

Supporting Information

Reactions of osmapyridinium with terminal alkynes

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NMR spectra

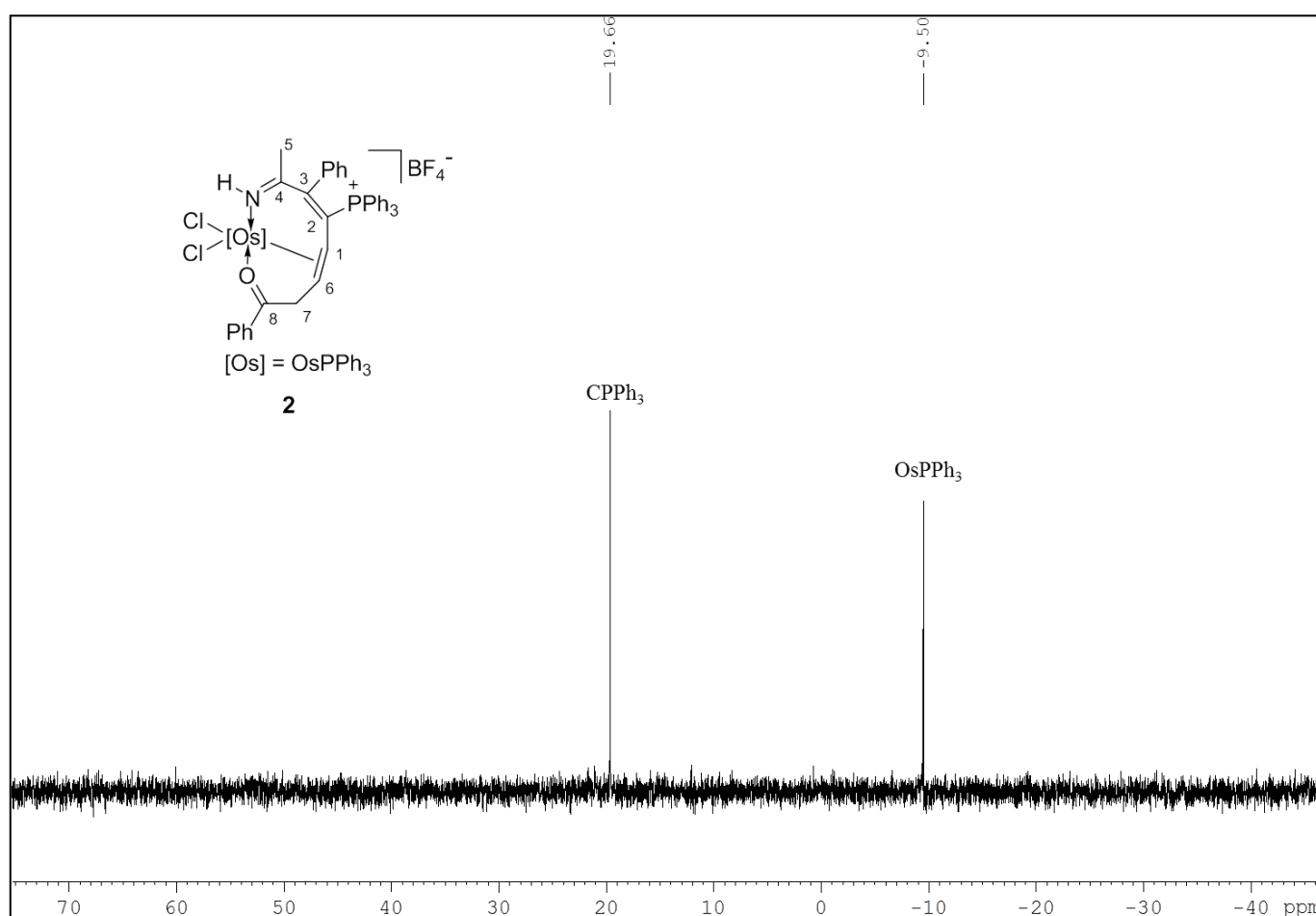


Figure S1-1 The $^{31}\text{P}\{^1\text{H}\}$ NMR spectrum of complex **2** in CD_2Cl_2 at 162.0 MHz.

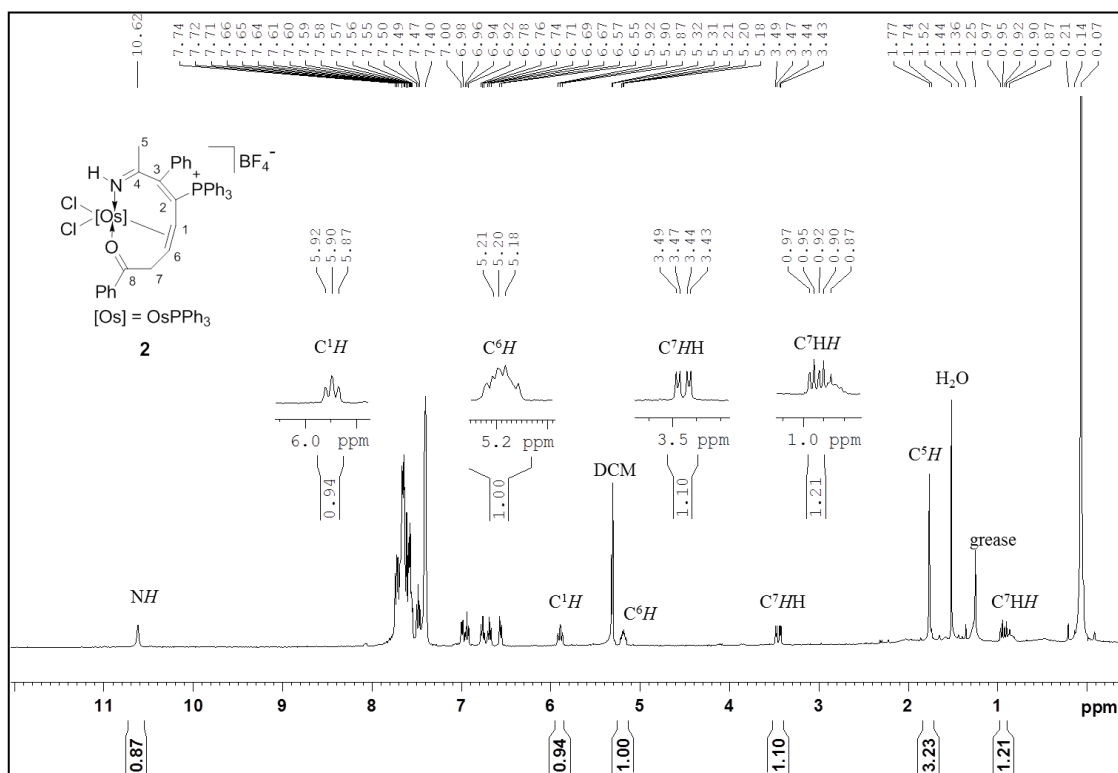


Figure S1-2 The ^1H NMR spectrum of complex **2** in CD_2Cl_2 at 400.1 MHz.

