

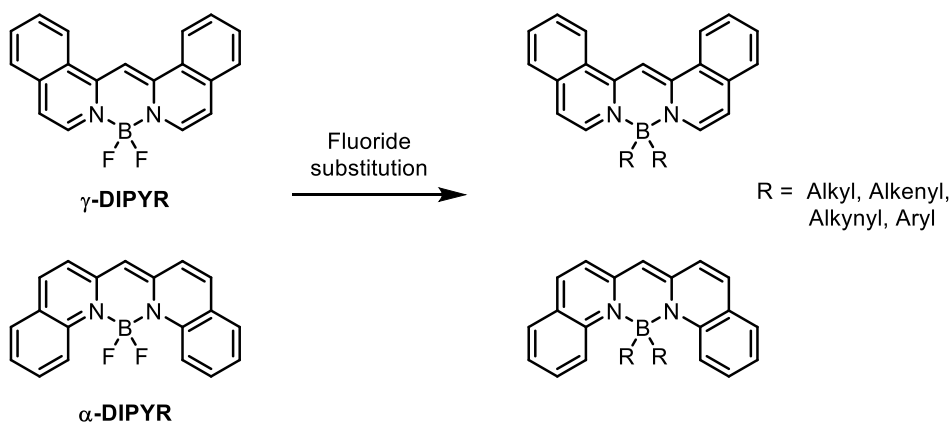
SYNTHESIS AND STUDY OF LUMINESCENT DIPYRIDYLMETHENE BORON COMPLEX FOR AN APPLICATION IN BIOLOGICAL IMAGING



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Molecular bioimaging is an important and still growing field of research and the development of new fluorescent scaffolds is a key feature to be able to adapt the fluorophore for a specific application. Among all the organic fluorophores one successful strategy consist of transforming a flexible cyanine type heteroaryl compound into a fluorophore by complexation with a boron atom¹. The archetypal example is the BODIPY scaffold in which a B^{III} atom is complexed by a dipyrin ligand. By replacing pyrrole units by pyridines, DIPYR (Dipyridylmethene boron complexes) were synthesized for the first time in 1973² and falsely described as non-fluorescent³. In 2017⁴, two quinoline and isoquinoline based structures, the α -DIPYR and the γ -DIPYR, were studied in details showing promising characteristics but very few fonctionnalization methods have been described so far. Herein, we describe the replacement of the fluorine on the boron atom and the photophysical properties of those new compounds. No such functionalization has been yet reported.



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