

Well-Defined [Ag(I)(Pc-L)] Complexes: suitable catalysts for the synthesis of 1-Alkoxy-isocromenes

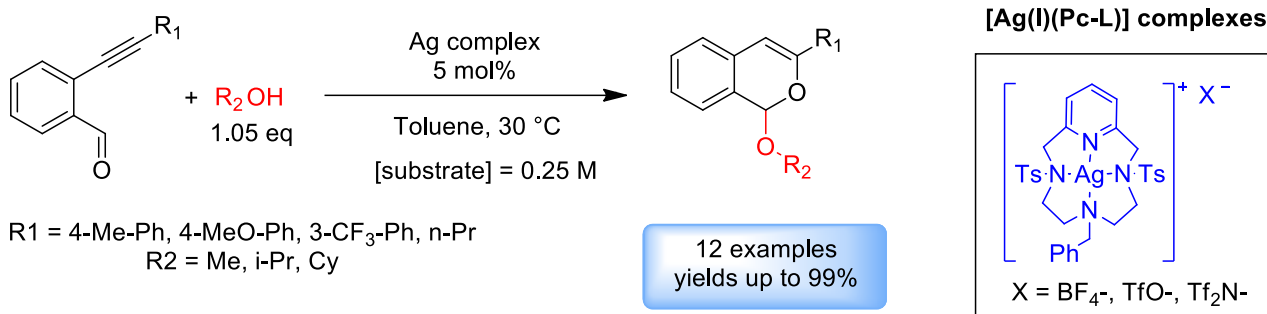
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The [Ag(I)(Pc-L)] complexes¹ – new silver(I) complex with an original macrocyclic pyridine-containing ligand (Pc-L) – demonstrated to be suitable catalysts for the synthesis of 1-alkoxyisocromenes² starting from various 2-alkynylbenzaldehydes³ and different primary and secondary alcohols.⁴ Best results were obtained with BF₄⁻ complex. The approach is characterised by absolute regioselectivity, mild reaction condition, good to excellent reaction yields, cleanness of the reaction and reduced purification steps. The reaction mechanism was investigated by in depth NMR studies and an aimed intramolecular “trapping” experiment to point out the possible involvement of an isochromenilium intermediate. In an enantioselective development perspective, some preliminary tests with Ag(I) complexes of previously synthesised chiral pyridine-containing ligands^{1b} were performed.



References

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