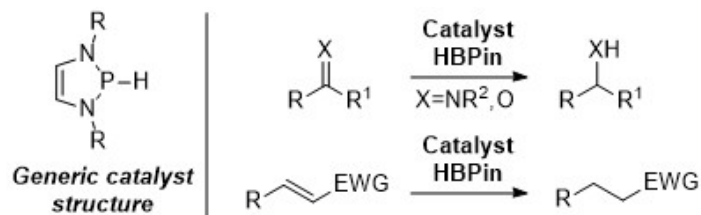


## Reductive Transformations Under 1,3,2-Diazaphospholene Catalysis

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Organocatalysts offer complementary reactivity to transition metal based catalysts, while still addressing the fundamental issues of reaction efficiency and stereoselectivity. We have investigated a nascent class of organocatalysts, namely, the 1,3,2-diazaphospholenes and found that they enable a variety of reductive transformations.<sup>1,2</sup>



By varying the exocyclic substituents on these catalysts, the reactivity can be modulated.<sup>3</sup> Furthermore, by introducing chiral groups onto these positions, we have shown that these reactions can be rendered enantioselective.

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