1. Experimental Section

All manipulations were carried out using standard Schlenk or glove box techniques under a dinitrogen atmosphere. Unless otherwise noted, solvents were deoxygenated and dried thoroughly by sparging with N_2 gas followed by passage through an activated alumina column. Non-halogenated solvents were typically tested with a standard purple solution of sodium benzophenone ketyl in tetrahydrofuran to confirm effective oxygen and moisture removal. The preparations of $(COD)PtCl_2$, (COD)PtMeCl, and (COD)PtPhCl were carried out following literature procedures.[1] Syntheses for BQAH, (BQA)PtCl, (**1**), and [Li][BQA] were recently reported.[2] The preparation of the isopropyl substituted derivative 3,3'-^{i}Pr$_2$-BQAH, (**6**), employed palladium coupling methods analogous to those used for the preparation of BQAH.[2] The full details for the preparation of **6** and a series of related ligands will be published elsewhere.[3] [HN^{i}Pr$_2$Et][OTf] was generated by protonating N^{i}Pr$_2$Et with HOTf in Et_2O. Other reagents were purchased from commercial vendors and used without further purification. Elemental analyses were performed by Desert Analytics, Tucson, AZ. A Varian Mercury-300 NMR spectrometer or a Varian Inova-500 NMR spectrometer was used to record ^{1}H, ^{13}C, and ^{19}F NMR spectra. ^{1}H and ^{13}C NMR chemical shifts were referenced to residual solvent. ^{19}F NMR chemical shifts were referenced to an external C_6F_6 sample with a chemical shift of –163 ppm. GC-MS data for organic samples were obtained by injection of a CH_2Cl_2 solution into an Agilent 5973 Mass Selective Detector (EI). Low Resolution FAB-MS data was obtained from the UCLA Mass Spectroscopy Facility. Deuterated solvents were purchased from Cambridge Isotope Labs and were degassed and dried over activated 3 Å molecular sieves prior to use.

(BQA)PtMe, 2. A slurry of [Li][BQA] (557.2 mg, 2.011 mmol) in benzene (30 mL) was added dropwise to a stirring solution of (COD)PtMeCl (711.6 mg, 2.011 mmol) in benzene (20 mL). The room temperature addition effected a rapid color change from orange to an intense purple. The reaction solution was stirred at 25 ºC for 2 hours then warmed to 80 ºC for 3 hours in a reaction vessel sealed with a Teflon stopcock. The mixture was allowed to cool and then filtered through Celite. Copious amounts of methylene chloride were used to wash the Celite filter-cake until the filtrate was colorless. The filtrates were then combined and washed with water (4x100ml)dried over Na_2SO_4, filtered through Celite and the solvent was removed in vacuo. The resulting purple, microcrystalline solid was washed (i) with petroleum ether (50 mL) to remove residual cyclooctadiene. Drying of the purple solid yield spectroscopically pure product (850 mg, 88%). The complex can be recrystallized in a petroleum ether:tetrachloroethane diffusion chamber. ^{1}H NMR (CD_2Cl_2, 300 MHz, 25 °C): δ

8.86 (d, $^3J_{PtH}$ = 53 Hz, 2H), 8.27 (d, 2H), 7.62 (d, 2H), 7.51 (m, 2H), 7.30 (m, 2H), 7.03 (d, 2H), 0.862 (s, $^2J_{PtH}$ = 72 Hz, 3H). ^{13}C NMR (CD_2Cl_2, 126 MHz, 25 °C): δ 151.3, 149.0, 147.1, 138.4, 132.8, 129.9, 121.7, 114.7, 113.8, -7.55 (Pt*Me*). Anal. Calcd for $C_{19}H_{15}N_3Pt$: C, 47.50; H, 3.15; N, 8.75. Found: C, 47.78; H, 2.90; N, 8.61.

(BQA)Pt(OTf), 3. Triflic acid (31.35 μL, 0.185 mmol) was added in one portion to a solution of **2** (108.1 mg, 0.176) in CH_2Cl_2 (10 mL). The solution turned red immediately and solids precipitated. Stirring was continued for 30 min, at which time ether (10ml) was added and the mixture was cooled to –35 °C. The red solid was collected on a fretted glass funnel and washed with ether (3x10ml) followed by petroleum ether (20ml), and dried under vacuum, affording an analytically pure red powder (102 mg, 94%). Anal. Calcd for $C_{19}H_{12}F_3N_3O_3PtS$: C, 37.14; H, 1.97; N, 6.84. Found: C, 36.97; H, 1.81; N, 7.13. Spectral data for **3** were obtained as the solvent adduct in CD_3CN (see below).

