 - Present** **Analytical Chemist, Assistant Engineer** at Chaire AgroBiotechnologies Industrielles (ABI) – AgroParisTech, Pomacle, France
- Development of analytical protocols, measurements and analysis (SOP), data processing and reporting (for GC-MS and LC-QTOF)
 - GC-MS and LC-QTOF maintenance
 - Referent in GC-MS, LC-QTOF, TGA, DSC, GPC and HPLC
- June 2013- Dec. 2016** **Analytical Chemist, Laboratory Technician** at Chaire ABI – AgroParisTech, Pomacle, France
- Development of analytical protocols, measurements and analysis (SOP), data processing and reporting
 - GC-MS maintenance
 - Referent in GC-MS, TGA, DSC, GPC and HPLC
- June 2014- Present** **Assistant of Prevention** at Chaire AgroBiotechnologies Industrielles (ABI) – AgroParisTech, Pomacle, France
- Sept 2011- Aug 2012** **Scientific Assistant** at Laboratoire EXACT (lab specialized in chemical analysis for the wine sector), Mâcon, France
- Project
Optimization of the procedures for the analysis of haloanisoles, halophenols and lindane on several matrices by SPME and SPE, analysis by GC-MS
- Develop analytical protocols, make measurements and analysis, data processing and reporting, record the results of measurements and analyzes information and monitoring of the equipments, define requirements and make supply orders, organize assays, identify problems
- Achievements
Establishment of procedures and methods (SOP)
- March – April 2011** **Research Assistant** at Université de Montpellier 2, UMR IATE (Ingénierie des Agropolymères et Technologies Emergentes), Montpellier, France
- Project
Study of the chelation of calcium by complexing agents like emulsifying salts
- Organize assays, project management, identify areas of research, critical attitude concerning the results
- Achievements
Determination of the reaction kinetic
- April – June 2009** **Research Assistant** at Institute of Chemical Sciences, Heriot-Watt University, Edinburgh, Scotland
- Project
Determination of new inorganic compounds structures by Single Cristal X-Ray Diffraction (SCXRD)
- Process the raw data, determine the structure, and write concise reports on the properties and parameters of the crystal
- Achievements
Many structures elucidated for the different research teams

Education

- 2010 – 2012 Master in Physico-Chemical Analysis and Control**, Université Claude Bernard Lyon I, Lyon, France.
- 2009 – 2010 Bachelor of Sciences in Chemistry** (Licence 3 de Chimie), Heriot-Watt University, Edinburgh, Scotland.
- 2007 – 2009 DUT Chimie**, IUT Robert Schuman, Strasbourg, France.
- 2006 – 2007 Baccalauréat général S**, option Physique-Chimie, mention Bien, Lycée Marie Curie, Strasbourg, France

Scientific production

Patents :

[1] **Method for transforming levoglucosenone into 4-hydroxymethyl butyrolactone or 4-hydroxymethyl butenolide** Allais, F. ; Flourat, A. L. ; Peru, A. A. M. ; Teixeira, A. R. S. ; Brunissen, F. ; Spinnler, H. E. , Dépôt Avril 2014

Publications in peer-reviewed journals :

[1] **Chemo-enzymatic synthesis of key intermediates (S)- γ -hydroxymethyl- α,β -butenolide and (S)- γ -hydroxymethyl- γ -butyrolactone via lipase-mediated Baeyer-Villiger oxidation of levoglucosenone** Flourat, A. L.; Peru, A. A. M.; Teixeira, A. R. S.; Brunissen, F. and Allais,* F. Green Chem. 2014, 17, 404

[2] **Lipase- Catalyzed Baeyer-Villiger Oxidation of Cellulose-Derived Levoglucosenone into (S)- γ -Hydroxymethyl- α,β -Butenolide: Optimization by Response Surface Methodology** A. R. S. Teixeira, A. L. Flourat, A. A. M. Peru, F. Brunissen, F. Allais Frontiers in Chemistry 2016 4, 16/1-16/11

Supervision

- 2018**
(sept 2017-
march) **Jérémy Pereira,**
Fixed-term contract of Analytical Engineer for 6 months
Development and optimization of a GC-MS analysis method on expired gas for intestinal diseases
- 2017**
(march –
sept.) **Jérémy Pereira (UCBL I),**
Development and optimization of a GC-MS analysis method on expired gas for intestinal diseases
- 2016**
(april –
june) **Bérénice Geslot (UniStra) ,**
Electronic smoking of bees (analyzes by GC-MS and formulations)
- 2015**
(march –
aug.) **Giulia Guidi (URCA),**
Development and optimization of GC-MS analysis method:
Formulation of products for fumigation
Degradation of lignin

Skills

Analytical Methods :

- ✓ Chromatography (GC, HPLC and GPC)
- ✓ Solid Phase Extraction (SPE, SPME)
- ✓ Thermal analysis : TGA and DSC
- ✓ Mass Spectrometry
- ✓ NMR, UV-Vis, IR
- ✓ Atomic Spectroscopy (AES et AAS)
- ✓ Surface analysis (MEB, MET, XRF, XPS)
- ✓ Polymers NMR
- ✓ Thermal analysis : TGA and DSC

Others :

- ✓ Quality user , regulations, analytical project management
- ✓ Method development, data analysis
- ✓ Inorganic chemistry , Physical chemistry, Organic chemistry

Language

French : Native Language

English : Professional

German : Beginner