Supporting Information (SI) for:

Employing dianionic macrocyclic tetracarbenes to synthesize neutral divalent metal complexes

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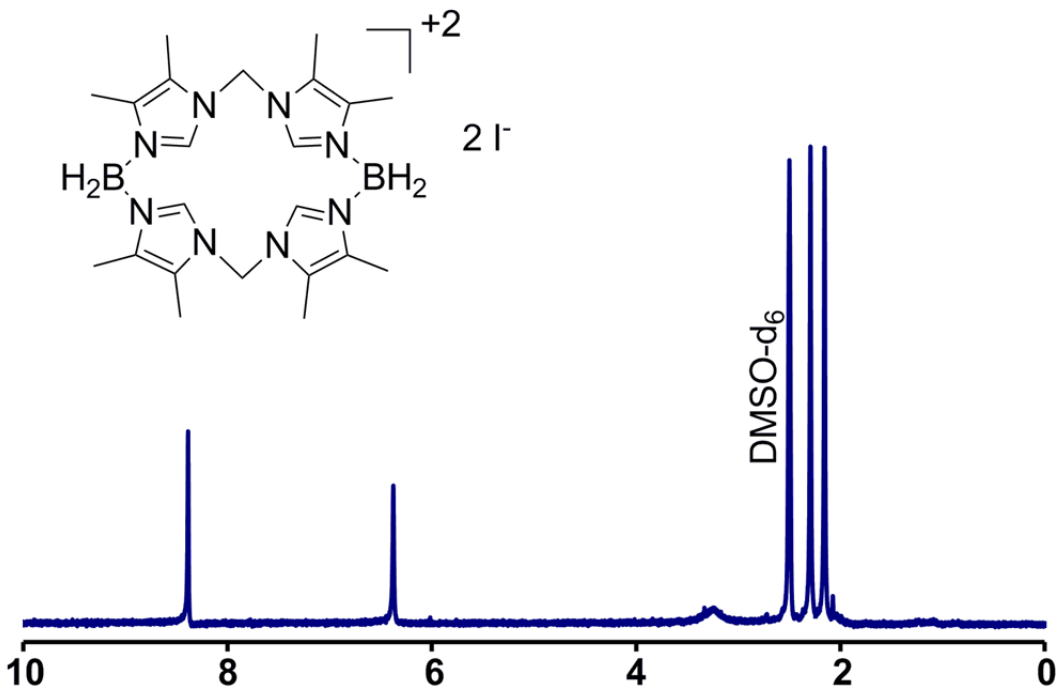
Bond Lengths and Angles Table for DFT: S2

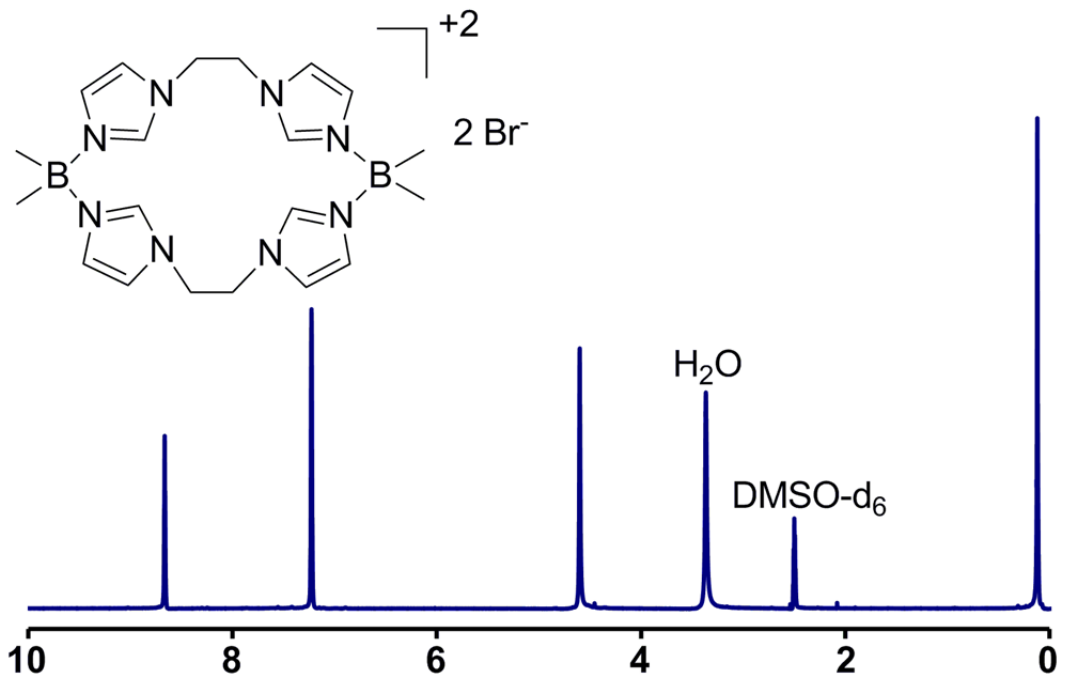
^{1}*H NMRs of* ***2***, ***4***, ***10***, *and* ***11****:* S3-S6

