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2-(((4-(Trifluoromethyl)quinolin-6-yl)amino)methyl)phenols: Synthesis and optical properties

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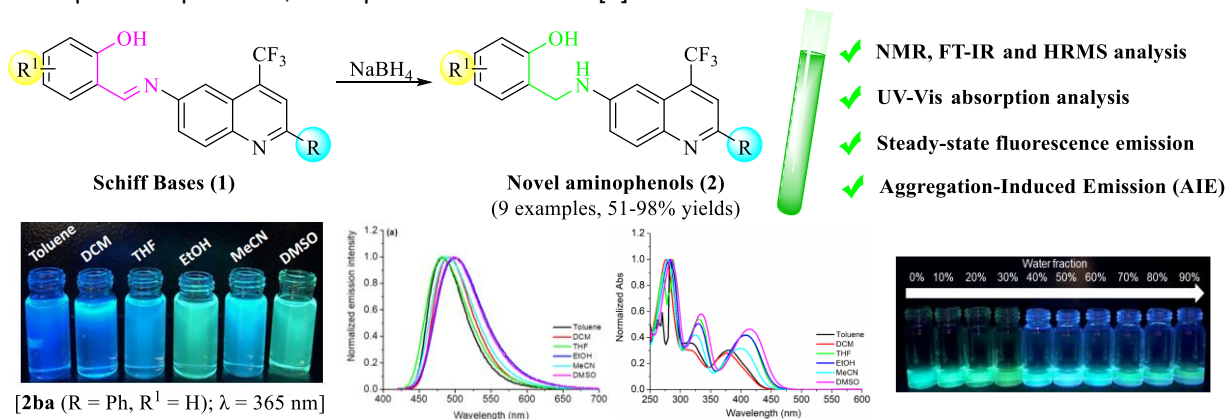
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ABSTRACT

Secondary amines are compounds of biological interest and have also been employed in the synthesis of products that are of interest in pharmaceutical and agricultural industries [1-4]. Although the secondary amines are well now for their biological interest, the synthesis of organic compounds that presents interesting photophysical characteristics have been drawing considerable attention in the last years. This highlights the significance of creating organic compounds possessing these photophysical properties, which have garnered significant attention and found extensive applications in the chemistry of materials [5]. In this regard, this study sought to evaluate the synthesis by a simple reduction method starting from Schiff bases (1) and using sodium borohydride as reduction reagent, to obtain a new series of 2-(((alkyl/aryl/heteroaryl)-4-(trifluoromethyl)quinolin-6-yl)amino)methyl)phenols (2). Subsequently, it was studied the UV-Vis absorption analysis and steady-state fluorescence emission properties, both in liquid and solid state for these hybrid system quinoline-phenol 2, as depicted in Scheme 1 [6].



Scheme 1. A summary of this study: the synthesis and photophysical properties of 2-(((alkyl/aryl/heteroaryl)-4-(trifluoromethyl)quinolin-6-yl)amino)methyl)phenols (2).

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