[(BQA)Pt(NCCD$_3$)][OTf], 4. Heating **3** at 70 °C in CD_3CN for 24 h produces its d_3-acetonitrile adduct **4**. ^{1}H NMR (CD_3CN, 500 MHz, 70 °C): δ 8.35 (d, 2H), 8.26 (d, 2H), 7.52 (d, 2H), 7.43 (m, 2H), 7.36 (m, 2H), 7.11 (d, 2H). ^{13}C NMR (CD_3CN, 126 MHz, 70 °C): δ 149.3, 149.2, 147.9, 141.9, 132.5, 131.0, 129.6, 123.1, 115.8. ^{19}F NMR (CD_3CN, 282 MHz, 25 °C): δ -75.37. Anal. Calcd for $C_{21}H_{12}D_3F_3N_4O_3PtS$: C, 38.30; H, 2.75; N, 8.51. Found: C, 38.14; H, 2.44; N, 8.23.

(BQA)PtPh, 5. A slurry of [Li][BQA] (111 mg, 0.399 mmol) in benzene (15 mL) was added dropwise to a stirring solution of (COD)PtPhCl (166 mg, 0.399 mmol) in benzene (20 mL). The room temperature addition effected a rapid color change from orange to an intense purple. The reaction solution was stirred at 90 ºC for 18 hours, after which time it was allowed to cool. The resulting mixture was filtered through Celite, and the Celite was washed with copious amounts CH_2Cl_2 until the filtrate was colorless. The filtrates were combined and the solvent was removed under reduced pressure, affording an analytically pure, microcrystalline red solid (203 mg, 94%). ^{1}H NMR ($CDCl_3$, 300 MHz, 25 °C): δ 8.44 (d, $^3J_{PtH}$ = 51 Hz, 2H), 8.23 (d, 2H), 7.81 (d, 2H) 7.74 (d, 2H), 7.56 (m, 2H), 7.3-7.1 (m, 5H), 7.05 (d, 2H). ^{13}C NMR ($CDCl_3$, 126 MHz, 25 °C): δ 155.5, 150.3, 149.7, 148.7, 138.9, 138.3, 132.2, 129.8, 127.6, 122.8, 121.5, 114.6, 114.1. Anal. Calcd for $C_{24}H_{17}N_3Pt$: C, 53.14; H, 3.16; N, 7.75. Found: C, 53.77; H, 3.01; N, 7.38.

Reaction of 3 with C_6H_6 in the presence of N^iPr_2Et. A 100 mL thick-walled glass reaction vessel was charged with **3** (50 mg, 0.0814 mmol), diisopropylethylamine (14.18 µL, 0.0814 mmol), benzene (15 mL), and a Teflon-coated magnetic stir bar. The vessel, which contained a heterogeneous slurry at 25 °C, was then sealed with a Teflon stopcock. The reaction mixture was stirred vigorously and heated to 150 °C, affording a homogeneous red solution. Over the course of 36 h the solution color gradually changed from red to purple, the color of complex **5**. After 36 h, the reaction was allowed to cool and the reaction volatiles were subsequently removed by lyophilization from a frozen benzene solution. The fine purple powder that remained was analyzed by ^1H NMR spectroscopy ($CDCl_3$) and established a 93% conversion from **3** to **5** (internal standard), production of a stoichiometric equivalent of $[HN^iPr_2Et][OTf]$, and an unidentified BQA-containing side product (7 %) by ^1H NMR spectroscopy. The salt byproduct, $[HN^iPr_2Et][OTf]$, was removed by washing the crude mixture with isopropanol (20 mL). The desired product **5** was then isolated by column chromatography [20% hexane in CH_2Cl_2] to yield 32 mg of a dry purple solid (32 mg, 73%). While the reaction occurs at lower temperature (100 °C) it is more more sluggish. After 5 days at 100 °C, approximately 20% of **3** is converted to **5**. FAB-MS obtained on a crude sample from the product mixture independently confirm the generation of **5**: FAB-MS calcd for $C_{24}H_{17}N_3Pt$, 542.11 [M]; Found, 542.25.