	Experimental		**Calculated**	**Calculated**
Complex	**($^{B(Me)_2,Et}TC^{H}$)Ni**	**Complex**	**($^{B(Me)_2,Et}TC^{H}$)Ni**	**[($^{Me,Et}TC^{H}$)Ni]$^{2+}$**
Ni-C1 (Å)	1.927(3)	Ni-C1 (Å)	1.9304	1.9296
Ni-C2 (Å)	1.891(3)	Ni-C2 (Å)	1.8926	1.8853
C1-Ni-C2 (°)	93.8(1)	Ni-C3 (Å)	1.9304	1.9298
C1-Ni-C2’ (°)	86.5(1)	Ni-C4 (Å)	1.8926	1.8854
C1-Ni-C1’ (°)	172.0(2)	C1-Ni-C2 (°)	93.311	87.684
C2-Ni-C2’(°)	175.8(2)	C2-Ni-C3 (°)	87.237	92.519
		C3-Ni-C4 (°)	93.311	87.677
		C1-Ni-C4 (°)	87.237	92.536
		C1-Ni-C3 (°)	167.409	168.369
		C2-Ni-C4 (°)	175.006	177.948

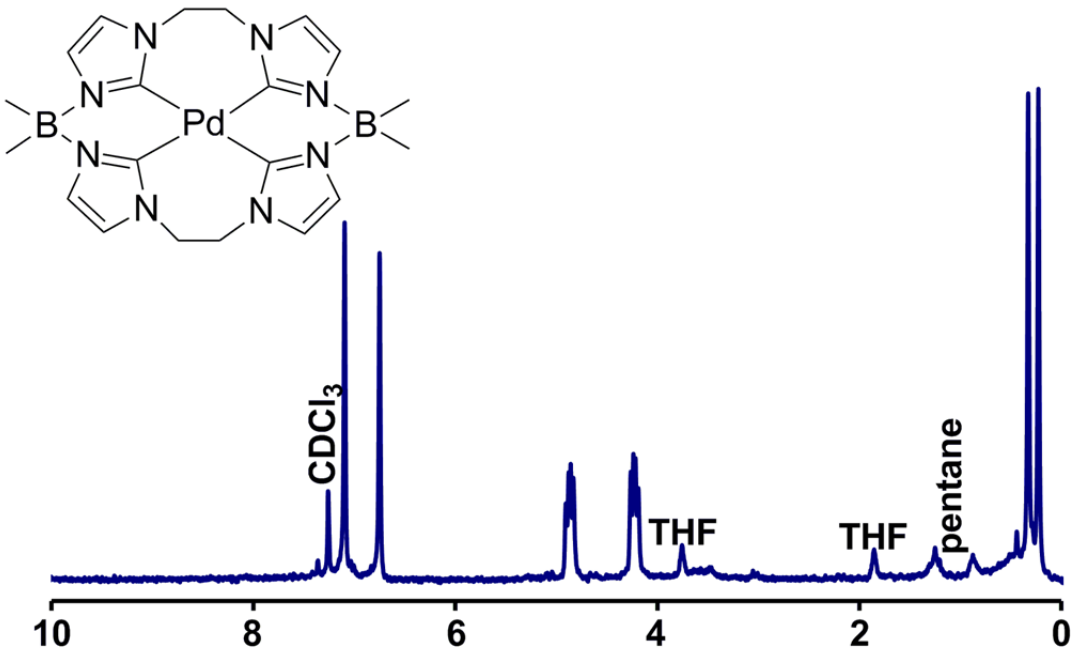
Table 1. Experimentally obtained data compared to DFT calculations using NWChem using functional B3LYP and basis set 6.31g**.



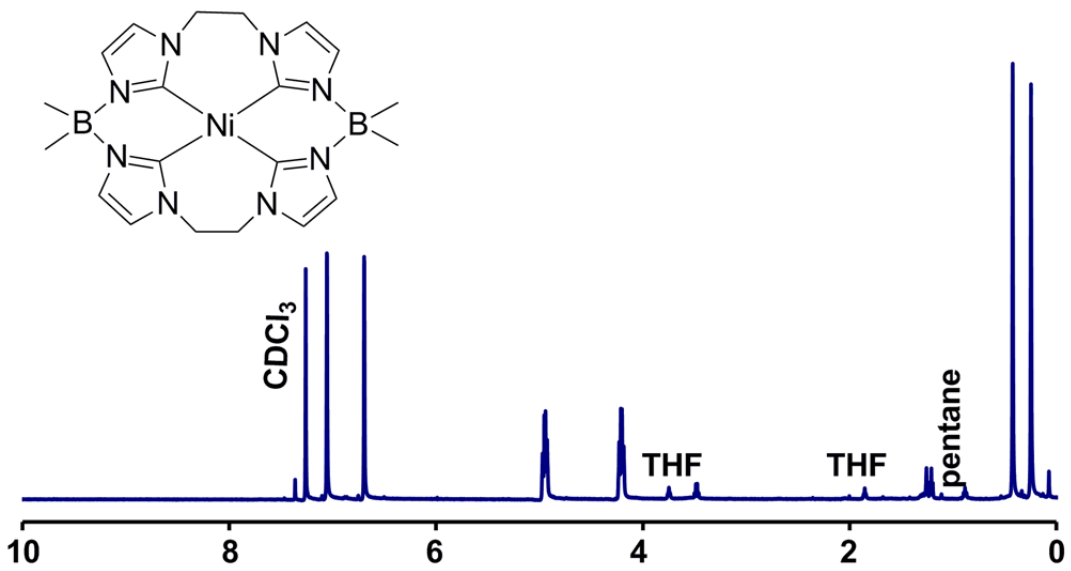
^{1}H NMR of ($^{BH_2,Me}TC^{Me}$)$(I)_2$ (**2**) in DMSO-d_6.



^{1}H NMR of ($^{B(Me)_2,Et}TC^{H}$)$(Br)_2$ (**4**) in DMSO-d_6.



^{1}H NMR of ($^{B(Me)_2,Et}Pd^{H}$) (**10**) in $CDCl_3$.



^{1}H NMR of ($^{B(Me)_2,Et}Ni^{H}$) (**11**) in $CDCl_3$.