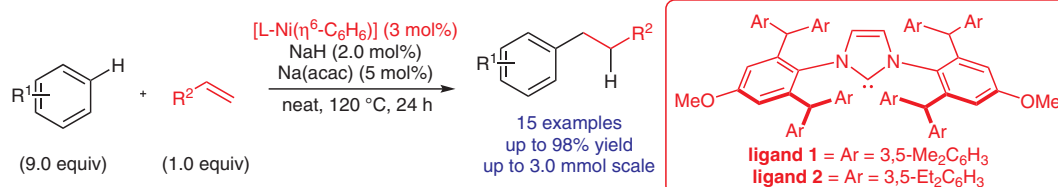
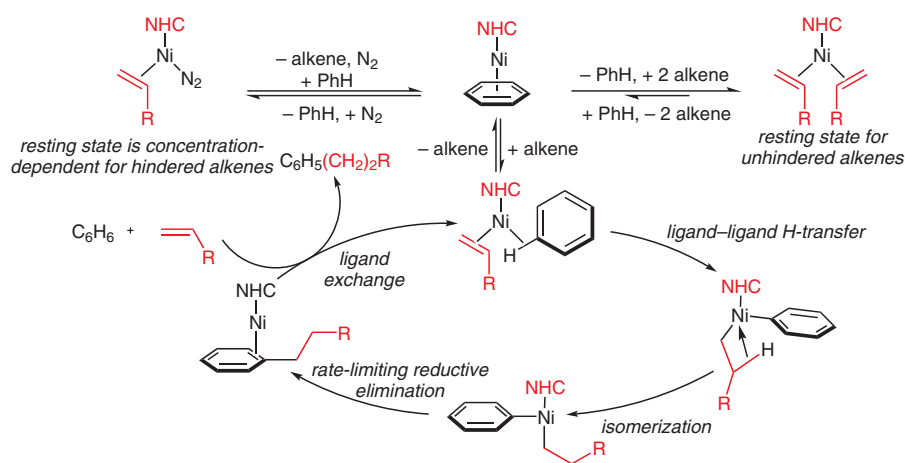


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 Nickel-Catalysed anti-Markovnikov Hydroarylation of Unactivated Alkenes with Unactivated Arenes Facilitated by Non-Covalent Interactions  
*Nat. Chem.* **2020**, *12*, 276–283.

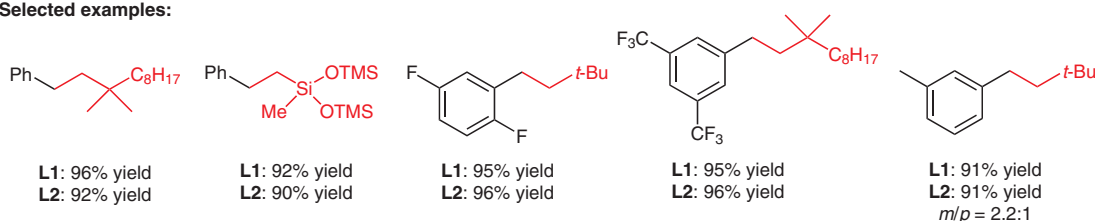
## Nickel-Catalyzed anti-Markovnikov Hydroarylation of Unactivated Alkenes



Proposed mechanism:



Selected examples:



**Significance:** Nakao, Hartwig and co-workers report a novel nickel-catalyzed undirected hydroarylation reaction between unactivated alkenes and unactivated arenes. The reaction proceeds in excellent yields with high selectivity for the anti-Markovnikov product. These products are distinct from those accessed through acid-catalyzed processes.

**Comment:** The authors characterized the catalytically relevant substrate bound nickel complexes and identified the reductive elimination step forming the C–C bond as the rate-limiting step. They also note that differences in the activity between catalysts with large/small carbenes are more dependent on the stabilizing intramolecular noncovalent interactions in the secondary coordination sphere, than steric hindrance.

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