Reaction of 5 with HOTf. Triflic acid (4.08 µL, 0.046 mmol) was added in one portion to a solution of **5** (25 mg, 0.046 mmol) in benzene and stirred for 30 min. The solution immediately changed from purple to red and a red solid precipitated from solution. The heterogeneous mixture was then frozen and dried by lyophilization to produce an orange-red solid (28.0 mg, 99%) that was extracted into CD_3CN for spectroscopic characterization. The ^1H NMR data obtained matched those reported for $[(BQA)Pt(NCCD_3)][OTf]$, **4**, as described above.

(3,3'-^{i}Pr$_2$-BQA)PtMe, 8. A slurry of **7** (512 mg, 1.417 mmol) in benzene (25 mL) was added dropwise to a stirring solution of (COD)PtMeCl (501.3 mg, 1.417 mmol) in benzene (25 mL). The room temperature addition effected a rapid color change from orange to an intense purple. The reaction solution was stirred at 100 ºC for 18 hours, after which time it was allowed to cool. This mixture was filtered through Celite, and the Celite was washed thoroughly with benzene until the filtrate was colorless. The filtrates were combined and washed with water (4x100ml), dried over Na_2SO_4, filtered through Celite and the volatiles were removed under reduced pressure to yield a purple, microcrystalline solid (658 mg, 82%). ^1H NMR (C_6D_6, 300 MHz, 25 °C): δ 8.94 (s,

$^3J_{PtH}$ = 54 Hz, 2H), 7.62 (d, 2H), 7.49 (s, 2H), 7.38 (t, 2H), 6.76 (d, 2H), 2.40 (septet, 2H), 1.70 (s, $^2J_{PtH}$ = 73 Hz, 3H), 0.89 (d, 12H). ^{13}C NMR (C_6D_6, 126 MHz, 25 °C): δ 150.7, 149.8, 147.2, 141.6, 134.1, 133.0, 130.1, 114.2, 113.3, 32.0, 23.6, - 5.79 (Pt*Me*). Anal. Calcd for $C_{25}H_{27}N_3Pt$: C, 53.18; H, 4.82; N, 7.44. Found: C, 53.33; H, 4.94; N, 7.04.

(3,3'-^{i}Pr$_2$-BQA)Pt(OTf), 9. Triflic acid (49.4 μL, 0.559 mmol) was added dropwise to a slurry of **8** (300 mg, 0..532) in CH_2Cl_2 (10 mL). The reaction mixture turned red immediately and red solids precipitated. Stirring was continued for 30 min, at which time ether(10ml) was added and the mixture was cooled to –35 °C. The red solid was collected on a fretted glass funnel and washed with ether (3x10ml) followed by petroleum ether (20ml), and dried under vacuum, affording a spectroscopically pure orange-red powder (301 mg, 80%). Analytically pure samples were obtained by recrystallization from CH_2Cl_2. ^{1}H NMR (CD_2Cl_2, 300 MHz, 25 °C): δ 8.50 (s, 2H), 8.08 (s, 2H), 7.62 (br s, 2H), 7.37 (br t, 2H), 6.93 (br s, 2H), 3.13 (septet, 2H), 1.41 (d, 12H). ^{19}F NMR (CD_2Cl_2, 282 MHz, 25 °C): δ -74.54. Anal. Calcd for $C_{25}H_{24}F_3N_3O_3PtS$: C, 42.98; H, 3.46; N, 6.01. Found: C, 42.60; H, 3.23; N, 5.80. (Note: We had difficulty obtaining satisfactory combustion analysis on **9**. The results of two other microanalysis attempts were determined as follows: C, 41.40; H, 3.24; N, 5.42 and C, 40.21; H, 3.58; N, 5.20).

[(3,3'-^{i}Pr$_2$-BQA)Pt(NCCD$_3$)][OTf], 11. Heating **10** at 70 °C in CD_3CN for 24 h generates the acetonitrile adduct, **11**. ^{1}H NMR (CD_3CN, 500 MHz, 70 °C): δ 8.34 (s, 2H), 8.31 (s, 2H), 7.72 (d, 2H), 7.49 (t, 2H), 7.12 (d, 2H), 3.23 (septet, 2H), 1.44 (d, 12H). ^{13}C NMR (CD_3CN, 126 MHz, 70 °C): δ 150.3, 149.8, 147.2, 144.5, 138.5, 132.8, 131.4, 118.3, 115.3, 33.2, 24.3. ^{19}F NMR (CD_3CN, 282 MHz, 25 °C): δ -75.44. Anal. Calcd for $C_{27}H_{24}D_3F_3N_4O_3PtS$: C, 43.66; H, 4.07; N, 7.54. Found: C, 43.36; H, 3.71; N, 7.38.