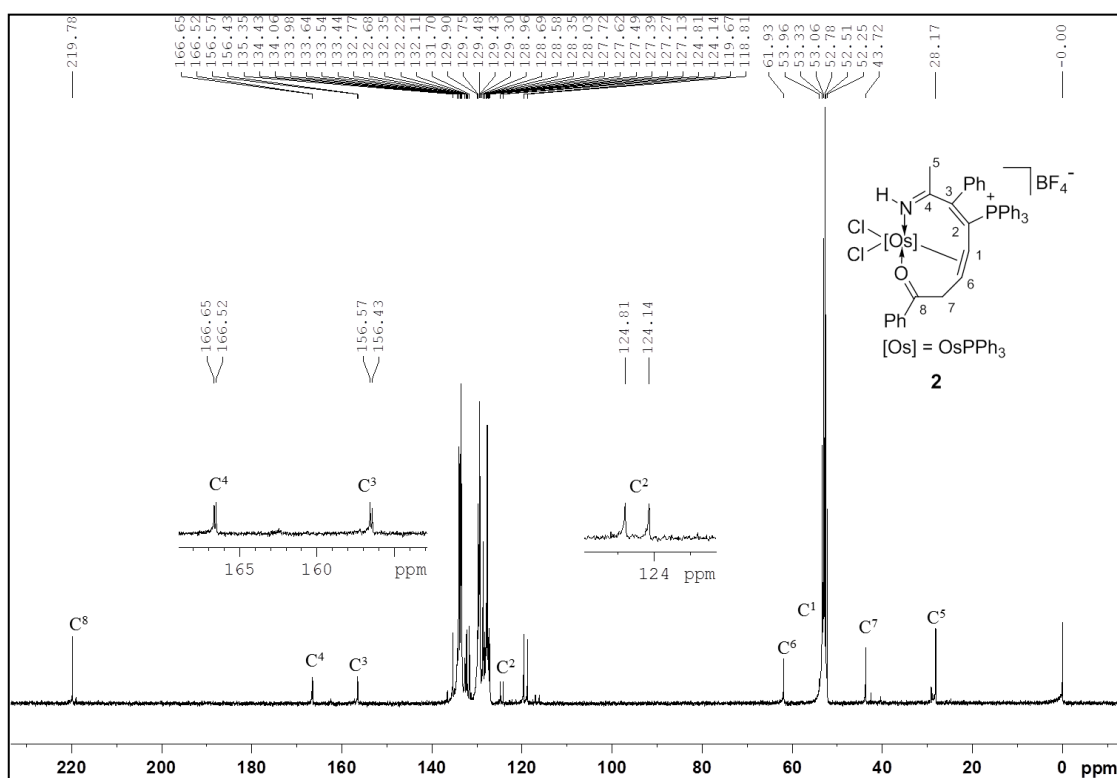


Figure S1-3 The $^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of complex **2** in CD_2Cl_2 at 101.6 MHz.

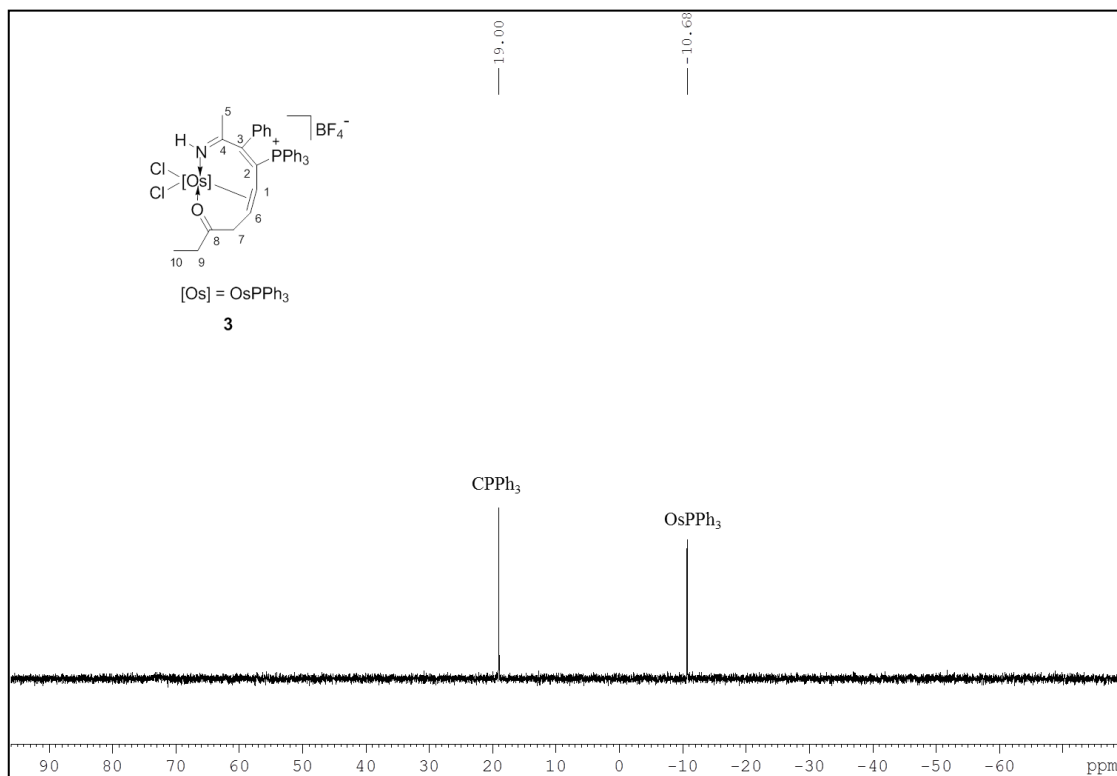


Figure S2-1 The $^{31}\text{P}\{^1\text{H}\}$ NMR spectrum of complex **3** in CDCl_3 at 162.0 MHz.

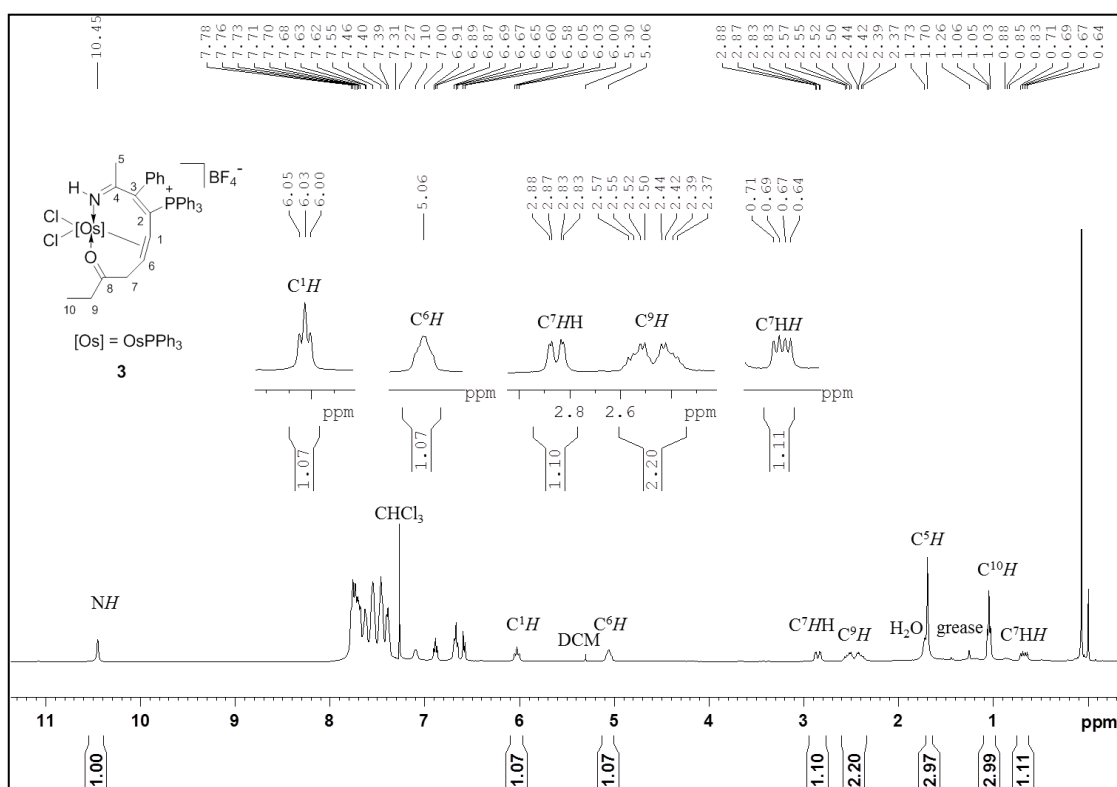


Figure S2-2 The ^1H NMR spectrum of complex **3** in CDCl_3 at 400.1 MHz.

