

**Azo Complexes of Osmium(II): Preparation and Reactivity of
Organic Azide and Hydrazine Derivatives**

Gabriele Albertin,^{*,†} Stefano Antoniutti,[†] Laura Bonaldo,[†] Alessandra Botter[†] and Jesús Castro[‡]

[†]*Dipartimento di Scienze Molecolari e Nanosistemi, Università Ca' Foscari Venezia, Dorsoduro 2137, 30123 Venezia, Italy.*

[‡]*Departamento de Química Inorgánica, Universidade de Vigo, Facultade de Química, Edificio de Ciencias Experimentais, 36310 Vigo (Galicia), Spain.*

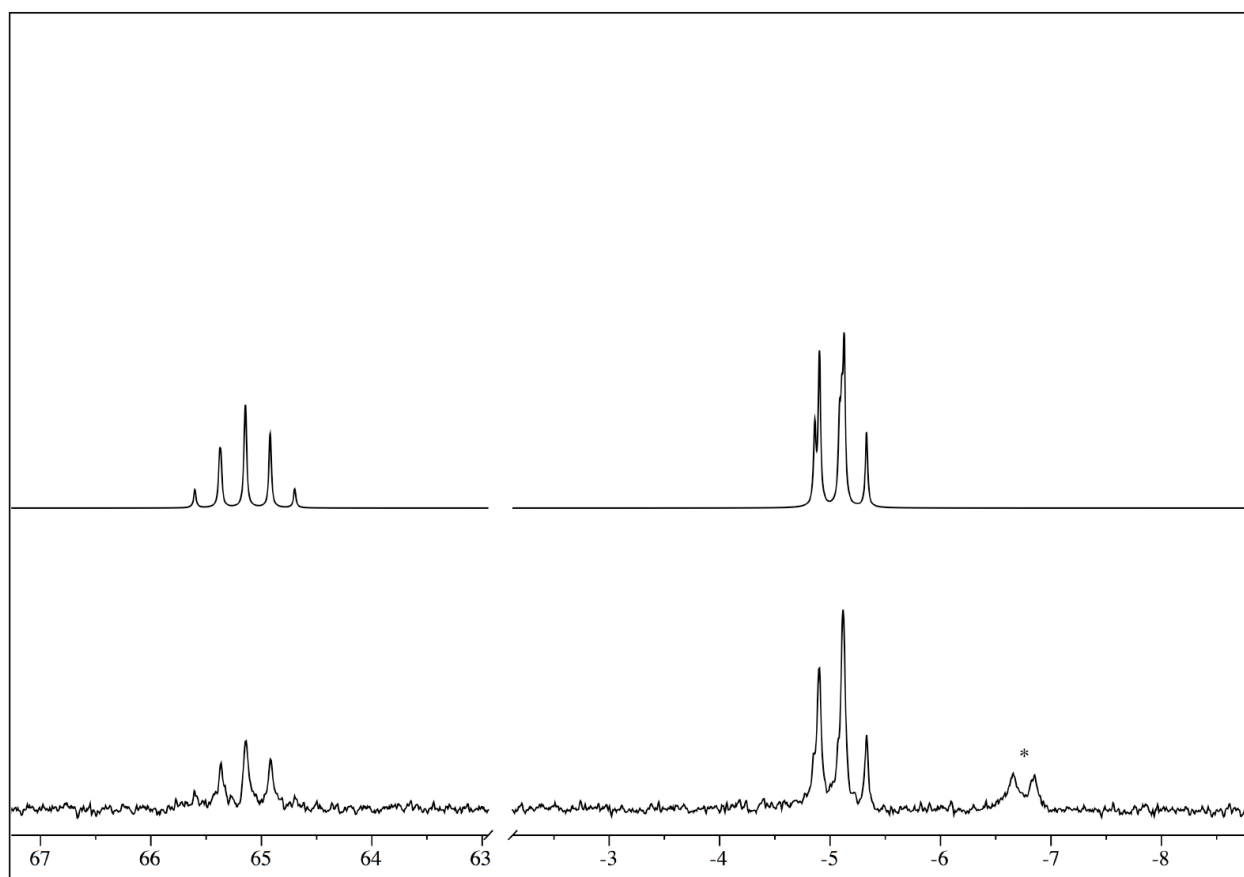


Figure S1. $^{31}\text{P}\{^1\text{H}\}$ NMR spectra of $[\text{OsCl}(\eta^{1-15}\text{N}_3\text{CH}_2\text{C}_6\text{H}_4\text{-4-CH}_3)(\text{CO})(\text{PPh}_3)_2\{\text{P}(\text{OEt})_3\}]\text{BPh}_4$ (**5b₁**) in CD_2Cl_2 at $-30\text{ }^\circ\text{C}$: simulated (upper) and experimental (lower; asterisk marks an impurity).

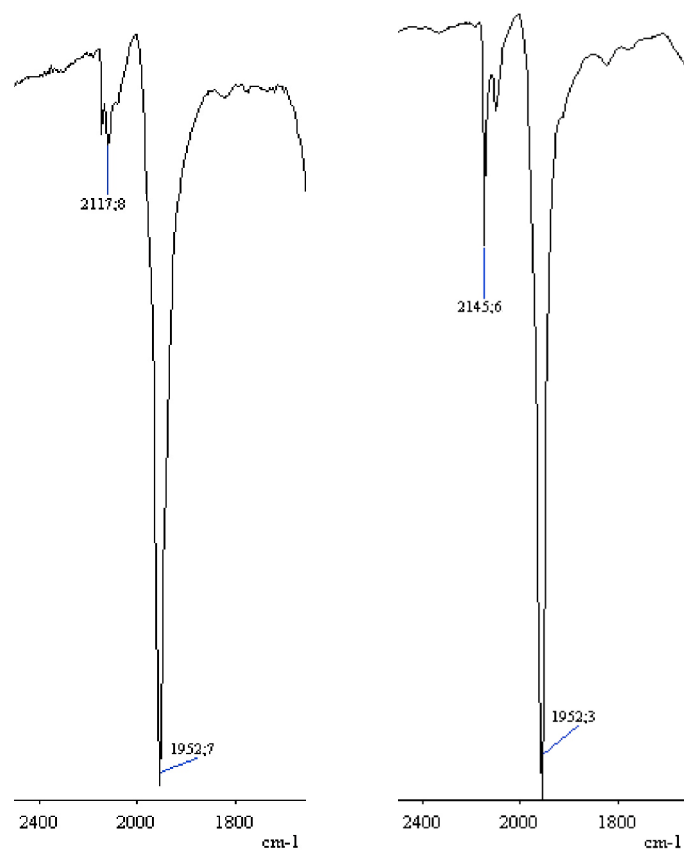


Figure S2. IR spectra in KBr of the labeled $[\text{OsCl}(\eta^1\text{-}^{15}\text{N}_3\text{CH}_2\text{C}_6\text{H}_4\text{-4-CH}_3)(\text{CO})\text{-(PPh}_3)_2\{\text{P(OEt)}_3\}]\text{BPh}_4$ (**5b**₁, left) and unlabeled compound $[\text{OsCl}(\eta^1\text{-N}_3\text{CH}_2\text{C}_6\text{H}_4\text{-4-CH}_3)(\text{CO})\text{-(PPh}_3)_2\{\text{P(OEt)}_3\}]\text{BPh}_4$ (**5b**, right).