

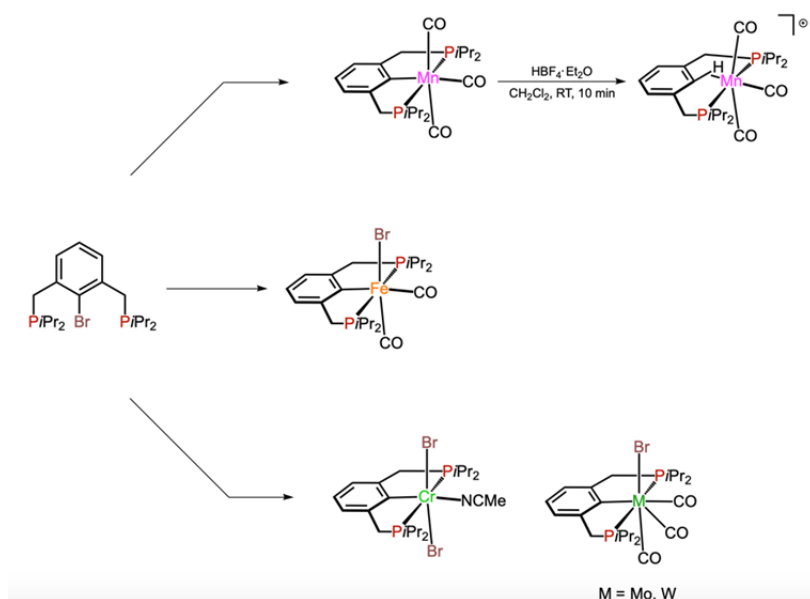
Synthesis of Novel Base Metal PCP Complexes under Solvothermal Conditions

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Due to their great stability and modifiability, transition metal pincer complexes have proven to be powerful tools in homogenous catalysis. Recently, attention shifted to the development of catalysts based on inexpensive and environmentally benign base metals.



However, examples of base metal-based PCP pincer complexes are exceedingly rare in literature, mainly due to the difficulty of creating the metal carbon σ -bond [1].

Using a *m*-xylene-based ligand system, featuring a bromine substituent at the *ipso*-carbon, [2] this work describes the synthesis of novel, base metal PCP pincer complexes with the group 6 metals, manganese, iron as well as cobalt and nickel, utilizing oxidative addition of the ligand on metal(0) precursors under solvothermal conditions.

[1] Murugesan, S.; Kirchner, K. *Dalton Trans.* **2016**, *45*, 416-439.

[2] Rybtchinski, B.; Ben-David, Y.; Milstein, D. *Organometallics*, **1997**, *16*, 3786-3793.