Electronic Supporting Information

Experimental

Methods and materials

All reagents were purchased from Aldrich and used without further purification. 1,1'-Dimethylene-2,2'-biimidazole (**L**) was prepared via a published procedure.[1] Elemental analyses were obtained by Campbell Microanalytical Laboratories, University of Otago, Dunedin, New Zealand. IR Spectra were recorded with a Perkin Elmer Spectrum One FTIR spectometer in diffuse reflectance mode using KBr powder. Melting points were obtained with an Electrothermal melting point apparatus and are uncorrected. All yields were based on the silver as the limiting reagent.

Synthesis of $[Ag(L)(NO_3)]_2$ (1)

1,1'-Dimethylene-2,2'-biimidazole (9.8 mg, 0.06 mmol) and $AgNO_3$ (5.2 mg, 0.03 mmol) were each dissolved in 5ml of acetonitrile and heated. The solutions were mixed and left to cool. Colourless needles of **1** suitable for X-ray crystallographic analysis were obtained after 48 h. Yield: 3.3 mg (33%). Elemental anal. calcd (found) for $C_{16}H_{16}N_{10}O_6Ag_2$: C, 29.11 (28.55); H, 2.44 (2.28); N, 21.22 (20.58) %. IR (KBr) ν/cm^{-1}: 3118.5 (m), 3002.9 (w), 2397.9 (br, w), 1598.3 (w), 1508.4 (m), 1471.6 (w), 1434.6 (m), 1361.5 (br, s), 1286.0 (s), 1215.7 (m), 1139.8 (m), 1123.7 (w), 1099.2 (w), 1056.6 (w), 964.5 (w), 828.4 (w), 787.5 (m), 763.1 (m), 721.7 (m), 673.7 (m). Mp >300°C.

Synthesis of $[Ag_3(L)_4(ClO_4)_3]$ (2)

1,1'-Dimethylene-2,2'-biimidazole (9.7 mg, 0.06 mmol) and $AgClO_4$ (6.3 mg, 0.03 mmol) were each dissolved in 5ml of acetonitrile and heated. The solutions were mixed and left to cool. After 24 h 1 ml of this solution was used for vapour diffusion with diisopropyl ether. Colourless needles of **2** suitable for X-ray crystallographic analysis were obtained after 24 h. Yield: 5.7 mg (45%). Crystals of **2** were hydroscopic, and no consistent elemental analysis or melting point could be obtained for this complex. IR (KBr) ν/cm^{-1}: 3135.8 (br, m), 1555.0 (m), 1519.8 (m), 1435.9 (m), 1351.1 (m), 1287.4 (m), 1090.6 (br, s), 967.3 (m), 776.2 (m), 673.6 (m), 622.8 (s).

Synthesis of $[Ag_2(L)_3(PF_6)_2]$ (3)

1,1'-Dimethylene-2,2'-biimidazole (9.8 mg, 0.06 mmol) and $AgPF_6$ (7.7 mg, 0.03 mmol) were each dissolved in 5ml of acetonitrile and heated. The solutions were mixed and left to cool. Colourless needles of **3** suitable for X-ray crystallograhic analysis were obtained after 48 h. Yield: 3.1 mg (20%). Elemental anal. calcd (found) for $C_{24}H_{24}N_{12}F_{12}P_2Ag_2.2H_2O$: C, 28.20 (28.15); H, 2.76 (2.40); N, 17.04 (15.94) %. IR (KBr) ν/cm^{-1}: 3107.6 (br, w), 1500.2 (m), 1467.9 (w), 1435.9 (w), 1347.2 (w), 1283.6 (m), 1123.0 (m), 1058.8 (w), 841.3 (br, s), 763.64 (m), 720.0 (w), 670.3 (w), 558.8 (s). Mp 289-292°C.

[1]R. P. Thummel, V Goulle and B Chen, *J. Org. Chem.*, 1989, **54**, 3057.

