Electronic Supplementary Information (ESI)

Contrasting reactivity behaviour of [RuHCl(CO)(PNP)] complex with electrophilic reagents XOTf (X = H, CH$_3$, Me$_3$Si)

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**Fig. S1.** VT $^1$H NMR spectral stack plot of the reaction of complex 1 with HOTf in CD$_2$Cl$_2$. The downfield region shows the formation of HCl

**Fig. S2.** Partial $^1$H-$^1$H COSY NMR spectrum of complex [RuH(CO)(PNP)][BAR$_4$] (5a) in CD$_2$Cl$_2$ at room temperature
**Fig. S3.** Partial $^1$H-$^{31}$P HMQC NMR spectrum of complex [RuH(CO)(PNP)][BAr$_{4f}$] (5a) in CD$_2$Cl$_2$ at room temperature.

**Fig. S4.** Partial VT $^1$H NMR spectrum of complex [RuH(CO)(PNP)][BAr$_{4f}$] (5a) in CD$_2$Cl$_2$. 
**Fig S5:** Partial $^1$H NMR stack plot of the titration of 5a, 5b and 5c with CH$_3$CN in CD$_2$Cl$_2$. The volume of added CH$_3$CN is given in the left hand side of the plot. NMR spectra were recorded at 213 K.