

Researcher Position in Organic Chemistry

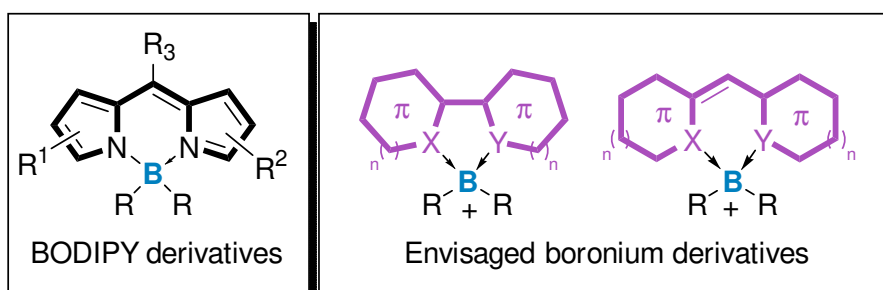
Development of fluorescent boronium cations

Institution: Institut des Sciences Moléculaires ([Team ORGA](#)), Université de Bordeaux, Talence, France

Application Deadline : October 1st, 2025

Profile required : We are seeking a candidate (M/F) with a Master's degree (MSc) or PhD in Organic Chemistry, with strong expertise in organic synthesis and compound characterisation (NMR, IR, MS, etc.). The ideal candidate will demonstrate excellent communication and teamwork skills, a strong sense of research ethics, and a proven ability to work both independently and collaboratively, with full adherence to laboratory safety protocols.

Project : Fluorescent organoborane compounds, particularly those based on the well-known BODIPY (boron-dipyrromethene) scaffold, have attracted significant attention due to their outstanding photophysical properties, including high fluorescence quantum yields, tunable emission wavelengths, and chemical robustness. Building on this successful platform, our project aims to develop novel boronium-based fluorescent compounds that extend and diversify the functionality of traditional BODIPY dyes. Boronium species—cationic boron centers—offer new opportunities for designing fluorophores with enhanced emission and versatile reactivity. This research project will explore the synthesis, characterization, and photophysical behavior of these boronium derivatives. The ultimate goal is to unlock new applications in fields such as bioimaging, sensing, and optoelectronics.



Position Overview : You will be an integral part of our research group focused on boron chemistry. The successful candidate will have the opportunity to work on an innovative project involving the design and synthesis of new BODIPY-based fluorescent compounds, access state-of-the-art facilities, and contribute to a stimulating research environment within ISM.

Key Responsibilities : Design and carry out organic synthesis to develop novel compounds, reactions, or methodologies. Analyze and characterize products using various spectroscopic and analytical techniques (e.g., NMR, MS, UV-Vis, fluorescence). Collaborate with interdisciplinary teams to advance shared research goals. Supervise and mentor graduate and undergraduate students within the laboratory.

Salary : The gross monthly salary starts at €2,800.00, depending on qualifications and experience.

How to Apply : Send to laurent.chabaud@u-bordeaux.fr and mathieu.pucheault@u-bordeaux.fr: Reference letters, CV (2 pages max), list of publications, 4 pages summary of previous research experience.