Crystal Structure Determination

Crystals were mounted on a glass fiber under oil. Data were collected at the temperature indicated on a Bruker APEXII area detector using graphite monochromised Mo Kα (γ = 0.71073 Å) radiation. The data reduction was performed using SAINT. Intensities were corrected for Lorentzian polarization effects and for absorption effects using multiscan methods. Space groups were determined from systematic absences and checked for higher symmetry. Structures were solved by direct methods using SHELXS-97 and refined with full-matrix least squares on F^2 using SHELXL-97. All non-hydrogen atoms were refined anisotropically, unless specified otherwise. Hydrogen atoms were included at geometrically estimated positions and refined with a riding model. Details of data collections and structure refinements are given in Table S1.

Crystallographic Tables

Table **S1** – Crystal data and refinement parameters for structures **1** – **3**.

Compound	**1**	**2**	**3**
Empirical formula	$C_{16}H_{16}N_{10}O_6Ag_2$	$C_{34}H_{35}Ag_3Cl_3N_{17}O_{12}$	$C_{12}H_{12}AgF_6N_6P$
Formula weight	660.13	1303.75	493.12
Temperature (K)	120(2)	120(2)	120(2)
Crystal system	monoclinic	monoclinic	orthorhombic
Space group	$P2_1/c$	Pc	Pbcn
Unit cell dimensions: a(Å), b(Å), c (Å)	13.4409(8), 15.3904(8), 19.3895(10)	11.8432(4), 12.4409(4), 15.8426(4)	21.9927(5), 12.7858(3), 11.2203(3)
α(°), β(°), γ(°)	90, 91.252(3), 90	90, 109.147(1), 90	90, 90, 90
Volume($Å^3$)	4010.0(4)	2205.12(12)	3155.08(13)
Z	8	2	8
Density (calculated) (Mg/m^3)	2.187	1.964	2.076
Absorption coefficient (mm^{-1})	2.016	1.583	1.456
F(000)	2592	1292	1936
Crystal size (mm)	0.16 × 0.11 × 0.02	0.51 × 0.13 × 0.06	0.47 × 0.12 × 0.08
Theta range for data collection	3.38 to 55°	4.98 to 55°	6.08 to 55°
Index Ranges	-17 ≤ h ≤ 17, -19 ≤ k ≤ 19, -25 ≤ l ≤ 25	-15 ≤ h ≤ 15, -16 ≤ k ≤ 16, -20 ≤ l ≤ 20	-28 ≤ h ≤ 28, -16 ≤ k ≤ 16, -14 ≤ l ≤ 14
Reflections collected	84288	49118	68125
Independent reflections [R(int)]	9202[0.0709]	10072[0.0315]	3617[0.0408]
Data / restraints / parameters	9202/0/613	10072/8/633	3617/0/235
Observed reflections [I>2σ(I)]	6984	9700	3109
Goodness-of-fit on F^2	1.038	1.034	1.041
R_1 [I>2sigma(I)]	R_1 = 0.0308	0.0204	0.0203
wR_2 (all data)	0.0692	0.0485	0.0516
Largest diff. peak/hole / e $Å^{-3}$	0.73/-0.54	0.69/-0.53	0.88/-0.75
Flack parameter		0.228(12)	

Table **S2**. Bond Lengths for Complex **1**.

