



## Master PhD courses by SYLVAIN MARQUE

### Master PhD lessons: Solvent effects: *Nitroxides/alkoxyamines as school cases*

This course aims to describe the different solvent effects which may occur as well as the main parameters used for a quantitative description. As several solvent effects may occur at the same time, modelising based on Solvent Linear Relationship (similar to Linear Free Energy Relationship) will be discussed on the grounds of Koppel-Palm and Kalmet-Abboud-Taft equations. The interest for these equations will be highlighted by the investigation of solvent effects on EPR hyperfine coupling constants of nitroxides and on homolysis rate constants of alkoxyamines

- Friday, April 1st- 10:00 - 12:00 AM
- Tuesday, April 5th - 10:00 - 12:00 AM

### PhD lessons: *How to use philosophical concepts in applied chemistry*

These lessons aim to discuss how a systemic approach can be suitable in applied chemistry using the irradiation of multilayer films as a model

- Friday, April 1st - 02:00 - 04:00 PM
- Tuesday, April 5th - 02:00 - 04:00 PM

### Scientific seminar: *Persistent radical effect - from polymer applications to potential new drugs*

Alkoxyamines are one of the most versatile models of dynamic covalent bond in radical chemistry. The potential of dynamic covalent bond is well known and appreciated in Materials Sciences as Covalent Adaptive Network. The purpose of this talk is to describe the potential of such a unique property and molecules as potential drugs for cancer, parasitic diseases, bacteria, and fungi

- Monday, April 4th - 02:00 - 03:00 PM

**Sala Parravano – Cannizzaro building (CU014) Sapienza University**

**Zoom: <https://uniroma1.zoom.us/j/89316172982>**



**Sylvain Marque** - *Institut de Chimie Radicalaire, Université Aix-Marseille*

Marque has expertise in Physical Organic Chemistry of radical species applied in Biology, Chemistry, and Materials Sciences. He did his PhD in Marseille. He has been teaching as a Professor at Aix-Marseille Université for several years now.