

**Table S1.**

Dihedral angles in literature *trans*-Pt(Ypy)<sub>2</sub>L<sub>2</sub> complexes. The complexes indicated in bold contain *ortho*-substituted pyridine derivatives.

CSD refcode	Compound	Dihedral Angle	Reference
TCPYPT	<i>trans</i> -Pt(py) <sub>2</sub> (SCN) <sub>2</sub>	89.1	(Caira & Nassimbeni, 1975)
MIJWEH	<i>trans</i> -[Pt(py) <sub>2</sub> Cl(DMSO)](NO <sub>3</sub> )	87.4; 88.4	(Fontes <i>et al.</i> , 2001)
<b>TAGJAN</b>	<b><i>trans</i>-[Pt(2-NH<sub>2</sub>py)<sub>2</sub>(NH<sub>2</sub>Me)<sub>2</sub>](ClO<sub>4</sub>)<sub>2</sub></b>	<b>86.0</b>	<b>(Beck <i>et al.</i>, 2003)</b>
<b>TAGHUF</b>	<b><i>trans</i>-[Pt(2-NH<sub>2</sub>py)<sub>2</sub>(NH<sub>2</sub>Me)<sub>2</sub>](NO<sub>3</sub>)<sub>2</sub></b>	<b>79.9</b>	<b>(Beck <i>et al.</i>, 2003)</b>
<b>YEXSOJ</b>	<b><i>trans</i>-[Pt(2-OHpy)<sub>2</sub>(NH<sub>2</sub>Me)<sub>2</sub>](NO<sub>3</sub>)</b>	<b>61.8</b>	<b>(Schreiber <i>et al.</i>, 1994)</b>
<b>KARVEE</b>	<b><i>trans</i>-Pt(2-Mepy)<sub>2</sub>l<sub>2</sub></b>	<b>81.9; 89.9</b>	<b>(Tessier &amp; Rochon, 1999)</b>
<b>RIHPAZ</b>	<b><i>trans</i>-Pt(2,6-(CH<sub>2</sub>OH)py)<sub>2</sub>Cl<sub>2</sub></b>	<b>79.7</b>	<b>(Rochon <i>et al.</i>, 1996)</b>
DIPYPT	<i>trans</i> -Pt(py) <sub>2</sub> l <sub>2</sub>	74.0	(Thiele & Wagner, 1978)
KARTUS	<i>trans</i> -Pt(4-Mepy) <sub>2</sub> l <sub>2</sub>	70.4	(Tessier & Rochon, 1999)
ACAZOU	<i>trans</i> -Pt(3-(NHSO <sub>2</sub> Me)py) <sub>2</sub> l <sub>2</sub>	69.1	(Dodoff <i>et al.</i> , 2004)
KARVAA	<i>trans</i> -Pt(3-Mepy) <sub>2</sub> l <sub>2</sub>	63.5	(Tessier & Rochon, 1999)
JAFQAJ	<i>trans</i> -[Pt(Apy) <sub>2</sub> (NH <sub>3</sub> ) <sub>2</sub> ](NO <sub>3</sub> ) <sub>2</sub>	68.1	(Ueda <i>et al.</i> , 2003)
KARQUP	<i>trans</i> -Pt(3-Mepy) <sub>2</sub> Cl <sub>2</sub>	66.2 ; 69.6	(Tessier & Rochon, 1999)
KARROK	<i>trans</i> -Pt(4-Mepy) <sub>2</sub> Cl <sub>2</sub>	67.4	(Tessier & Rochon, 1999)
CLPRPT	<i>trans</i> -Pt(4-(COOEt)py) <sub>2</sub> Cl <sub>2</sub>	57.0	(Camalli <i>et al.</i> , 1980)
CLPYPT	<i>trans</i> -Pt(py) <sub>2</sub> Cl <sub>2</sub>	56.2	(Colamarino & Orioli, 1975)
OBEROCC	<i>trans</i> -Pt(4-(CHCH <sub>2</sub> )py) <sub>2</sub> Cl <sub>2</sub>	54.5	(Shaver <i>et al.</i> , 2000)
NIXMIQ	<i>trans</i> -Pt(Bpy) <sub>2</sub> Cl <sub>2</sub>	46.2	(Eremenko <i>et al.</i> , 1997)
NOYLES	<i>trans</i> -Pt(4-(non-5-yl)py) <sub>2</sub> (C <sub>a</sub> ) <sub>2</sub>	63.3	(Adams & James, 1997)
SESDOJ	<i>trans</i> -Pt(py) <sub>2</sub> Cl(Ph)	52.8 ; 54.9	(Pombrik <i>et al.</i> , 1988)
IRIKUP	<i>trans</i> -Pt(py) <sub>2</sub> (N <sub>a</sub> ) <sub>2</sub>	56.6	(Romerosa <i>et al.</i> , 2004)
ICUVAD	<i>trans</i> -Pt(py) <sub>2</sub> (NO <sub>3</sub> ) <sub>2</sub>	40.1	(Tessier & Rochon, 2001)
ICUVIL	<i>trans</i> -Pt(3,5-Me <sub>2</sub> py) <sub>2</sub> (NO <sub>3</sub> ) <sub>2</sub>	39.2	(Tessier & Rochon, 2001)

Apy = 2-(4-pyridyl)-4,4,5,5-tetramethyl-4,5-dihydro-1-H-imidazolyl-1-oxy-3-oxide; Bpy = N-nitroxyethylnicotinamide; C<sub>a</sub> = 4-nitrophenylethyne; N<sub>a</sub> = 8-(methylthio)theophylline.

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