Atom	Atom	Length/Å	Atom	Atom	Length/Å	Atom	Atom	Length/Å	Atom	Atom	Length/Å
Ag1	Ag2	2.8920(4)	O60	N58	1.233(4)	N22	C21	1.357(4)	N46	C45	1.360(4)
Ag1	N1	2.162(3)	O61	N58	1.229(4)	N22	C23	1.374(4)	N46	C47	1.367(4)
Ag1	N13	2.166(3)	N1	C2	1.333(4)	N25	C26	1.380(4)	C2	C9	1.443(5)
Ag2	N8	2.109(3)	N1	C5	1.384(4)	N25	C29	1.331(4)	C4	C5	1.365(5)
Ag2	N20	2.117(3)	N3	C2	1.358(4)	N28	C27	1.373(4)	C6	C7	1.516(5)
Ag3	Ag4	2.9040(4)	N3	C4	1.373(4)	N28	C29	1.344(4)	C11	C12	1.366(5)
Ag3	N25	2.122(3)	N3	C6	1.469(4)	N28	C30	1.478(4)	C14	C15	1.353(5)
Ag3	N44	2.116(3)	N8	C9	1.334(4)	N32	C33	1.329(4)	C17	C21	1.449(5)
Ag4	N32	2.134(3)	N8	C12	1.375(4)	N32	C36	1.380(4)	C18	C19	1.513(5)
Ag4	N37	2.146(3)	N10	C7	1.476(4)	N34	C31	1.464(4)	C23	C24	1.364(5)
O65	N62	1.254(4)	N10	C9	1.354(4)	N34	C33	1.351(4)	C26	C27	1.362(5)
O63	N62	1.255(4)	N10	C11	1.369(4)	N34	C35	1.378(4)	C29	C33	1.453(5)
O64	N62	1.243(4)	N13	C14	1.382(4)	N37	C38	1.326(4)	C30	C31	1.517(5)
O51	N50	1.241(4)	N13	C17	1.330(4)	N37	C41	1.381(4)	C35	C36	1.359(5)
O52	N50	1.253(4)	N16	C15	1.366(4)	N39	C38	1.352(4)	C38	C45	1.455(5)
O53	N50	1.256(4)	N16	C17	1.358(4)	N39	C40	1.366(4)	C40	C41	1.366(4)
O55	N54	1.261(4)	N16	C18	1.467(4)	N39	C42	1.474(4)	C42	C43	1.518(5)
O56	N54	1.237(4)	N20	C21	1.320(4)	N44	C45	1.320(4)	C47	C48	1.360(5)
O57	N54	1.259(4)	N20	C24	1.380(4)	N44	C48	1.381(4)			
O59	N58	1.236(4)	N22	C19	1.471(4)	N46	C43	1.464(4)			

Table **S3**. Bond Angles for Complex **1**.

Atom	Atom	Atom	Angle/˚	Atom	Atom	Atom	Angle/˚
N1	Ag1	Ag2	91.87(7)	C45	N46	C43	123.7(3)
N1	Ag1	N13	164.95(11)	C45	N46	C47	107.3(3)
N13	Ag1	Ag2	91.99(7)	C47	N46	C43	128.4(3)
N8	Ag2	Ag1	95.06(8)	O51	N50	O52	120.7(3)
N8	Ag2	N20	165.10(11)	O51	N50	O53	120.5(3)
N20	Ag2	Ag1	95.49(8)	O52	N50	O53	118.9(3)
N25	Ag3	Ag4	93.70(7)	O56	N54	O55	119.9(3)
N44	Ag3	Ag4	96.05(7)	O56	N54	O57	120.0(3)
N44	Ag3	N25	170.04(11)	O57	N54	O55	120.0(3)
N32	Ag4	Ag3	94.55(7)	O60	N58	O59	118.3(4)
N32	Ag4	N37	172.30(11)	O61	N58	O59	121.1(4)
N37	Ag4	Ag3	92.31(7)	O61	N58	O60	120.7(4)
O65	N62	O63	120.2(3)	N1	C2	N3	111.0(3)
O64	N62	O65	119.9(3)	N1	C2	C9	131.1(3)
O64	N62	O63	119.9(3)	N3	C2	C9	117.9(3)
C2	N1	Ag1	134.4(2)	C5	C4	N3	105.7(3)
C2	N1	C5	105.2(3)	C4	C5	N1	110.3(3)
C5	N1	Ag1	119.8(2)	N3	C6	C7	109.5(3)
C2	N3	C4	107.8(3)	N10	C7	C6	110.1(3)
C2	N3	C6	123.7(3)	N8	C9	N10	110.4(3)
C4	N3	C6	128.1(3)	N8	C9	C2	130.9(3)
C9	N8	Ag2	131.8(2)	N10	C9	C2	118.7(3)
C9	N8	C12	105.8(3)	C12	C11	N10	105.8(3)
C12	N8	Ag2	121.1(2)	C11	C12	N8	109.9(3)
C9	N10	C7	123.2(3)	C15	C14	N13	110.0(3)
C9	N10	C11	108.1(3)	C14	C15	N16	106.6(3)
C11	N10	C7	128.1(3)	N13	C17	N16	110.9(3)
C14	N13	Ag1	119.9(2)	N13	C17	C21	130.9(3)
C17	N13	Ag1	134.9(2)	N16	C17	C21	118.1(3)
C17	N13	C14	105.2(3)	N16	C18	C19	110.2(3)
C15	N16	C18	128.7(3)	N22	C19	C18	109.3(3)