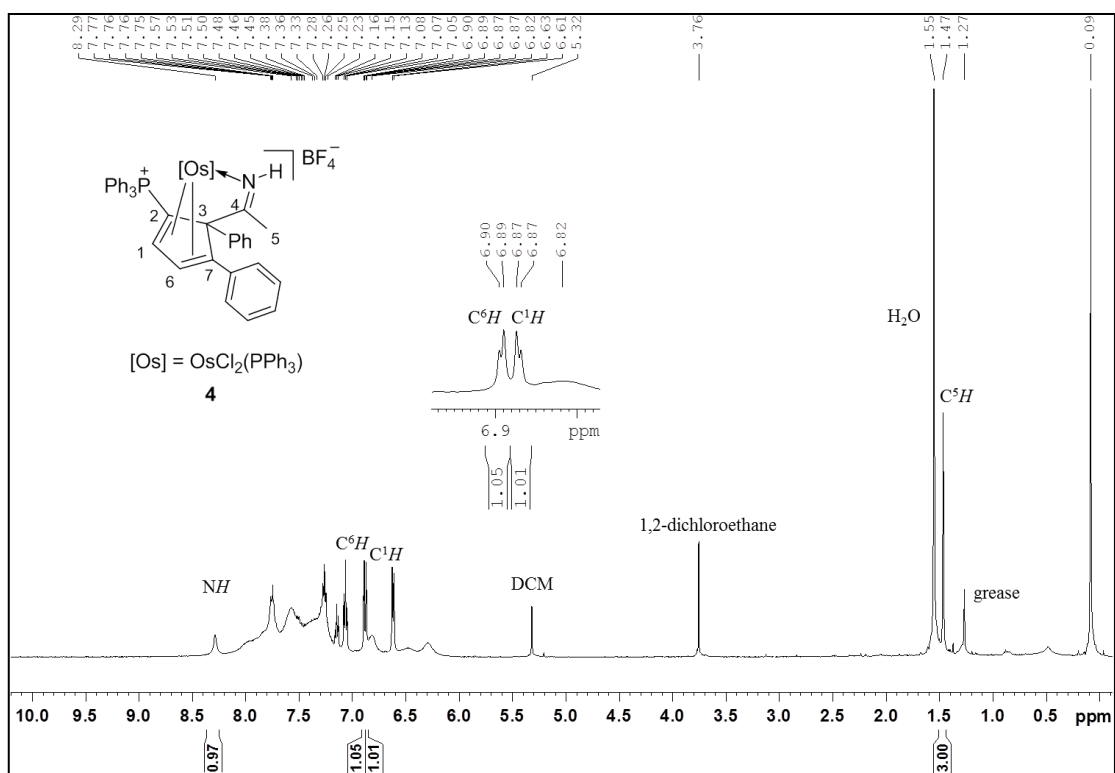


Figure S3-2 The ^1H NMR spectrum of complex **4** in CD_2Cl_2 at 400.1 MHz.

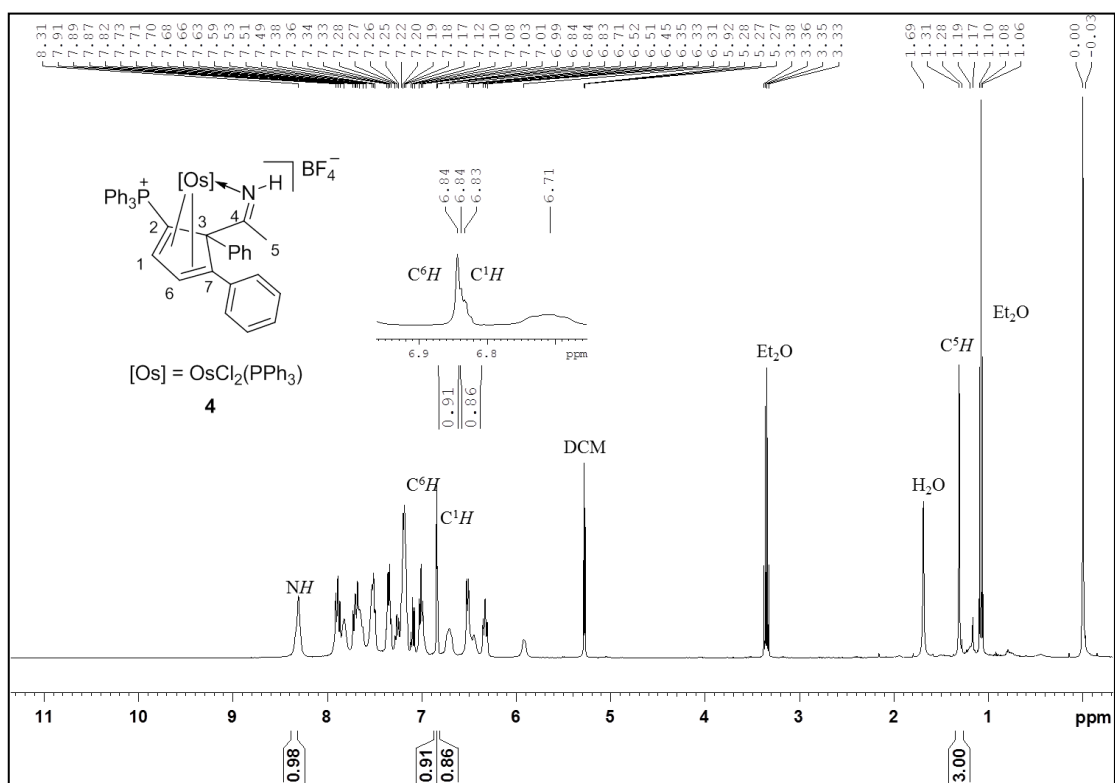


Figure S3-3 The ^1H NMR spectrum of complex **4** in CD_2Cl_2 at 400.1 MHz under 253 K.

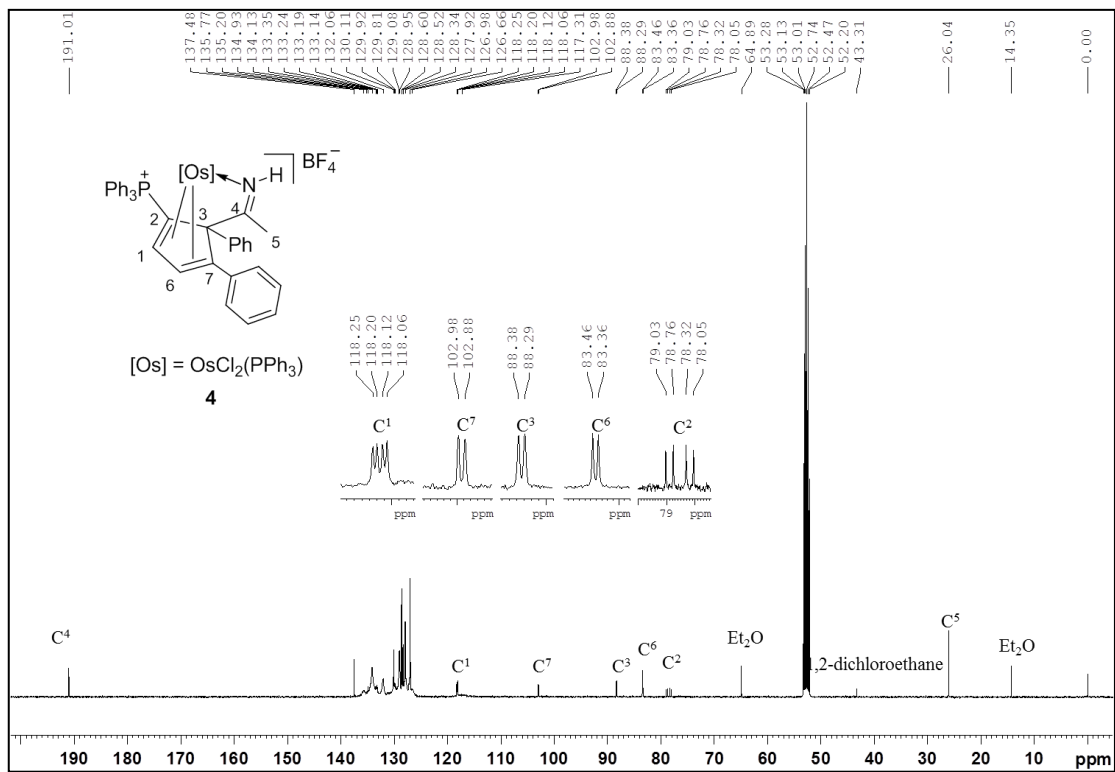


Figure S3-4 The $^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of complex 4 in CD_2Cl_2 at 101.6 MHz.

