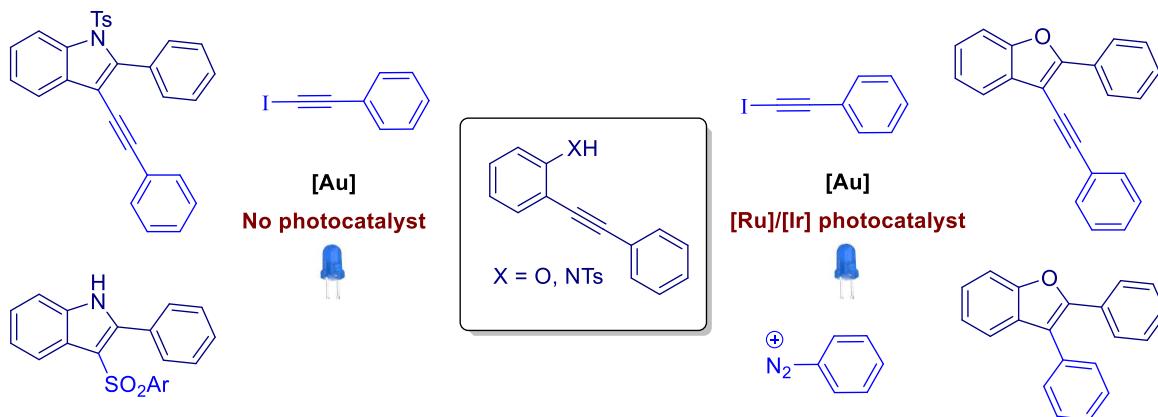


Visible Light-Induced Radical Processes and Organometallic Catalysis

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Visible light-assisted transformations are playing an increasingly important role in synthetic chemistry and have attracted considerable attention, particularly in metal-catalyzed homogeneous reactions.[1] The merging of organometallic catalysis and photocatalysis is a rapidly expanding field of great interest to the chemical research and industrial communities. It overcomes the limitations of both strategies and opens up new possibilities for cross-coupling reactions. In this context, the use of visible light activation to facilitate oxidative addition on gold intermediates, *via* photoredox catalysis or photosensitization, has proven to be an effective way to circumvent the lack of reactivity in gold chemistry.[2-4] This presentation will demonstrate the power and potential of these dual catalytic processes under light activation to promote efficient cross-coupling reactions with this metal.



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