(3,3'-^{i}Pr$_2$-BQA)Pt(C$_6$H$_5$), 10. A slurry of **7** (290 mg, 0.801 mmol) in benzene (15 mL) was added dropwise to a stirring solution of (COD)PtPhCl (333 mg, 0.801 mmol) in benzene (20 mL), resulting in a rapid color change to intense purple. The reaction solution was stirred at 100 ºC for 18 hours, after which time it was allowed to cool. This mixture was filtered through Celite, which was washed with benzene until the filtrate was colorless. The filtrates were combined and the solvent was removed under reduced pressure to yield an analytically pure, microcrystalline solid (468 mg, 94%). ^{1}H NMR (CD_2Cl_2, 300 MHz, 25 °C): δ 8.38 (s, $^3J_{PtH}$ = 53 Hz, 2H), 8.06(s,

2H), 7.72 (d, 2H), 7.63 (d, 2H), 7.52 (t, 2H), 7.20 (t, 2H), 7.08 (m, 1H), 7.01 (d, 2H), 2.92 (sept., 2H), 1.24 (d, 12H). ^{13}C NMR (CD_2Cl_2, 126 MHz, 25 °C): δ 155.9, 150.5, 149.4, 148.9, 142.4, 139.3, 134.8, 132.5, 130.0, 127.6, 122.9, 114.5, 113.2, 32.2, 23.6. $C_{30}H_{29}N_3Pt$: C, 57.50; H, 4.66; N, 6.71. Found: C, 57.48; H, 4.60; N, 6.59.

Note: As described in the text, the phenyl complex **10** can also be generated, albeit in lower yield (~ 60 – 65%), by heating **9** in benzene in the presence of a stoichiometric equivalent of N^iPr_2Et at 150 °C. This reaction protocol is analogous to that described for the conversion of **3** to **5** above. The yield of **10** produced by this method critically depends on the purity of the sample of **9** used.

Note: Complex **10** can be quantitatively converted back to **9** by a procedure analogous to that described for the conversion of **5** to **3** with HOTf.

Figure 1: Fully labeled drawing of **9**. The hydrogen atoms and solvent (½ benzene) have been omitted for clarity.

