

## Inter-IISER Chemistry Meet (IICM 2017)

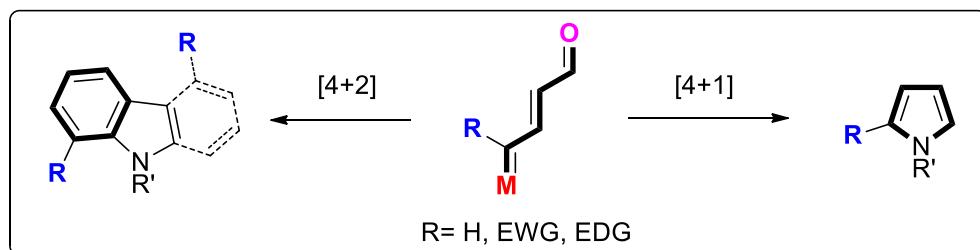
### Enalcarbenoid: A New Catalytic Activation Mode for Heterocycles Synthesis

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For the past few years, our research group involved in the design of new classes of catalytic activation modes to study their unique reactivity. Recently, we have introduced enalcarbenoid as a new catalytic activation mode in the chemical synthesis (Fig., M = metal complex).<sup>1-3</sup> This is the first example in which a privileged metal–carbenoid and the enal moiety are united in an activation mode, thus creating seamless integration of transition–metal catalysis, Lewis acid catalysis and organocatalysis.<sup>4</sup> In this presentation, we highlight the [4+2] benzannulations, [4+1] pyrrolannulations of this activation mode in creating valuable heterocycles.<sup>1-3</sup>



#### References and Notes:

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3. Kanchupalli, V.; Joseph, D.; Katukojvala, S. *Org. Lett.* **2015**, *17*, 5878.
4. Zhou, Q.-L. *Angew. Chem. Int. Ed.* **2016**, *55*, 5352.