C17	N16	C15	107.3(3)	N20	C21	N22	111.0(3)
C17	N16	C18	123.4(3)	N20	C21	C17	131.1(3)
C21	N20	Ag2	133.8(2)	N22	C21	C17	117.9(3)
C21	N20	C24	106.0(3)	C24	C23	N22	106.1(3)
C24	N20	Ag2	120.1(2)	C23	C24	N20	109.5(3)
C21	N22	C19	123.8(3)	C27	C26	N25	110.0(3)
C21	N22	C23	107.4(3)	C26	C27	N28	105.7(3)
C23	N22	C19	128.3(3)	N25	C29	N28	111.1(3)
C26	N25	Ag3	118.2(2)	N25	C29	C33	130.8(3)
C29	N25	Ag3	133.8(2)	N28	C29	C33	118.0(3)
C29	N25	C26	105.2(3)	N28	C30	C31	109.1(3)
C27	N28	C30	128.2(3)	N34	C31	C30	109.1(3)
C29	N28	C27	107.9(3)	N32	C33	N34	111.1(3)
C29	N28	C30	123.7(3)	N32	C33	C29	131.3(3)
C33	N32	Ag4	133.5(2)	N34	C33	C29	117.5(3)
C33	N32	C36	105.3(3)	C36	C35	N34	105.8(3)
C36	N32	Ag4	121.1(2)	C35	C36	N32	110.2(3)
C33	N34	C31	124.1(3)	N37	C38	N39	110.8(3)
C33	N34	C35	107.5(3)	N37	C38	C45	131.3(3)
C35	N34	C31	127.9(3)	N39	C38	C45	117.9(3)
C38	N37	Ag4	135.2(2)	N39	C40	C41	106.0(3)
C38	N37	C41	105.7(3)	C40	C41	N37	109.5(3)
C41	N37	Ag4	118.7(2)	N39	C42	C43	108.9(3)
C38	N39	C40	107.9(3)	N46	C43	C42	110.0(3)
C38	N39	C42	124.1(3)	N44	C45	N46	110.8(3)
C40	N39	C42	127.7(3)	N44	C45	C38	131.6(3)
C45	N44	Ag3	132.8(2)	N46	C45	C38	117.6(3)
C45	N44	C48	106.0(3)	C48	C47	N46	106.5(3)
C48	N44	Ag3	120.4(2)	C47	C48	N44	109.4(3)

Table **S4**. Bond Lengths for Complex **2**.