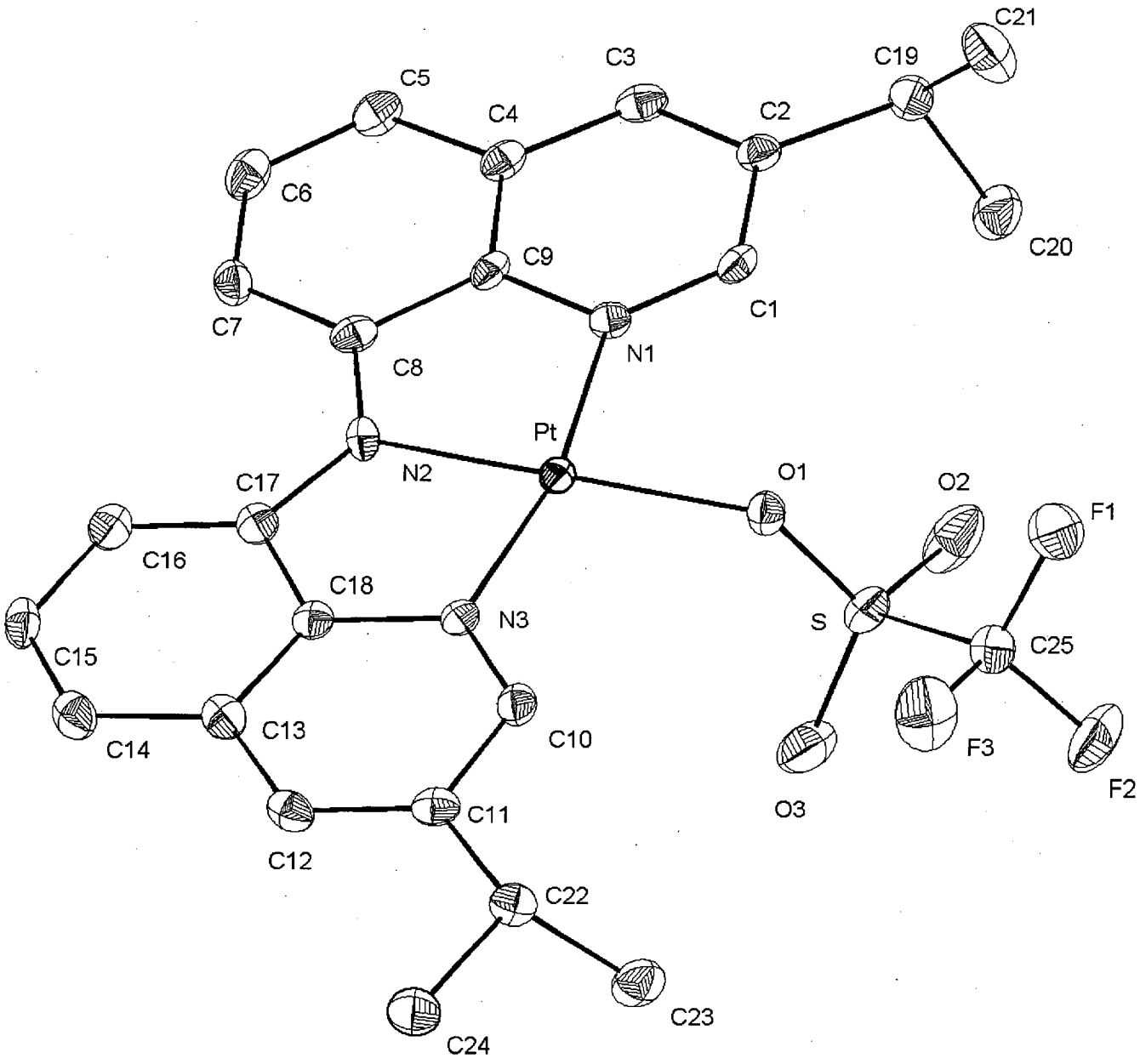

Figure 2: Fully labeled drawing of **10.** Hydrogen atoms have been omitted for clarity.