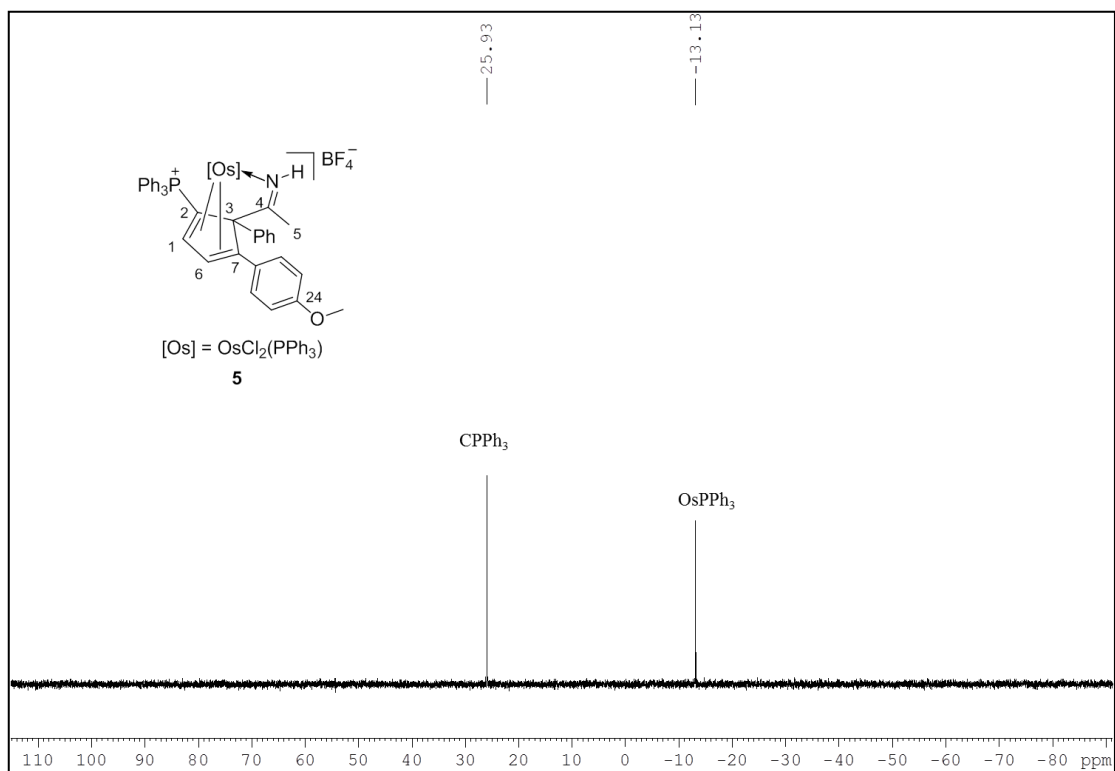


Figure S4-1 The $^{31}\text{P}\{^1\text{H}\}$ NMR spectrum of complex 5 in CD_2Cl_2 at 162.0 MHz.

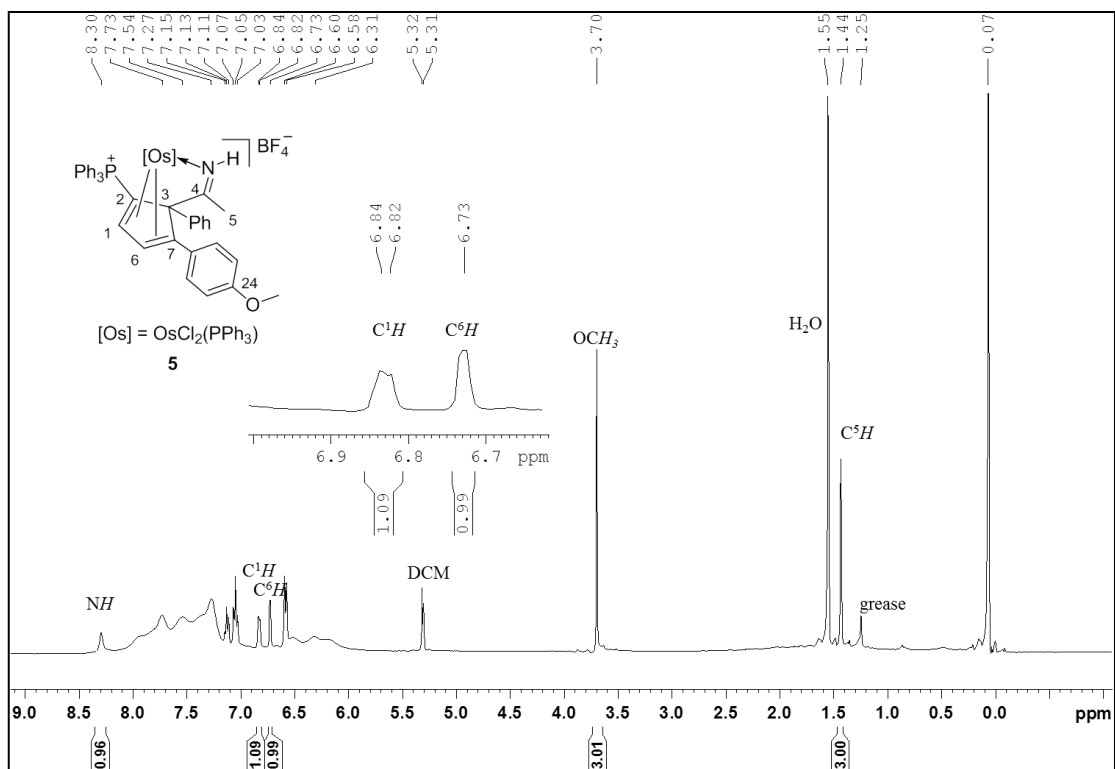


Figure S4-2 The ^1H NMR spectrum of complex **5** in CD_2Cl_2 at 400.1 MHz.