Atom	Atom	Length/Å	Atom	Atom	Length/Å	Atom	Atom	Length/Å	Atom	Atom	Length/Å
Ag1	Ag2	3.0487(3)	C11	C12	1.359(5)	C28	N27	1.363(4)	C47	C48	1.358(4)
Ag1	N1	2.120(2)	C11	N10	1.367(4)	C29	N25	1.374(4)	C47	N46	1.368(4)
Ag1	N13	2.112(2)	C12	N8	1.382(4)	C30	C31	1.520(4)	C48	N44	1.379(4)
Ag2	Ag3	3.0860(3)	C14	C21	1.449(4)	C30	N27	1.473(4)	C51	C52	1.455(6)
Ag2	N8	2.261(2)	C14	N13	1.328(4)	C31	N34	1.464(4)	C51	N50	1.130(5)
Ag2	N20	2.392(2)	C14	N15	1.352(3)	C33	N32	1.328(4)	Cl60	O61	1.442(2)
Ag2	N25	2.262(2)	C16	C17	1.363(4)	C33	N34	1.357(4)	Cl60	O62	1.429(2)
Ag2	N37	2.388(2)	C16	N15	1.364(4)	C35	C36	1.361(5)	Cl60	O63	1.432(3)
Ag3	N32	2.120(2)	C17	N13	1.387(4)	C35	N34	1.372(4)	Cl60	O64	1.430(3)
Ag3	N44	2.118(2)	C18	C19	1.514(4)	C36	N32	1.378(4)	Cl65	O66	1.418(3)
C2	C9	1.439(4)	C18	N15	1.476(4)	C38	C45	1.436(4)	Cl65	O67	1.420(3)
C2	N1	1.330(4)	C19	N22	1.469(3)	C38	N37	1.327(4)	Cl65	O68	1.401(4)
C2	N3	1.356(3)	C21	N20	1.320(3)	C38	N39	1.357(4)	Cl65	O69	1.421(3)
C4	C5	1.349(4)	C21	N22	1.357(3)	C40	C41	1.368(4)	Cl70	O71	1.446(4)
C4	N3	1.374(4)	C23	C24	1.358(4)	C40	N39	1.364(4)	Cl70	O72	1.422(4)
C5	N1	1.384(4)	C23	N22	1.369(4)	C41	N37	1.381(4)	Cl70	O73	1.428(3)
C6	C7	1.508(6)	C24	N20	1.380(3)	C42	C43	1.526(5)	Cl70	O74A	1.546(10)
C6	N3	1.476(4)	C26	C33	1.446(4)	C42	N39	1.464(4)	Cl70	O75B	1.448(6)
C7	N10	1.469(4)	C26	N25	1.327(3)	C43	N46	1.462(4)			
C9	N8	1.330(4)	C26	N27	1.357(4)	C45	N44	1.317(4)			
C9	N10	1.358(4)	C28	C29	1.357(4)	C45	N46	1.362(4)			

Table **S5**. Bond Angles for Complex **2**.

Atom	Atom	Atom	Angle/°	Atom	Atom	Atom	Angle/°
N1	Ag1	Ag2	86.82(6)	O62	Cl60	O61	109.61(13)
N13	Ag1	Ag2	98.26(6)	O62	Cl60	O63	108.66(18)

