Vincent Lafouasse

Graduate student in Molecular Chemistry (M2)

"There is excitment, adventure, and challenge, and there can be great art in organic synthesis."

— Robert B. Woodward ¹

Research Interest

Education

Fall 2020 **(M2) M.Sc. Molecular Chemistry and Interfaces**, *École Normale Supérieure de Paris-Saclay – École Polytechnique*, Paris-Saclay (91). A high-level program devoted to molecular chemistry and its applications to the fields of

biology and material sciences. Training will particularly focus on organometallic chemistry and catalysis, supramolecular chemistry, chemical biology, and chemistry for optoelectronics.

- 2018–2020 **(M1) M.Sc. Chemistry**, *Université Paris-Sud*, Orsay (91), High Honours. Organic Chemistry specialization
- 2017–2018 **B.Sc. Chem. (Physics minor)**, *Sorbonne Université (ex-UPMC)*, Paris (75), High Honours.

 Fundamentals of Chemistry and Physics
- 2015–2017 **B.Sc. Sciences de la Matière**, *Ecole Normale Supérieure de Lyon*, Lyon (69). Élève normalien : A unique, non-specialized training program in Physics and Chemistry
- 2013–2015 Classe Préparatoire PCSI/PC* (CPGE), Lycée Henri IV, Paris (75).

 Two years of intensive theoretical courses in Mathematics, Physics and Chemistry in order to prepare for École Normale Supérieure national selective examas well as other prestigious graduate schools (Grandes Écoles).
 - Baccalauréat (A-levels), Lycée de l'Île-de-France, Villebon-sur-Yvette (91), Highest Honours.
 Science major

^{1.} as reported by : Nicolaou, K. C.; Sorensen, E. J. Introduction : Constructing the Molecules of Nature. In *Classics in total synthesis : targets, strategies, methods*; Wiley-VCH; **1996**; p 3.

Experience

Research

2018 Lab week, Sorbonne Université, Paris (75), Supramolecular Chemistry.

Under the direction of Matthieu Sollogoub (IPCM, GOBS) as part of the UE 3C015 TEOREM Detailed achievements :

- Study of β -CD based inclusion compounds
- Synthesis and RMN caracterisation of a α -CD based [3]-rotaxane
- Synthesis and RMN caracterisation of a self-assembled iron cage

2014-2015 TIPE, Lycée Henri IV, Paris (75), Supramolecular Chemistry.

Under the direction of Julien Lalande

Detailed achievements:

- Synthesis of dibenzo-18-crown-6 using Pedersen's original protocol
- Qualitative and quantitative study of crown ether complexes with different cations

Teaching

2018-now Chemistry Professor, Optimal Sup Spé, Paris (75).

Teaching groups of CPGE students from all scientific tracks (PC, MP, PSI, BCPST) Detailed achievements :

- +12h of formation and +200 h of class
- a lot of LATEX edition
- Preparation of students for the national entrance exams to XENS

Languages

French Fluent Native speaker

English Fluent C2 BULATS 05/18

Skills

Molecular Organic Synthesis, Organometallic Chem., Catalysis, Asymmetric Synthesis Chemistry

General Chem Quantum Chemistry, Spectroscopy, Chemical Thermodynamics

Physics Quantum Mechanics, Thermodynamics

Code Python 🕏, LaTEX, Julia 🔥

Basics

Clojure ^Q, C, Bash ^J

Interests

Music Jazz guitar, Trumpet

Music theory and Jazz harmony

Dance