

Supporting Information for:

Selective C-F / C-H Bond Activation of Fluoroarenes by Cobalt Complex supported with phosphine ligands

Junye Li,^a Tingting Zheng,^{a,b} Hongjian Sun,^a Wengang Xu,^a Xiaoyan Li^a *

^a School of Chemistry and Chemical Engineering, Shandong University, Shanda Nanlu 27, 250100 Jinan, People's Republic of China

^b Department of Chemistry, Capital Normal University, 100037 Beijing, People's Republic of China

Contents

Fig. 1 The <i>in situ</i> IR of intermediate 9	2
Fig. 2 The <i>in situ</i> ¹H NMR of intermediate 9	2
Fig. 3 The <i>in situ</i> ¹⁹F NMR of intermediate 9	3
Fig. 4 The IR of complex 7	3
Fig. 5 The IR of complex 8	4
Fig. 6 The IR of complex 11	4

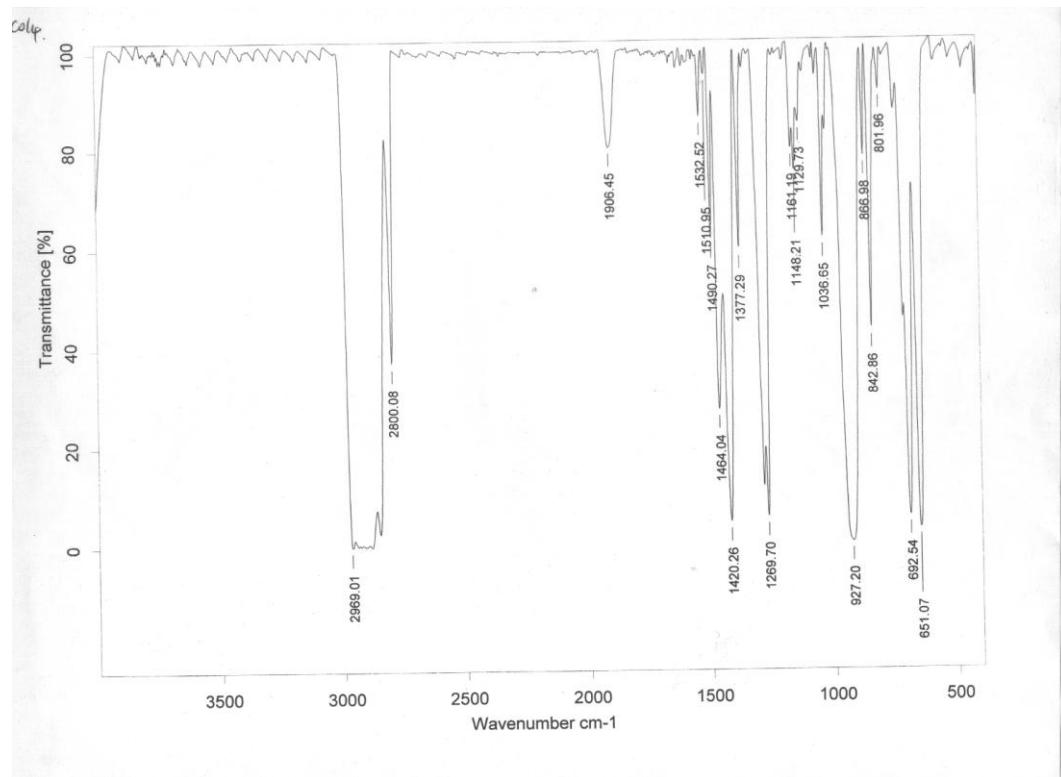


Fig. 1 The *in situ* IR of intermediate 9

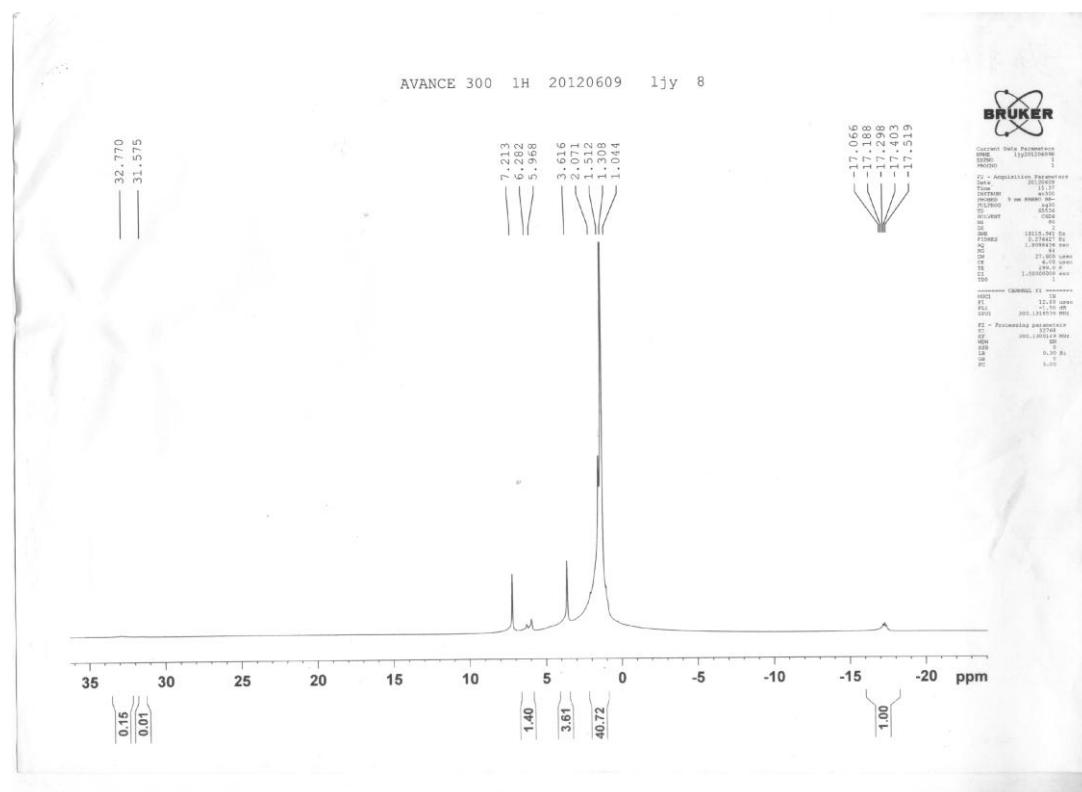


Fig. 2 The *in situ* ¹H NMR of intermediate 9