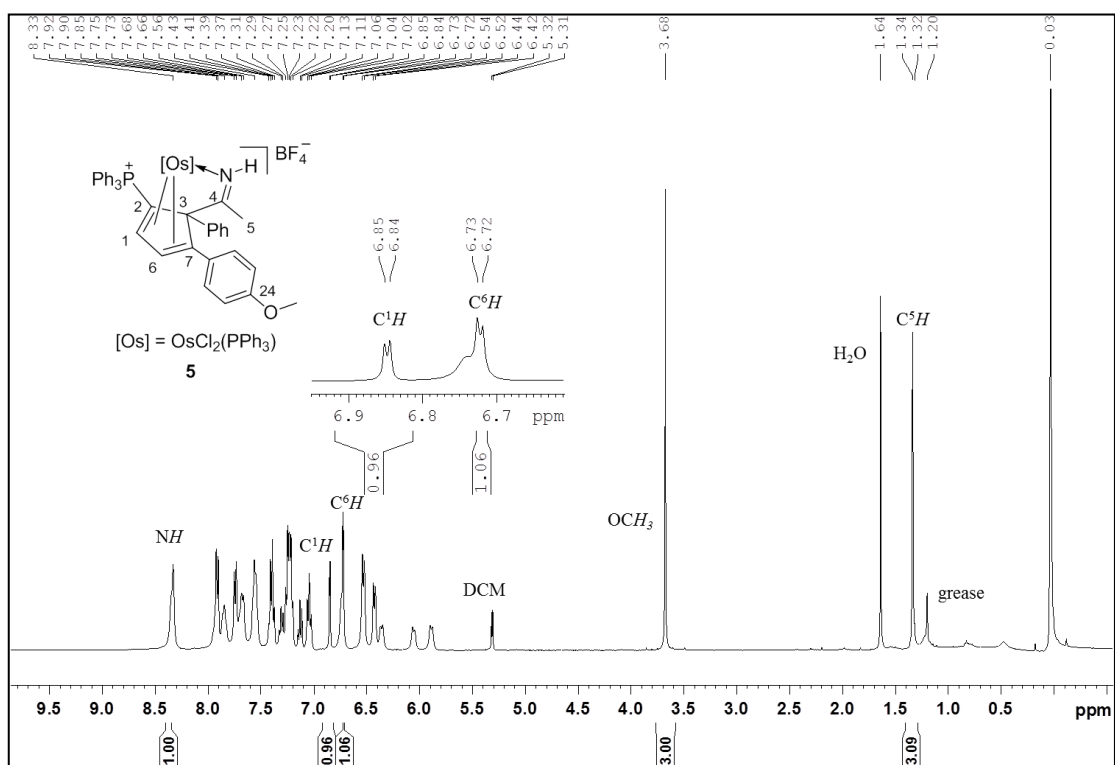


Figure S4-3 The ^1H NMR spectrum of complex **5** in CD_2Cl_2 at 400.1 MHz under 253 K.

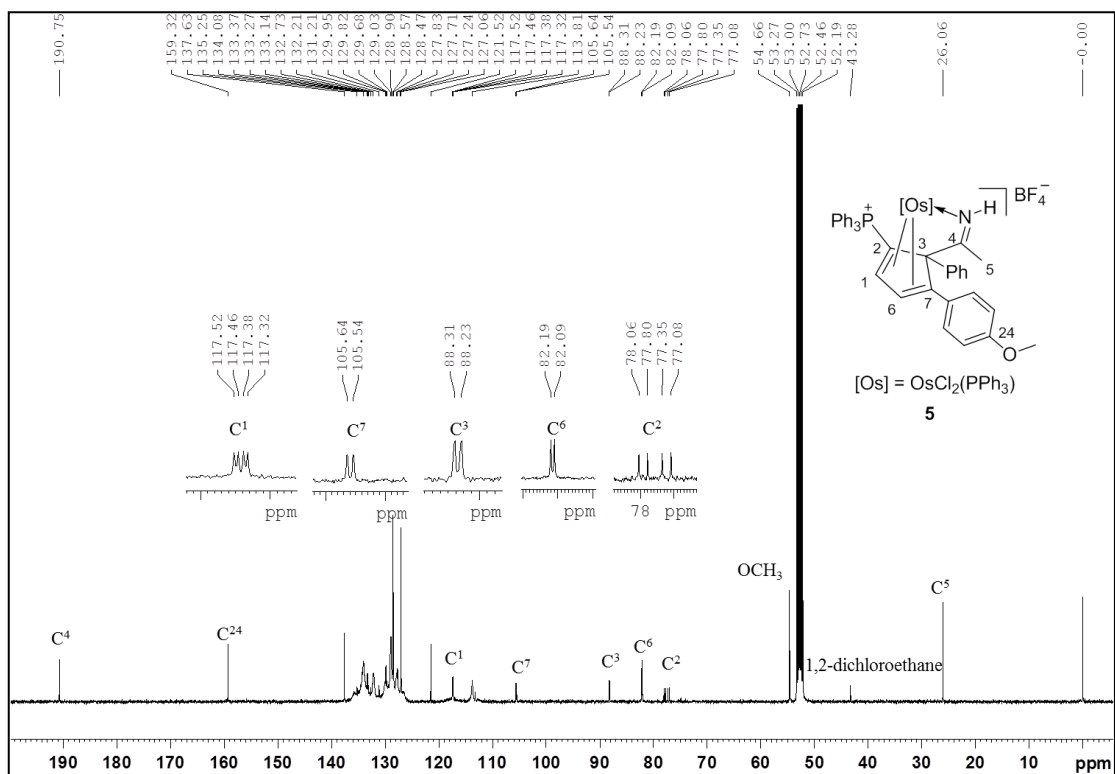


Figure S4-4 The $^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of complex **5** in CD_2Cl_2 at 101.6 MHz.

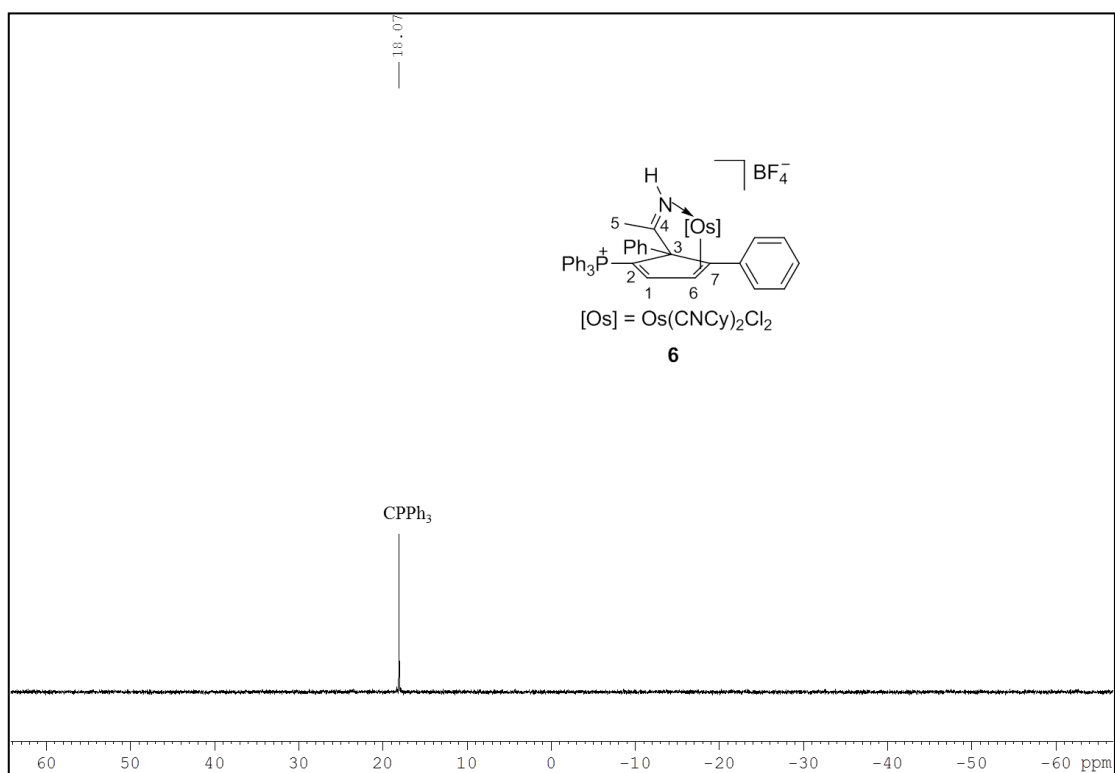


Figure S5-1 The $^{31}\text{P}\{^1\text{H}\}$ NMR spectrum of complex **6** in CD_2Cl_2 at 162.0 MHz.

