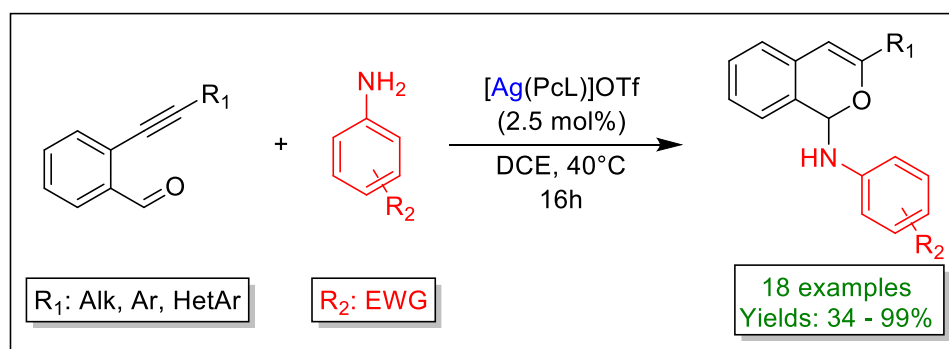


### OC3 - Synthesis of 1-Aminoisochromenes through reaction of 2-alkynylbenzaldehydes with electron-poor anilines promoted by [Ag(PcL)] catalyst

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Isochromene is an interesting oxygen-containing heterocycle characterizing different synthetic bioactive molecules<sup>1</sup> and natural products.<sup>2</sup> The isochromene core can be synthesized exploiting a regioselective *6-endo-dig* domino approach starting from 2-alkynylbenzaldehydes and suitable nucleophiles, under transition metal catalysis, able to activate the triple bond.<sup>3</sup> Most employed nucleophiles are oxygen- and carbon-based compounds, otherwise nitrogen-containing nucleophiles usually bring to the formation of isoquinoline derivatives, through the formation of the corresponding imine intermediate. Herein we report the first synthesis of 1-amino substituted isochromene derivatives starting from different 2-alkynylbenzaldehydes exploiting the features of electron-poor anilines and PcL silver complex catalysis.<sup>4</sup>



**Scheme 1:** Synthesis of 1-aminoisochromenes

A series of 1-arylaminoisochromene was prepared, differently substituted in 3 position with alkyl, cycloalkyl, aryl or heteroaryl moiety (**Scheme 1**).

Reaction conditions, scope and limitation of the approach and a plausible mechanism of the reaction will be presented and discussed.

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