Alan Michel Claude Obled

http://rjmg.wp.st-andrews.ac.uk/category/alan-obled/
Date of Birth: 10th November 1992. Nationality: French
School of Chemistry, Biomedical Sciences Research Complex, University of St Andrews, Fife, KY16 9ST
Tel: +44 (0)1334 464 834. E-mail: ao46@st-andrews.ac.uk

I am an **organic chemist** with research interests in the modification of natural products. Specifically, my research focuses on natural products with medicinal properties. As a CRITICAT CDT student, my projects involve conducting catalytic reactions, using homogenous catalysis and biocatalysis in order to obtain analogues of the target natural products, and then screening their bioactivities, particularly antibiotic properties against a variety of bacteria. My research endeavours on harnessing the power of biosynthesis to produce complex and bio-active metabolites possessing orthogonal reactive handles that can then be diversified using the flexibility of chemistry.

Employment Record

Visiting student in the Bonnet Group, Institute of Organic and Analytical Chemistry (ICOA), Université d'Orléans, France

February 2015 - July 2015: Developed *in* silico skills for drug design using molecular modelling software, cheminformatics tools and electronic data processing software

Visiting student in the Nolan Group, Chemistry department, University of St Andrews, UK

April 2014 - August 2014: Developed organometallic chemistry skills such as Gold catalysis and Palladium catalysed cross coupling reactions

Education

PhD, University of St. Andrews, UK, Professor R. J. M. Goss

September 2015 - Present

New Antibiotics Accessed Through Understanding and Harnessing Multifunctional Enzymes for Biocatalysis. Also involved a six-month taught programme of lectures, workshops and training rotations

Degree in Chemistry "Master Chimie des Molécules Bioactives" (equivalent to a MSc.), specialisation in synthesis, Université d'Orléans, France

First year joint Organic Synthesis and Analytical Chemistry (Awarded September 2015 with a 2.2)

Degree in Chemistry "Licence Chimie & Applications" (equivalent to a BSc.), Université d'Orléans, France

(Awarded September 2013 with a 2.1)

PhD Student Alan M. C. Obled

Skills and Knowledge

- Expertise in diverse organic synthesis such as Cross Coupling, Hydrofluorination and MOFs synthesis
- Expertise in spectroscopic and spectrometric characterisation: IR, MS, NMR, UV
- Experienced in purification: Chromatography column, GC, HPLC
- Experienced in the use of ChemDraw, MestReNova, KNIME, MOE, Microsoft Office
- Basic level of Linux: CentOs

Research Presentations

- Speaker, CDT annual conference, **Edinburgh**, April 2018 – Studies towards modifying microbial natural products
- Poster, CDT annual conference, **St. Andrews**, March 2017 – Chemical and biosynthetic approaches to making analogues of antibiotics
- Speaker, CDT annual conference, **St. Andrews**, March 2016 – Synthesis and potential applications of pyrazole-based MOFs

Funding Awarded

2015 - 2019 CRITICAT CDT programme in St. Andrews Four-year PhD scholarship

Public engagements

3rd August 2018 Cell Block Science, **HMP Perth, Perth**
28th May 2018 Science day, **St Andrews Nursery, St Andrews**
13th March 2018 Science day, **Westfield Family Nurture Centre, Cupar**
29th September 2017 Science day with Crail Primary School, **Byre Theatre, St Andrews**
10th December 2016 Dundee Science Festival, **Dundee Science Centre, Dundee**
10th November 2016 Dundee Science Festival, **Ardler Complex, Dundee**

PUBLICATIONS

1. Hydrofluorination of Alkynes Catalysed by Gold Bifluorides
   F. Nahra, S. R. Patrick, D. Bello, M. Brill, A. Obled, D. B. Cordes, A. M. Z. Slawin, D. O'Hagan, S. P. Nolan
   ChemCatChem, **2015**, *7*, 240-244.
   Submitted in November 2014 and published online in November 2014