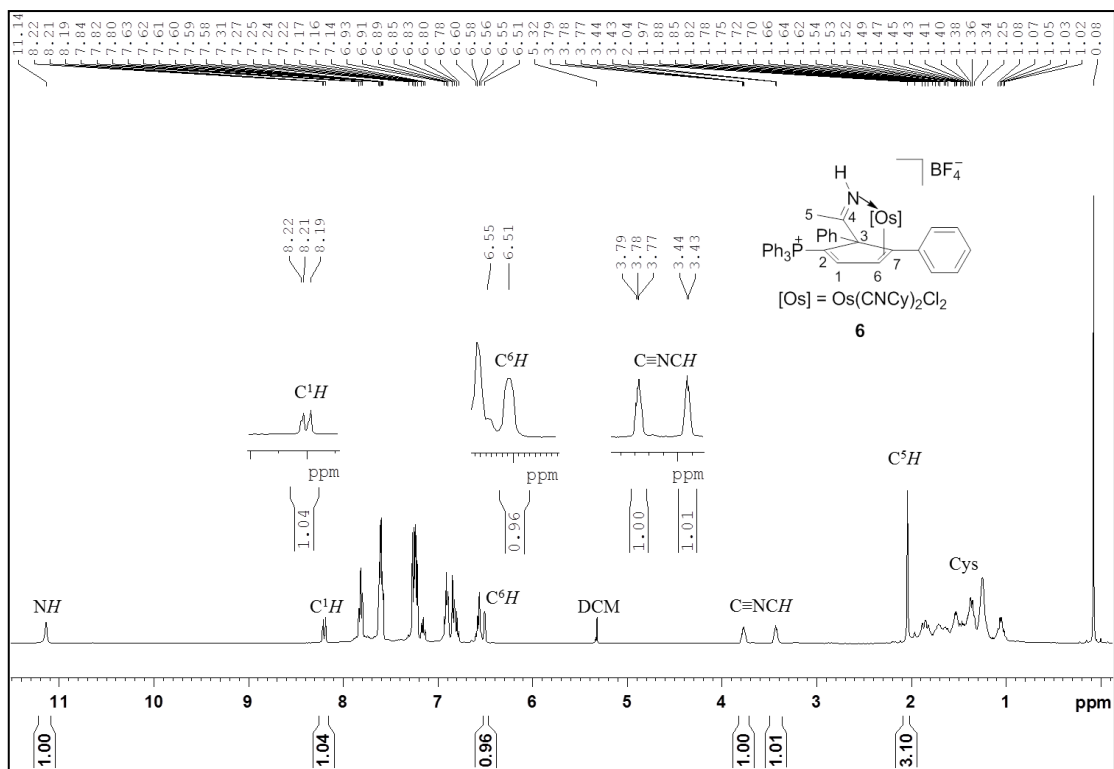


Figure S5-2 The ^1H NMR spectrum of complex **6** in CD_2Cl_2 at 400.1 MHz.

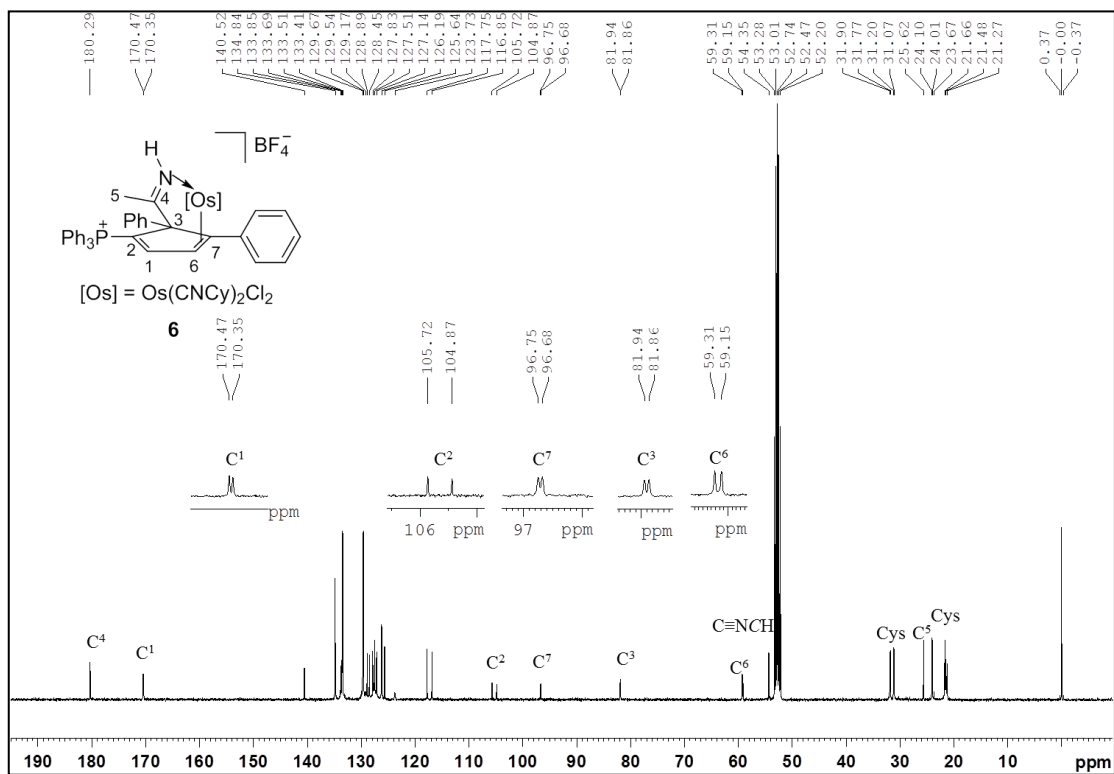


Figure S5-3 The $^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of complex **6** in CD_2Cl_2 at 101.6 MHz.

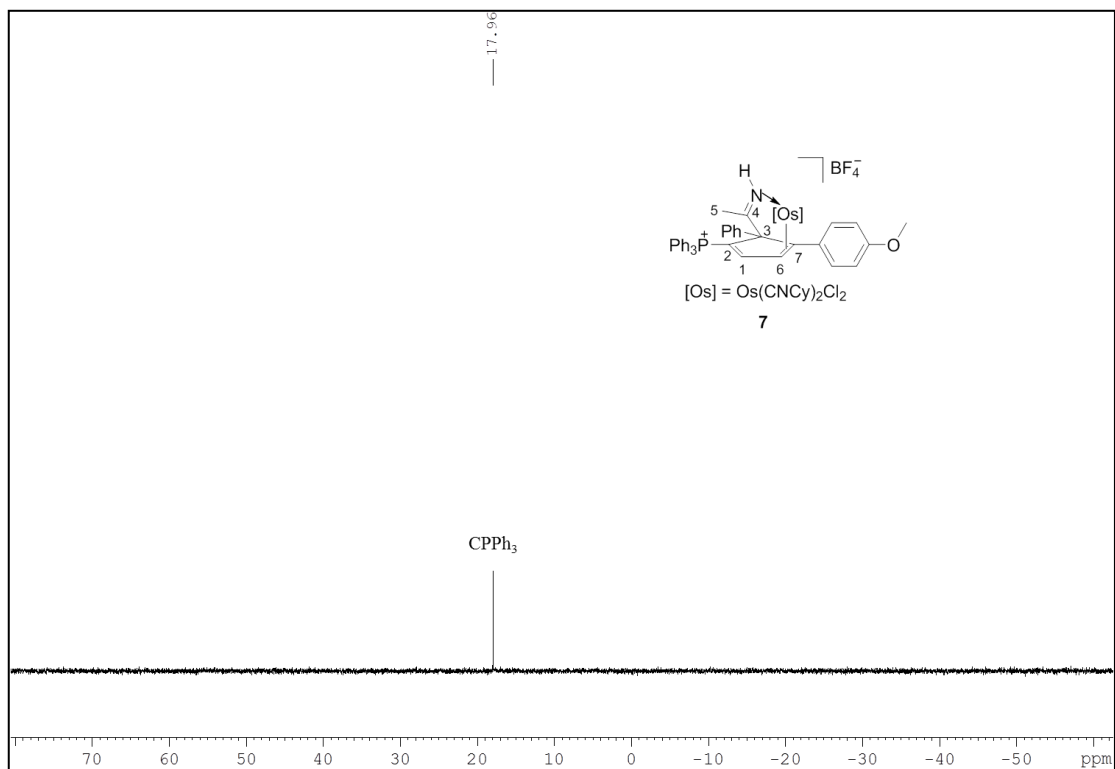


Figure S6-1 The $^{31}\text{P}\{^1\text{H}\}$ NMR spectrum of complex **7** in CD_2Cl_2 at 162.0 MHz.