N13	Ag1	N1	174.71(9)	O62	Cl60	O64	109.17(17)
Ag1	Ag2	Ag3	111.019(8)	O63	Cl60	O61	109.06(14)
N8	Ag2	Ag1	83.03(6)	O64	Cl60	O61	110.56(15)
N8	Ag2	Ag3	73.52(6)	O64	Cl60	O63	109.75(18)
N8	Ag2	N20	101.43(8)	O66	Cl65	O67	111.2(2)
N8	Ag2	N25	132.93(8)	O66	Cl65	O69	108.8(2)
N8	Ag2	N37	112.30(8)	O67	Cl65	O69	107.89(19)
N20	Ag2	Ag1	81.20(6)	O68	Cl65	O66	110.0(3)
N20	Ag2	Ag3	165.59(6)	O68	Cl65	O67	110.2(2)
N25	Ag2	Ag1	67.55(6)	O68	Cl65	O69	108.6(3)
N25	Ag2	Ag3	83.50(6)	O71	Cl70	O74A	138.9(8)
N25	Ag2	N20	108.93(8)	O71	Cl70	O75B	95.0(7)
N25	Ag2	N37	101.95(8)	O72	Cl70	O71	103.9(3)
N37	Ag2	Ag1	164.26(6)	O72	Cl70	O73	110.2(3)
N37	Ag2	Ag3	78.10(6)	O72	Cl70	O74A	89.2(6)
N37	Ag2	N20	91.84(8)	O72	Cl70	O75B	121.1(5)
N32	Ag3	Ag2	93.30(6)	O73	Cl70	O71	109.3(3)
N44	Ag3	Ag2	89.34(6)	O73	Cl70	O74A	101.8(5)
N44	Ag3	N32	174.61(10)	O73	Cl70	O75B	115.0(3)
N1	C2	C9	130.8(2)	O75B	Cl70	O74A	46.7(5)
N1	C2	N3	110.5(2)	C2	N1	Ag1	128.71(19)
N3	C2	C9	118.6(3)	C2	N1	C5	105.6(2)
C5	C4	N3	106.3(3)	C5	N1	Ag1	125.2(2)
C4	C5	N1	110.0(3)	C2	N3	C4	107.6(2)
N3	C6	C7	109.5(3)	C2	N3	C6	121.7(3)
N10	C7	C6	108.4(3)	C4	N3	C6	130.6(3)
N8	C9	C2	130.6(3)	C9	N8	Ag2	125.68(18)
N8	C9	N10	111.5(3)	C9	N8	C12	105.0(2)
N10	C9	C2	117.9(3)	C12	N8	Ag2	124.8(2)
C12	C11	N10	106.7(3)	C9	N10	C7	121.9(3)
C11	C12	N8	109.9(3)	C9	N10	C11	106.9(3)
N13	C14	C21	130.6(2)	C11	N10	C7	131.0(3)
N13	C14	N15	110.9(2)	C14	N13	Ag1	130.67(19)
N15	C14	C21	118.3(2)	C14	N13	C17	105.3(2)
C17	C16	N15	106.0(3)	C17	N13	Ag1	124.0(2)
C16	C17	N13	109.8(3)	C14	N15	C16	108.1(2)
N15	C18	C19	108.7(2)	C14	N15	C18	121.9(2)
N22	C19	C18	109.0(2)	C16	N15	C18	129.8(2)
N20	C21	C14	130.8(2)	C21	N20	Ag2	135.51(18)
N20	C21	N22	111.5(2)	C21	N20	C24	105.2(2)
N22	C21	C14	117.7(2)	C24	N20	Ag2	118.44(17)
C24	C23	N22	106.2(2)	C21	N22	C19	123.6(2)
C23	C24	N20	110.0(2)	C21	N22	C23	107.0(2)
N25	C26	C33	130.4(3)	C23	N22	C19	129.2(2)
N25	C26	N27	110.9(3)	C26	N25	Ag2	133.91(19)
N27	C26	C33	118.7(2)	C26	N25	C29	105.4(2)
C29	C28	N27	106.4(3)	C29	N25	Ag2	118.97(18)
C28	C29	N25	110.0(3)	C26	N27	C28	107.3(2)
N27	C30	C31	108.8(2)	C26	N27	C30	122.5(3)
N34	C31	C30	109.1(2)	C28	N27	C30	130.0(3)
N32	C33	C26	131.3(3)	C33	N32	Ag3	131.15(19)
N32	C33	N34	111.1(3)	C33	N32	C36	105.4(2)
N34	C33	C26	117.5(3)	C36	N32	Ag3	123.3(2)
C36	C35	N34	106.1(3)	C33	N34	C31	122.5(3)
C35	C36	N32	110.0(3)	C33	N34	C35	107.3(3)
N37	C38	C45	129.5(3)	C35	N34	C31	130.0(2)
N37	C38	N39	111.8(3)	C38	N37	Ag2	122.24(19)
N39	C38	C45	118.6(3)	C38	N37	C41	104.8(2)
N39	C40	C41	106.3(3)	C41	N37	Ag2	122.47(19)

C40	C41	N37	110.0(3)	C38	N39	C40	107.0(2)
N39	C42	C43	109.2(2)	C38	N39	C42	122.8(3)
N46	C43	C42	109.9(2)	C40	N39	C42	130.1(3)
N44	C45	C38	131.2(3)	C45	N44	Ag3	128.6(2)
N44	C45	N46	110.9(3)	C45	N44	C48	105.7(2)
N46	C45	C38	117.8(3)	C48	N44	Ag3	125.5(2)
C48	C47	N46	106.1(3)	C45	N46	C43	122.6(3)
C47	C48	N44	109.9(3)	C45	N46	C47	107.3(3)
N50	C51	C52	178.7(5)	C47	N46	C43	130.0(3)

Table **S6**. Bond Lengths for Complex **3**.

