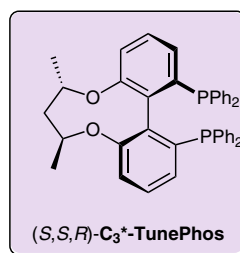
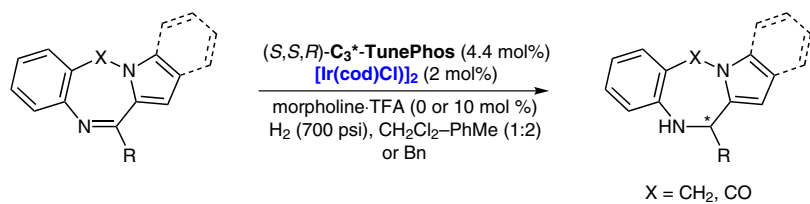
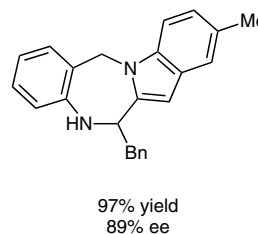
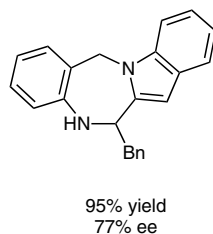
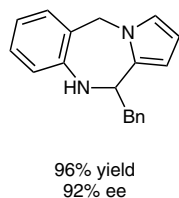
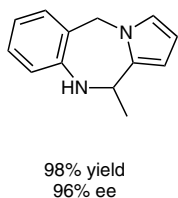
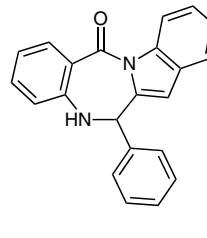
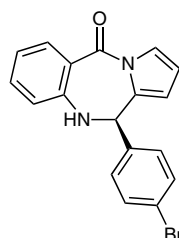
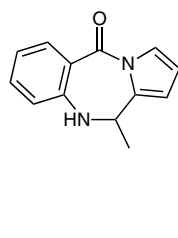
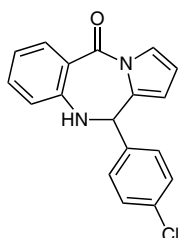


Ir(I)-Catalyzed Asymmetric Hydrogenation of Seven-Membered Cyclic Imines



Selected examples:



Significance: Dihydrobenzodiazepinones and -diazepines are a unique class of heterocycles with a range of biological activities. This report describes an efficient protocol for their synthesis by asymmetric hydrogenation.

Comment: Experiments showed that additives dramatically influenced the reaction in a highly substrate-dependent manner. When imines of benzodiazepinones were used, addition of morpholine trifluoroacetate improved both reactivity and selectivity. However, when the same additive was used with benzodiazepines, the selectivity decreased.