Catalysis @ Solvias - From Science to Business

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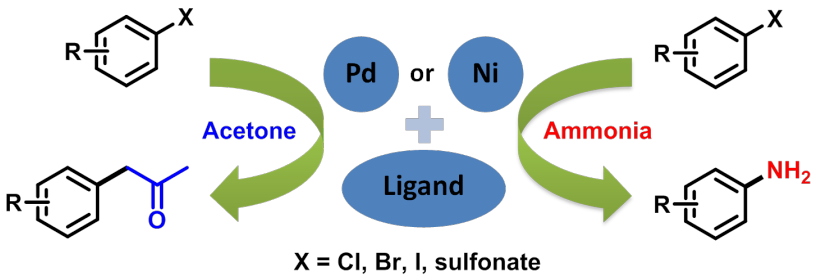
The catalysis team at Solvias has been at the forefront of making the latest scientific findings available to the development of commercial catalytic processes.[1] Various transformations (i.e. asymmetric hydrogenation, C-C and C-X cross-couplings, asymmetric C-C bond formations) can be evaluated efficiently on the high throughput experimentation (HTE) platform. This platform is operated in conjunction with a large library of (chiral) ligands and thus represents a unique set-up for the investigation of homogeneously catalyzed reactions.



Following the concept of modularity, Solvias peruses the consistent expansion of its ligand portfolio. The resulting large variety of modular (chiral) ligands has, in turn, led to unprecedented findings in academia. For example, significant progress has recently been made in the monoarylation of ammonia and acetone.[2] More precisely, the application of ferrocenyl bisphosphine ligands has enabled significant progress in substrate scope, reaction conditions, as well as catalyst costs and availability. Examples of these ligands and transformations will be presented.

[1] H.-U. Blaser, B. Pugin, F. Spindler, *Top. Organomet. Chem.* **2012**, *42*, 65−102.
[2] J. Schranck, J. Rotzler, *Org. Process Res. Dev.* **2015**, *19*, 1936–1943.