Atom	Atom	Length/Å	Atom	Atom	Length/Å
Ag1	Ag1[1]	3.0430(3)	N8	Ag1[1]	2.3934(16)
Ag1	N13	2.1914(16)	N8	C12	1.378(3)
Ag1	N1	2.1604(16)	N8	C9	1.325(2)
Ag1	N8[1]	2.3934(16)	C11	C12	1.363(3)
N10	C11	1.368(3)	C9	C2	1.440(3)
N10	C9	1.357(2)	C7	C6	1.521(3)
N10	C7	1.464(2)	C18	C18[2]	1.520(4)
N13	C17	1.384(2)	C17	C16	1.358(3)
N13	C14	1.326(2)	C14	C14[2]	1.453(4)
N15	C18	1.468(2)	C4	C5	1.363(3)
N15	C16	1.372(3)	P20	F24	1.5999(13)
N15	C14	1.357(2)	P20	F25	1.6063(12)
N1	C5	1.383(3)	P20	F26	1.5969(13)
N1	C2	1.326(2)	P20	F21	1.6054(13)
N3	C6	1.469(2)	P20	F22	1.6056(13)
N3	C4	1.368(3)	P20	F23	1.6001(13)
N3	C2	1.353(2)			

[1]1-X,-Y,2-Z; [2]1-X,+Y,3/2-Z

Table **S7**. Bond Angles for Complex **3**.

Atom	Atom	Atom	Angle/°	Atom	Atom	Atom	Angle/°
N13	Ag1	Ag1[1]	101.26(4)	N10	C7	C6	108.82(15)
N13	Ag1	N8[1]	95.64(5)	N15	C18	C18[2]	108.30(13)
N1	Ag1	Ag1[1]	82.71(4)	C16	C17	N13	110.38(17)
N1	Ag1	N13	149.88(6)	C17	C16	N15	105.81(17)
N1	Ag1	N8[1]	114.07(5)	N13	C14	N15	111.25(16)
N8[1]	Ag1	Ag1[1]	75.07(4)	N13	C14	C14[2]	131.27(11)
C11	N10	C7	130.77(17)	N15	C14	C14[2]	117.43(11)
C9	N10	C11	107.07(16)	N3	C6	C7	109.26(16)
C9	N10	C7	122.13(16)	C5	C4	N3	106.16(17)
C17	N13	Ag1	123.02(12)	C4	C5	N1	109.80(18)
C14	N13	Ag1	127.58(12)	N1	C2	N3	111.34(17)
C14	N13	C17	105.04(16)	N1	C2	C9	129.84(17)
C16	N15	C18	129.44(17)	N3	C2	C9	118.66(16)
C14	N15	C18	123.05(16)	F24	P20	F25	90.05(7)
C14	N15	C16	107.50(16)	F24	P20	F21	179.34(8)
C5	N1	Ag1	132.90(13)	F24	P20	F22	89.95(8)
C2	N1	Ag1	120.24(13)	F24	P20	F23	89.98(7)
C2	N1	C5	105.24(16)	F26	P20	F24	90.80(8)
C4	N3	C6	130.36(17)	F26	P20	F25	89.53(7)
C2	N3	C6	121.92(16)	F26	P20	F21	89.84(7)
C2	N3	C4	107.43(16)	F26	P20	F22	179.06(8)
C12	N8	Ag1[1]	127.56(12)	F26	P20	F23	90.54(8)
C9	N8	Ag1[1]	120.32(12)	F21	P20	F25	89.84(7)
C9	N8	C12	104.77(16)	F21	P20	F22	89.41(7)

C12	C11	N10	105.98(18)	F22	P20	F25	89.90(7)
C11	C12	N8	110.44(17)	F23	P20	F25	179.93(10)
N10	C9	C2	117.76(16)	F23	P20	F21	90.13(7)
N8	C9	N10	111.74(16)	F23	P20	F22	90.03(7)
N8	C9	C2	130.22(17)				

[1]1-X,-Y,2-Z; [2]1-X,+Y,3/2-Z