ELECTRONIC SUPPLEMENTARY INFORMATION

Flexible pyridyloxy-substituted cyclotetraphosphazene platforms linked by silver(I)

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Single Crystal X-ray Structures: Selected Bond Lengths and Angles

Table S1 Selected bond lengths (Å) and angles (º) for $\{[AgL]PF_6]\}_n$ (**1**)

Ag1-N16	2.372(4)	Ag1-N86#1	2.270(3)
Ag1-N26	2.382(3)	Ag1-N61#1	2.365(4)
N1-P1	1.557(3)	N3-P3	1.569(3)
N1-P2	1.556(3)	N3-P4	1.568(3)
N2-P2	1.566(3)	N4-P1	1.568(4)
N2-P3	1.559(4)	N4-P4	1.565(3)
N16-Ag1-N26	116.51(12)	N26-Ag1-N86#1	115.53(12)
N16-Ag1-N86#1	98.96(12)	N26-Ag1-N61#1	87.38(12)
N16-Ag1-N61#1	102.26(13)	N61#1-Ag1-N86#1	136.94(12)
N1-P2-N2	122.34(19)	P1-N1-P2	139.4(2)
N1-P1-N4	123.60(18)	P1-N4-P4	130.2(2)
N2-P3-N3	122.27(18)	P2-N2-P3	136.4(2)
N4-P4-N3	123.15(19)	P3-N3-P4	131.9(2)

Symmetry transformations used to generate equivalent atoms:
#1 *x*+1/2,-*y*+1/2,*z*-1/2 #2 *x*-1/2,-*y*+1/2,*z*+1/2

Table S2 Selected bond lengths (Å) and angles (º) for $\{[Ag_2L](PF_6)_2\}_n$ (**2**)

Ag1-N11	2.549(7)	Ag1-N41A	2.367(13)
Ag1-N21	2.242(7)	Ag1-N51	2.255(14)
Ag1-N41B	2.141(13)		
P1-N1	1.535(10)	P3-N2	1.534(9)
P1-N4	1.595(10)	P3-N3	1.519(10)
P2-N1	1.576(9)	P4-N3	1.564(10)
P2-N2	1.557(9)	P4-N4	1.521(10)
N11-Ag1-N21	93.5(2)	N21-Ag1-N41A	157.5(4)
N11-Ag1-N41A	100.7(4)	N21-Ag1-N41B	149.9(4)
N11-Ag1-N41B	98.5(4)	N41A-Ag1-N51	97.6(6)
N11-Ag1-N51	104.6(4)	N41B-Ag1-N51	105.6(10)
N21-Ag1-N51	95.5(4)		
N1-P1-N4	124.6(9)	P1-N1-P2	134.9(8)
N1-P2-N2	117.3(7)	P2-N2-P3	139.6(7)
N4-P4-N3	118.0(8)	P3-N3-P4	128.4(9)
N2-P3-N3	125.9(7)	P4-N4-P1	135.1(6)

Table S3 Selected bond lengths (Å) and angles (º) for $[Ag_2L(CF_3SO_3)_2]$ (**3**)

Ag1-N31	2.473(8)	Ag2-N21	2.332(8)
Ag1-N51	2.343(7)	Ag2-N41	2.231(9)
Ag1-N71	2.334(7)	Ag2-N61	2.253(9)
Ag1-O9	2.467(9)	Ag2-O7A	2.431(13)
N1-P1	1.582(8)	N3-P3	1.561(8)
N1-P2	1.558(7)	N3-P4	1.563(8)
N2-P2	1.563(8)	N4-P1	1.567(8)
N2-P3	1.571(8)	N4-P4	1.556(9)
N31-Ag1-N51	132.0(2)	N21-Ag2-N41	119.4(3)
N31-Ag1-N71	97.8(3)	N21-Ag2-N61	93.8(3)
N51-Ag1-N71	130.2(3)	N41-Ag2-N61	143.3(3)
N31-Ag1-O9	89.7(3)	N21-Ag2-O7A	105.3(4)
N51-Ag1-O9	92.1(3)	N41-Ag2-O7A	102.0(4)
N71-Ag1-O9	86.6(3)	N61-Ag2-O7A	82.0(4)
N1-P2-N2	121.5(4)	P1-N1-P2	136.3(6)
N1-P1-N4	120.3(5)	P1-N4-P4	128.6(5)
N2-P3-N3	121.9(4)	P2-N2-P3	129.4(6)
N3-P4-N4	119.3(4)	P3-N3-P4	126.5(6)

Table S4 Selected bond lengths (Å) and angles (º) for $\{[Ag_2L(CF_3SO_3)_2].C_4H_{10}O\}_n$ (**4**)

