

**Figure S1.** Inter-molecular metal- $\pi$  interactions in the  $[\text{Pd}(\text{L}^2)(\text{PPh}_3)]$  complex.

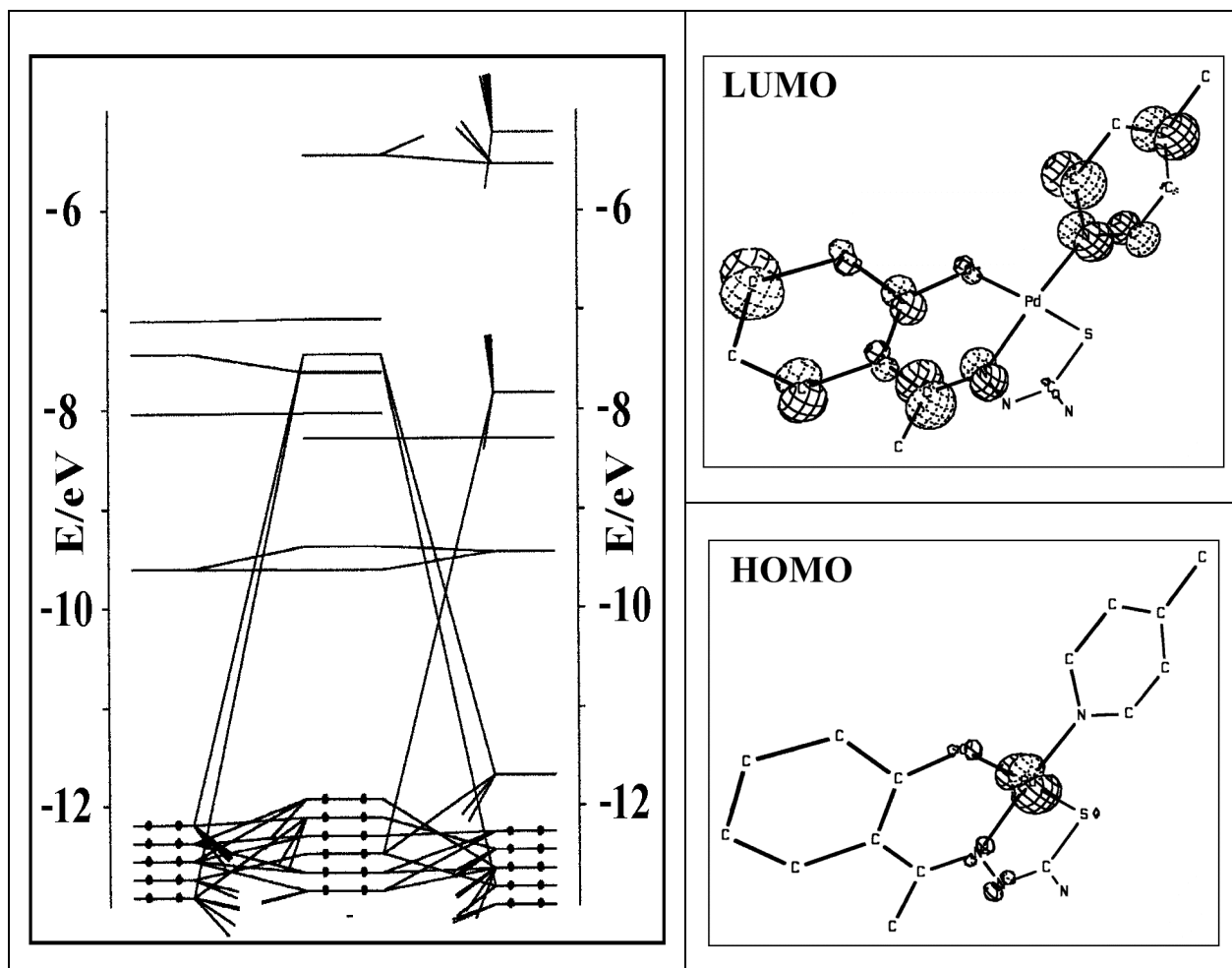
**Table S1.** Metal- $\pi$  and  $\pi$ - $\pi$  interactions in the  $[\text{Pd}(\text{L}^1)(\text{PPh}_3)]$  and  $[\text{Pd}(\text{L}^2)(\text{pic})]$  complexes respectively

<b>metal...<math>\pi</math> Interaction in <math>[\text{Pd}(\text{L}^1)(\text{PPh}_3)]</math></b>						
Cg(i)...Metal	Symmetry	$\pi$ ...M	$\pi$ ...M (perp)	$\beta$		
Cg(3) $\rightarrow$ Pd	1-x, 1-y, 1-z	3.999	3.322	33.8		
Ring ( Cg1 ) C(1) $\rightarrow$ C(2) $\rightarrow$ C(3) $\rightarrow$ C(4) $\rightarrow$ C(5) $\rightarrow$ C(6)						
<b><math>\pi</math>...<math>\pi</math> Interaction in <math>[\text{Pd}(\text{L}^2)(\text{pic})]</math></b>						
Cg(i)...Cg(j)	Symmetry	$\pi$ ... $\pi$	$\alpha$	$\beta$	Cg(i)...Cg(j) (perp)	Cg(j)...Cg(i) (perp)
Cg(3) $\rightarrow$ Cg(3)	-x, 1-y, 1-z	3.669(2)	0.0	23.5	3.506	3.506
Cg(4) $\rightarrow$ Cg(3)	1-x, 1-y, 1-z	4.562(2)	12.1	29.0	3.441	3.991
Ring ( Cg3 ) N(4) $\rightarrow$ C(10) $\rightarrow$ C(11) $\rightarrow$ C(12) $\rightarrow$ C(13) $\rightarrow$ C(14)						
Ring ( Cg4 ) C(1) $\rightarrow$ C(2) $\rightarrow$ C(3) $\rightarrow$ C(4) $\rightarrow$ C(5) $\rightarrow$ C(6)						

$\alpha$  = Dihedral angle between rings Cg(I) and Cg(J) ;  $\beta$  = Angle between Cg(I)  $\rightarrow$  Cg(J) vector and normal to ring Cg(I)



**Figure S2.** Inter-molecular  $\pi$ --- $\pi$  interactions in the  $[\text{Pd}(\text{L}^2)(\text{pic})]$  complex.



**Figure S3.** Partial molecular orbital diagram of the [Pd(L<sup>2</sup>)(pic)] complex.