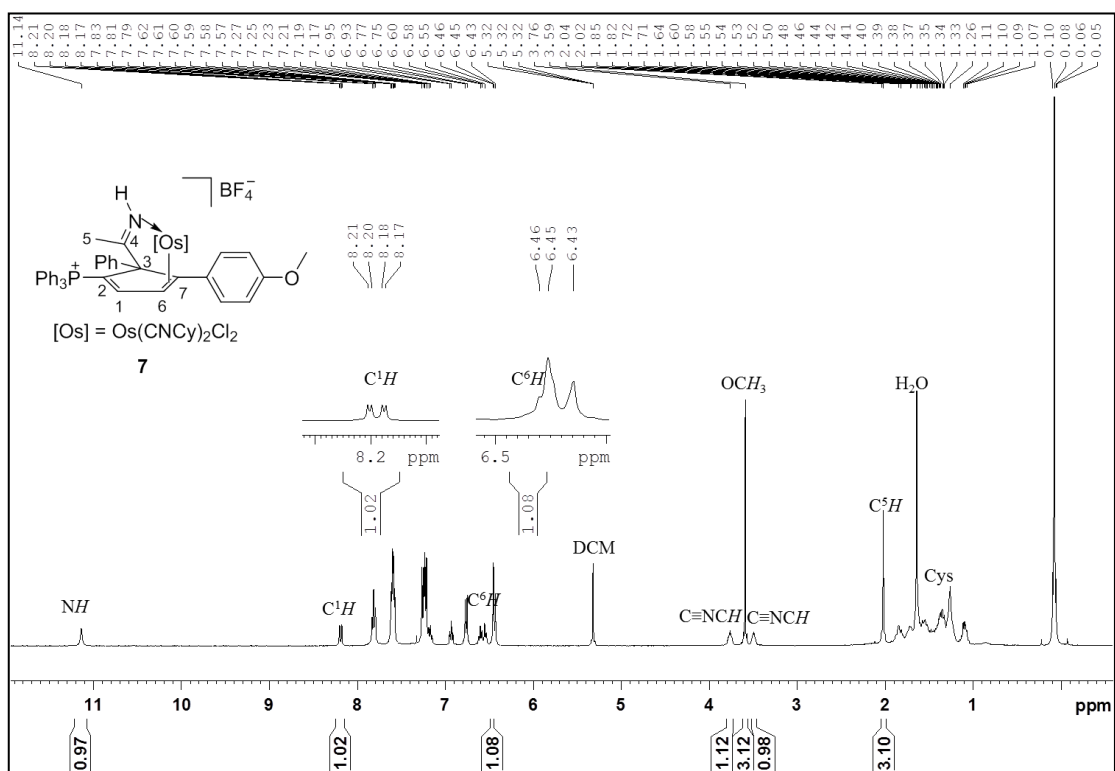


Figure S6-2 The ^1H NMR spectrum of complex **7** in CD_2Cl_2 at 400.1 MHz.

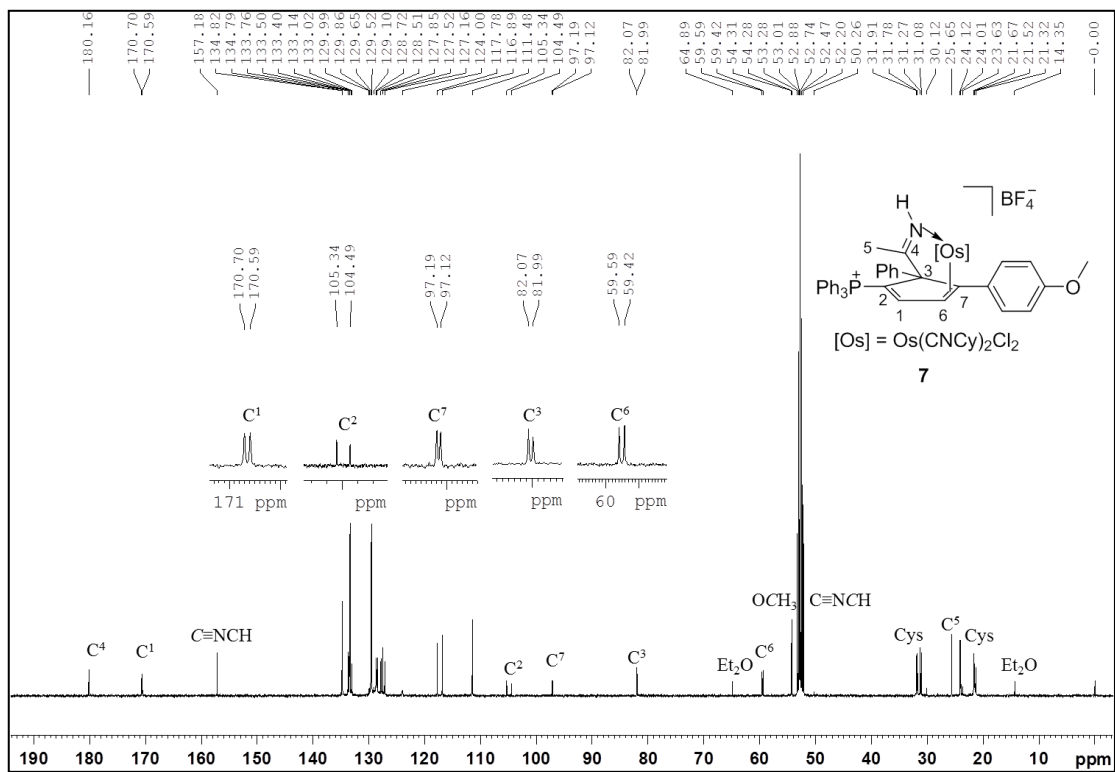


Figure S6-3 The $^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of complex **7** in CD_2Cl_2 at 101.6 MHz.