Ag1-N11#1	2.231(2)	Ag1-N31	2.4292(19)
Ag1-N41#2	2.2456(19)	Ag1-O12#3	2.6246(17)
N1-P1	1.5722(18)	N2-P2	1.5571(19)
N1-P2	1.5729(18)	N2-P1#4	1.5635(19)
N11#1-Ag1-N41#2	150.14(7)	N11#1-Ag1-O12#3	84.92(6)
N11#1-Ag1-N31	109.72(7)	N41#2-Ag1-O12#3	111.81(6)
N41#2-Ag1-N31	96.29(7)	N31-Ag1-O12#3	86.51(6)
N1-P2-N2	120.95(9)	P1-N1-P2	128.91(12)
N1-P1-N2#4	119.41(10)	P2-N2-P1#4	139.42(11)

Symmetry transformations used to generate equivalent atoms:
#1 x+1,y,z #2 -x+2,-y+1,-z+2 #3 -x+2,-y,-z+1 #4 -x+1,-y+1,-z+2

Table S5 Selected bond lengths (Å) and angles (º) for $\{[Ag_3MeL(CH_3CN)_2](PF_6)_3 \cdot 2CH_3CN\}_n$ (**5**)

Ag1-N11	2.180(10)	Ag2-N92	2.428(13)
Ag1-N51#1	2.172(10)	Ag3-N41	2.181(9)
Ag2-N21	2.181(10)	Ag3-N61	2.153(10)
Ag2-N81	2.190(10)	Ag3-N90	2.397(14)
N1-P1	1.567(9)	N3-P2	1.537(9)
N1-P4	1.569(10)	N3-P3	1.587(9)
N2-P1	1.570(11)	N4-P3	1.557(11)
N2-P2	1.542(11)	N4-P4	1.556(11)
N51#1-Ag1-N11	170.6(4)	N61-Ag3-N41	161.9(4)
N21-Ag2-N81	157.9(4)	N61-Ag3-N90	99.9(4)
N21-Ag2-N92	96.0(4)	N41-Ag3-N90	97.6(4)
N81-Ag2-N92	106.1(4)		
N1-P1-N2	120.8(5)	P1-N2-P2	144.3(7)
N1-P4-N4	121.5(5)	P1-N1-P4	130.7(6)
N2-P2-N3	122.1(5)	P3-N3-P2	131.0(6)
N3-P3-N4	120.9(5)	P4-N4-P3	144.3(7)

Symmetry transformations used to generate equivalent atoms: #1 x,y-1,z

Table S6 Selected bond lengths (Å) and angles (º) for $[Ag_4MeL(CF_3SO_3)(CH_3CN)_3](CF_3SO_3)_3$ (**6**)

Ag1-N11	2.185(4)	Ag3-O23	2.630(3)
Ag1-N31	2.189(4)	Ag3-N41	2.169(4)
Ag1-N90	2.523(6)	Ag3-N61	2.167(4)
Ag2-N21	2.190(4)	Ag4-N51	2.209(5)
Ag2-N81	2.188(4)	Ag4-N71	2.208(5)
Ag2-N91B	2.61(2)	Ag4-N92A	2.49(2)
Ag2-N91A	2.66(2)	Ag4-N92B	2.486(15)
Ag2-O21	2.631(3)		
P1-N1	1.575(4)	P3-N2	1.566(4)
P1-N4	1.571(4)	P3-N3	1.568(4)
P2-N1	1.564(4)	P4-N3	1.562(4)
P2-N2	1.565(4)	P4-N4	1.566(4)
N11-Ag1-N31	161.10(16)	N61-Ag3-N41	169.40(15)
N11-Ag1-N90	105.57(19)	N51-Ag4-N71	162.01(16)
N31-Ag1-N90	90.43(19)	N51-Ag4-N92A	101.6(8)
N21-Ag2-N91B	99.9(6)	N51-Ag4-N92B	95.8(6)
N21-Ag2-N91A	89.5(5)	N71-Ag4-N92A	91.2(8)
N21-Ag2-N81	162.62(16)	N71-Ag4-N92B	98.2(5)
N81-Ag2- N91B	91.3(6)	Ag2-O21-S2	145.5(4)
N81-Ag2-N91A	101.5(5)	Ag3-O23-S2	111.1(7)
P1-N1-P2	129.3(3)	N1-P1-N4	122.7(2)
P1-N4-P4	129.6(3)	N1-P2-N2	129.3(3)
P2-N2-P3	130.6(3)	N2-P3-N3	122.1(2)
P4-N3-P3	130.1(3)	N3-P4-N4	122.5(2)