

THIRD INTERNATIONAL SYMPOSIUM ON C-H ACTIVATION

May 30 - June 2, 2016

IL14 – Visible Light Driven Photo(redox) Catalysis for C–H-Functionalizations

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Visible light photo(redox) catalysis has emerged as an efficient strategy in organic synthesis as it employs readily available and easy to handle catalysts in combination with visible light and can be applied to a variety of transformations. The potential of photo(redox) catalysis calls for further exploration, as visible light is a safe, abundant, eco-friendly and readily available energy source which meets demands for more economic and environmentally-friendly processes. The potential of visible light in promoting catalytic reactions has been validated and, with the introduction of photo(redox) catalyzed processes, new horizons are open for accomplishing traditional chemical reactions in a more expedient manner and for introducing concepts for performing highly demanding transformations such as fundamental C–H and C=C bond functionalizations. In this presentation our introduction to visible light photo(redox) will be shown and new and valuable transformations will be highlighted. Additionally, efforts to delineate the general requirements for visible light photo(redox), as well as combined catalysis processes, will be outlined.