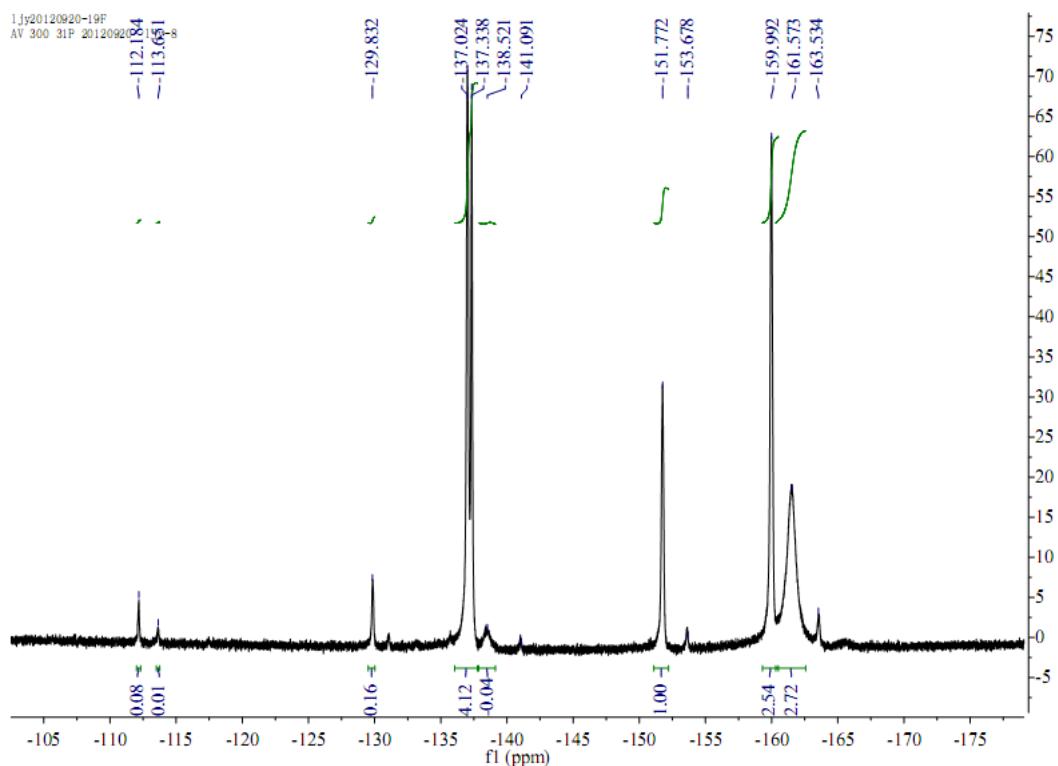


Fig. 3 The *in situ* ^{19}F NMR of intermediate 9

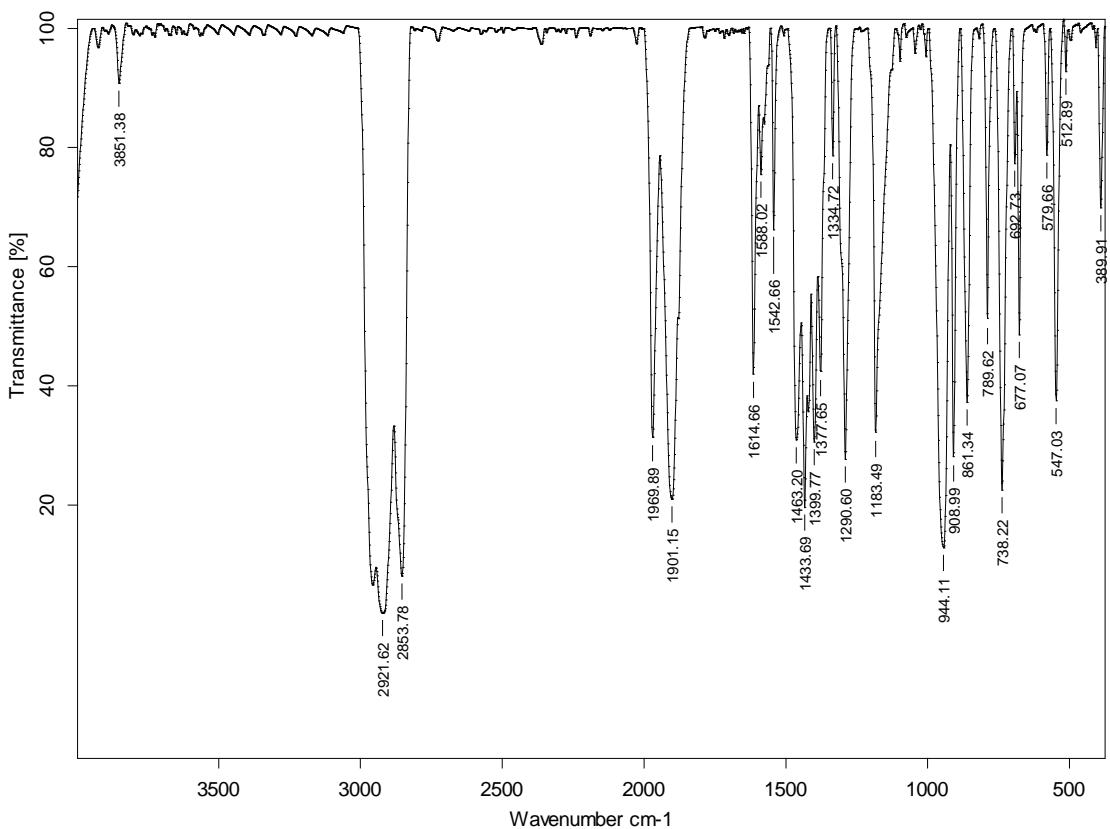


Fig. 4 The IR of complex 7

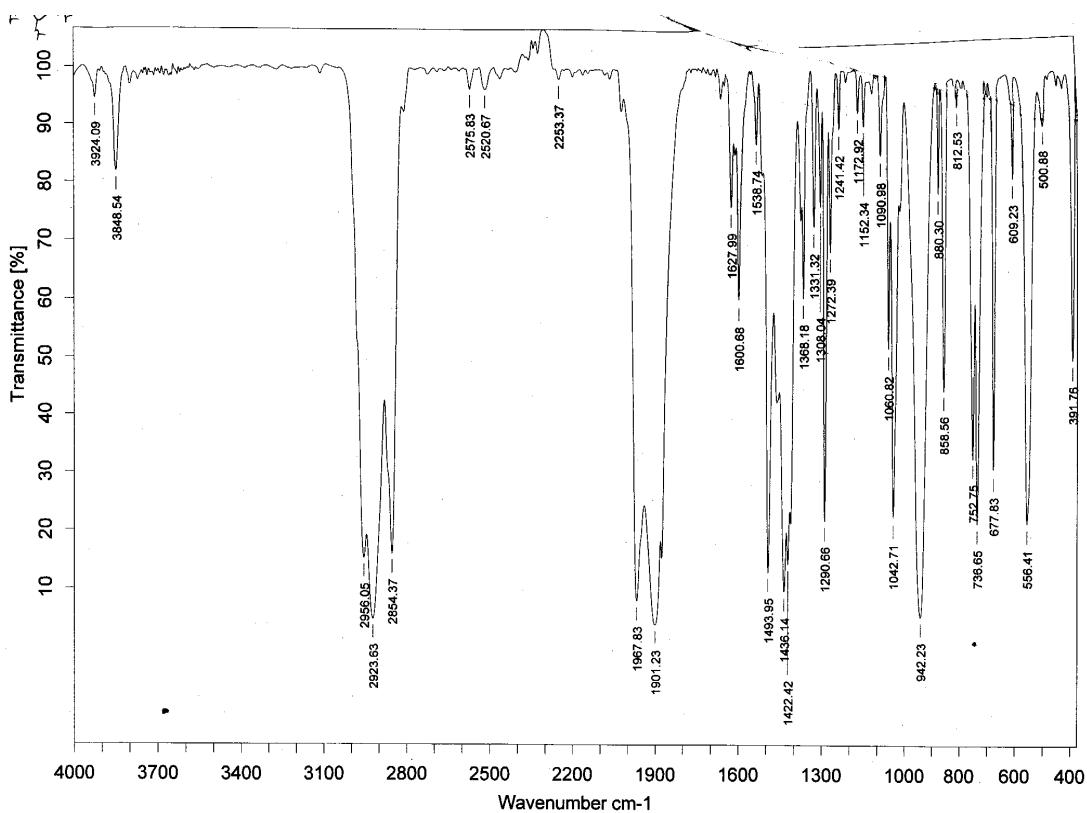


Fig. 5 The IR of complex 8

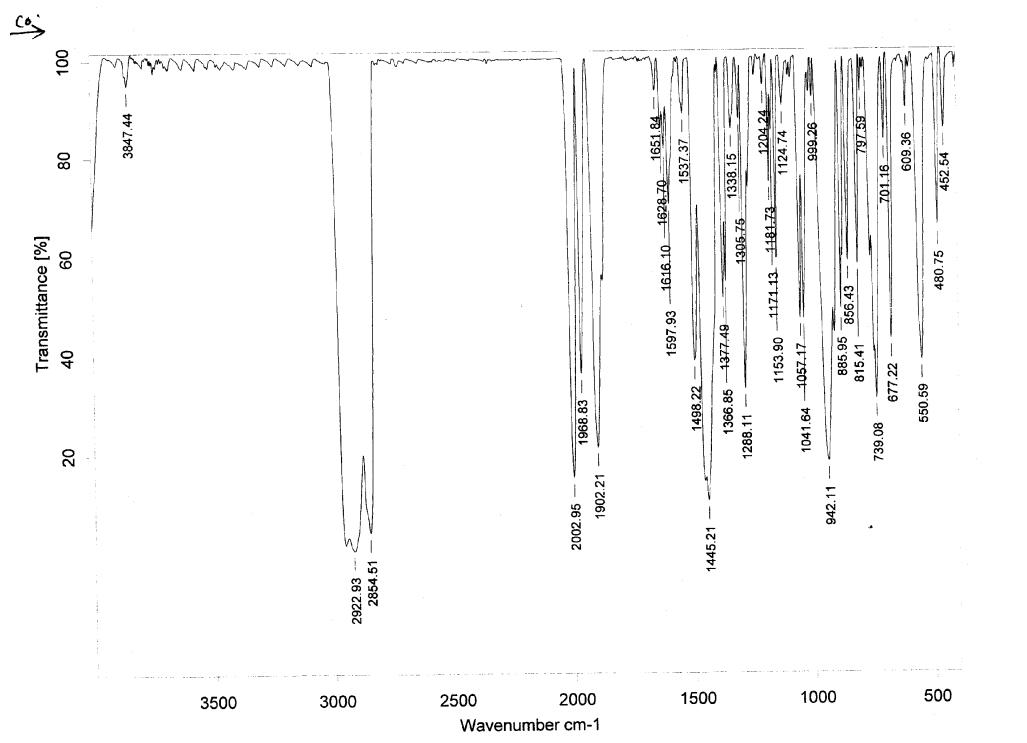


Fig. 6 The IR of complex 11