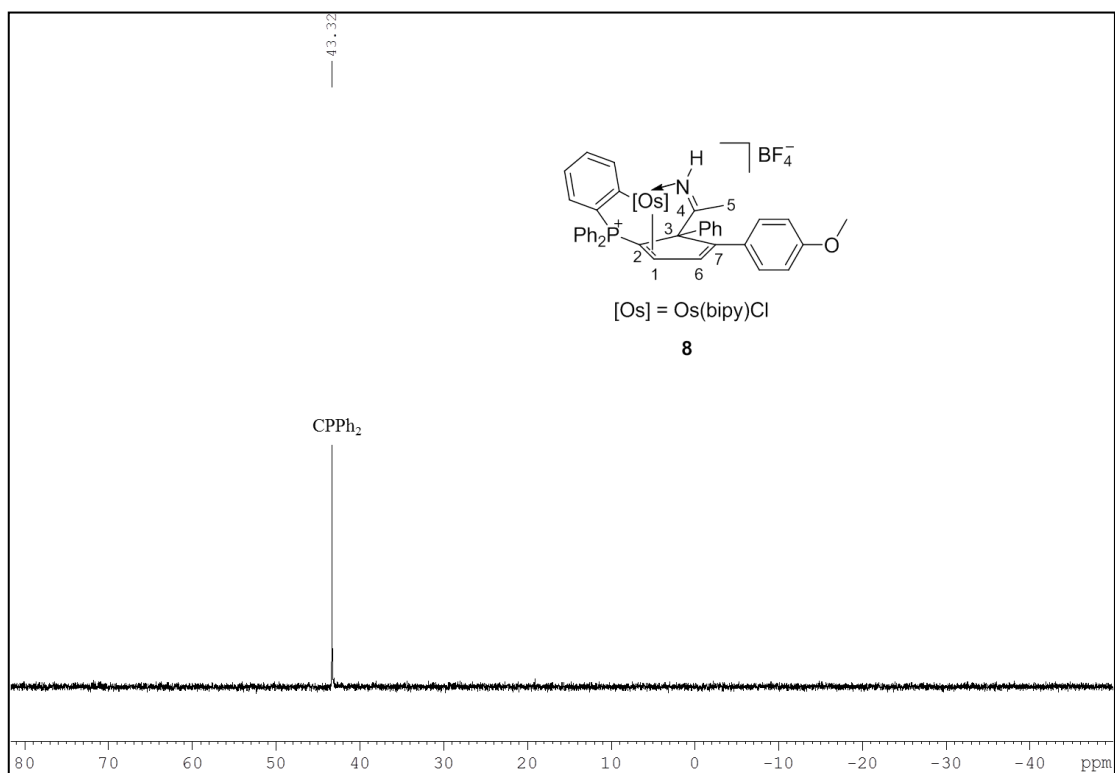


Figure S7-1 The $^{31}\text{P}\{^1\text{H}\}$ NMR spectrum of complex **8** in $\text{DMSO}-d_6$ at 162.0 MHz.

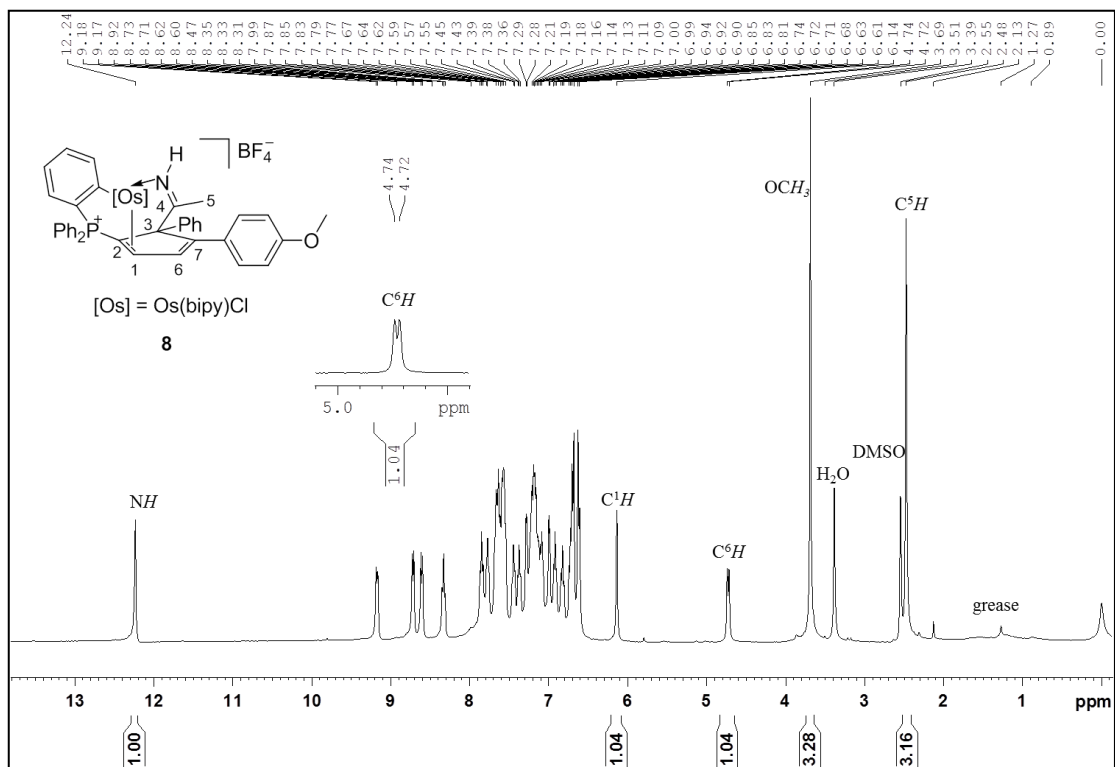


Figure S7-2 The ^1H NMR spectrum of complex **8** in DMSO-D_6 at 400.1 MHz.

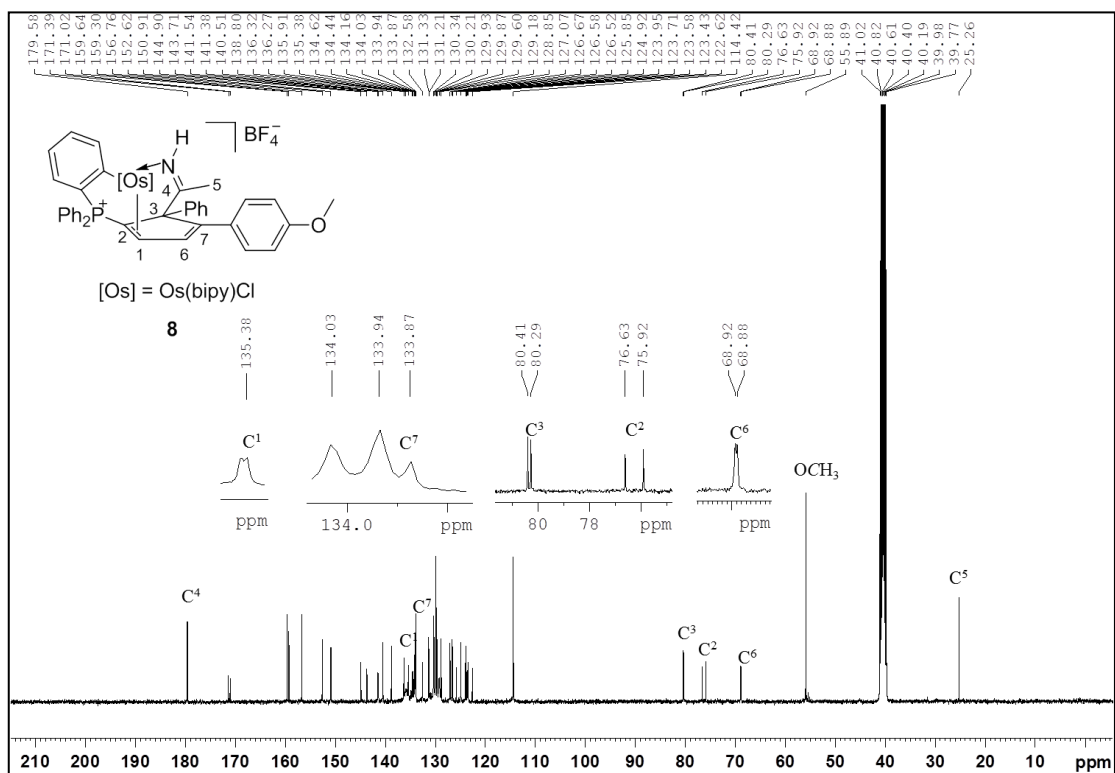


Figure S7-3 The $^{13}\text{C}\{^1\text{H}\}$ NMR spectrum of complex **8** in DMSO-D_6 at 101.6 MHz