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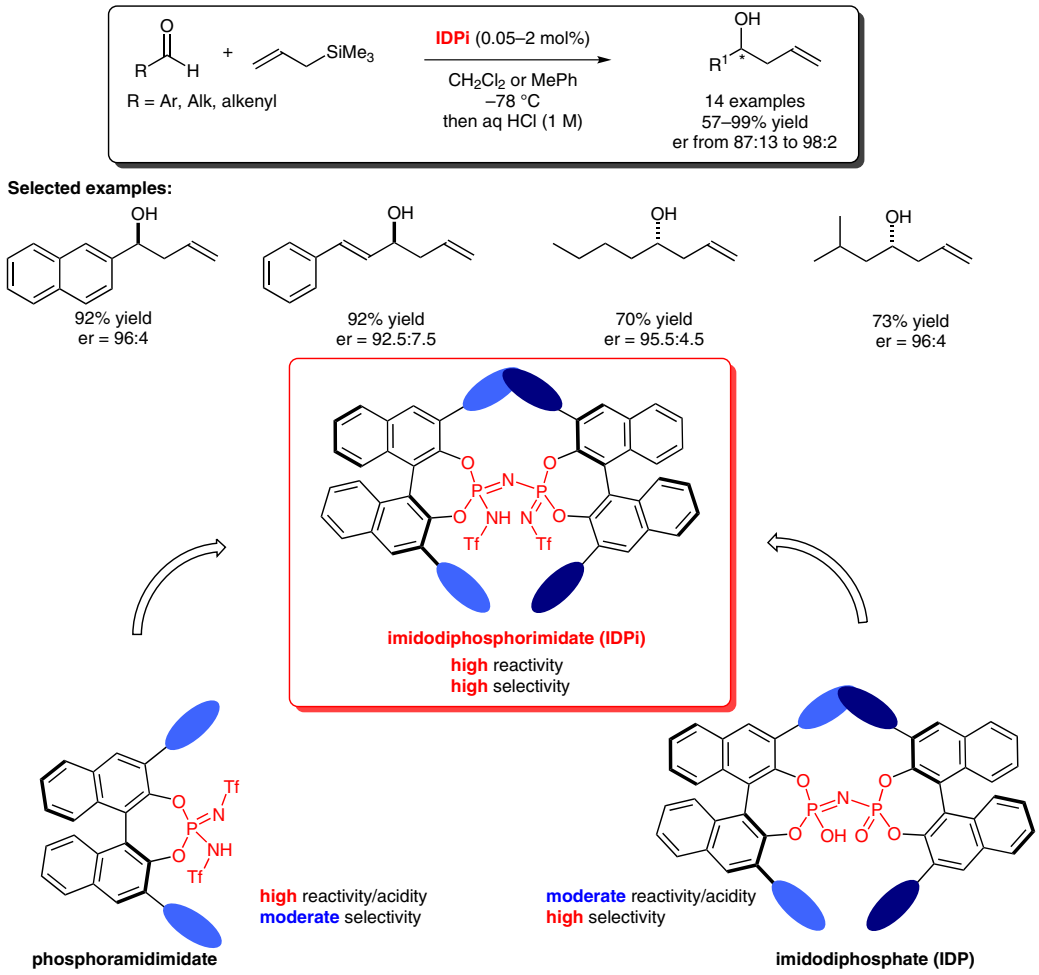
Extremely Active Organocatalysts Enable a Highly Enantioselective Addition of Allyltrimethylsilane to Aldehydes
Angew. Chem. Int. Ed. **2016**, *55*, 13200–13203.

Highly Enantioselective Addition of Allyltrimethylsilane to Aldehydes



Significance: List and co-workers report the first general, highly enantioselective, organocatalytic addition of allyltrimethylsilane to aldehydes (the Hosomi–Sakurai reaction). This transformation is enabled by newly developed highly confined imidodiphosphorimidates **IDPi**. Various aromatic and aliphatic aldehydes are tolerated under the reaction conditions, affording the desired products in good to excellent yields and enantioselectivities (er ≤ 98:2).

Comment: The **IDPi** motif, which can be accessed by a single-flask synthesis from 3,3′-disubstituted BINOL derivatives, is a combination of the recently developed highly confined imidodiphosphates (*Nature* **2012**, *483*, 315) and highly acidic BINOL-derived phosphoramidimidates (*Synlett* **2016**, *27*, 156).

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