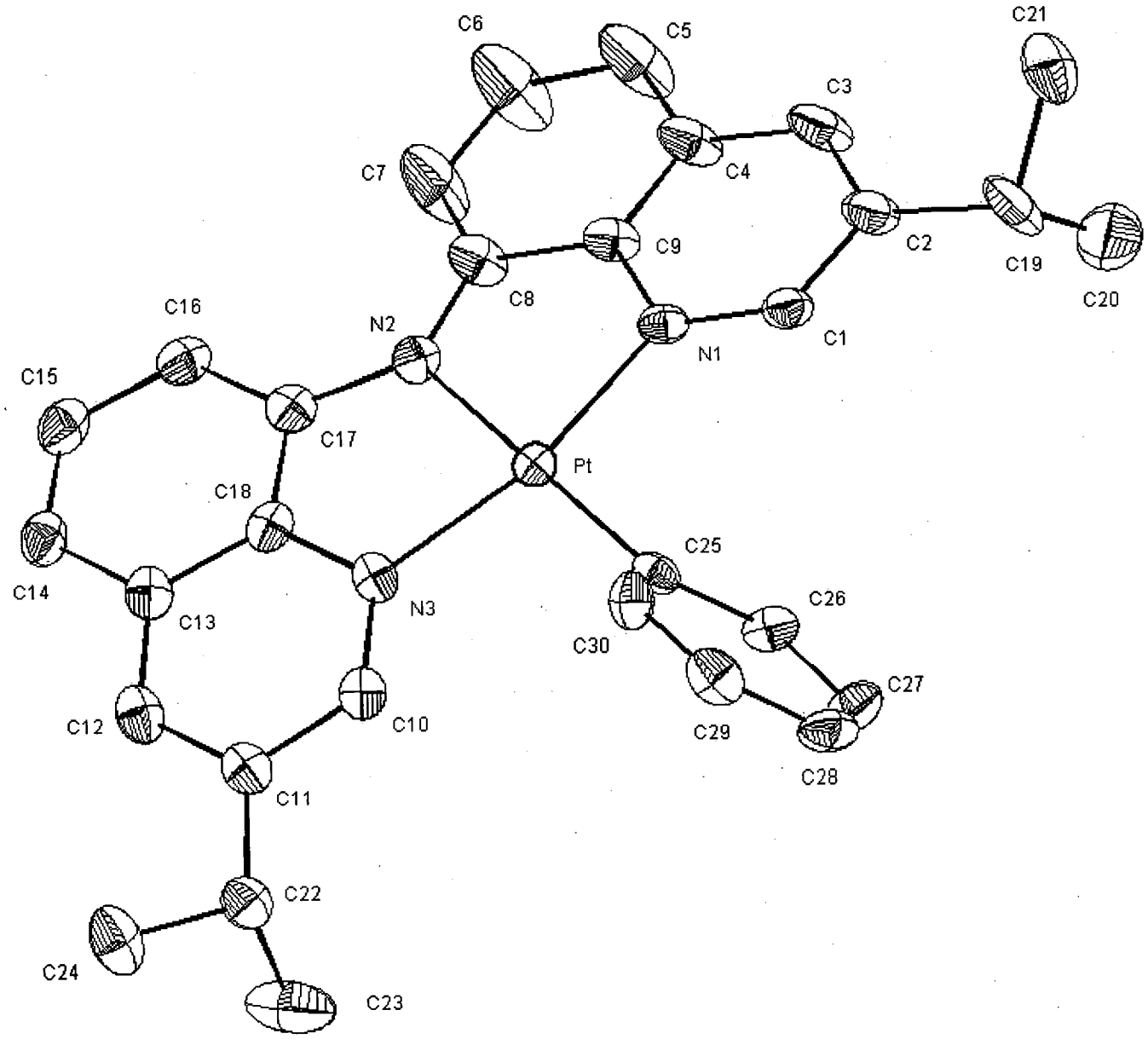

Table 1. Crystal data and structure refinement for **9**.

Empirical formula	$(C_{25}H_{24}F_3N_3O_3PtS) \cdot ½ (C_6H_6)$	
Formula weight	698.11 + ½ (78.11)	
Crystal size	0.11 x 0.16 x 0.26 mm^3	
Crystal color	deep red	
Crystal shape	rough block	
	Data Collection	
Type of diffractometer	Bruker SMART 1000 CCD	
Wavelength	0.71073 Å MoKα	
Temperature	96 K	
Crystal system	monoclinic	
Space group	$P2_1/c$ (#14)	
Unit cell dimensions	a = 7.7567(6) Å	α= 90°
	b = 15.7693(11) Å	β= 99.529(1)°
	c = 21.8001(16) Å	γ = 90°
Volume	2629.7(3) $Å^3$	
Z	4	
Density (calculated)	1.863 Mg/m^3	
Absorption coefficient	5.473 mm^{-1}	
F(000)	1444	
Theta range for data collection	1.60 to 28.52°	
Index ranges	-10<=h<=10, -20<=k<=20, -29<=l<=28	
Reflections collected	45635	
Independent reflections	6313 [R_{int} = 0.0496]	
Completeness to theta = 28.52°	94.3 %	
Absorption correction (TMax, TMin)	face-indexed (0.548, 0.361)	
	SADABS v2.03 (1.00, 0.826)	
	Structure solution and Refinement	
Structure solution program	SHELXS-97 (Sheldrick, 1990)	
Primary solution method	Direct Methods	
Secondary solution method	Difference Fourier map	
Hydrogen placement	calculated	
Structure refinement program	SHELXL-97 (Sheldrick, 1997)	
Refinement method	Full-matrix least-squares on F^2	
Data / restraints / parameters	6313 / 0 / 460	
Goodness-of-fit on F^2	1.610	
Treatment of hydrogen atoms	Unrestrained	

Final R indices [I>2sigma(I)]	R1 = 0.0251, wR2 = 0.0476
R indices (all data)	R1 = 0.0329, wR2 = 0.0488
Largest diff. peak and hole	1.555 and -0.674 $e \cdot Å^{-3}$

Special Refinement Details

Refinement of F^2 against ALL reflections. The weighted R-factor *w*R and goodness of fit (S) are based on F^2, conventional R-factors R are based on F, with F set to zero for negative F^2. The threshold expression of $F^2 > 2\sigma(F^2)$ is used only for calculating R-factors(gt) etc. and is not relevant to the choice of reflections for refinement.

Table 2. Atomic coordinates (x 10^4) and equivalent isotropic displacement parameters (Å^2 x 10^3) for **9**. U_{eq} is defined as one third of the trace of the orthogonalized U^{ij} tensor.

	x	y	z	U_{eq}
Pt	2185(1)	4531(1)	564(1)	12(1)
S	2388(1)	2813(1)	1294(1)	20(1)
O(1)	1246(2)	3520(1)	1041(1)	16(1)
O(2)	3266(3)	2955(2)	1915(1)	37(1)
O(3)	3376(3)	2452(2)	864(1)	34(1)
N(1)	3180(3)	5207(2)	1312(1)	13(1)
N(2)	3021(3)	5469(2)	114(1)	14(1)
N(3)	1366(3)	4079(2)	-286(1)	12(1)
C(1)	3181(4)	5039(2)	1904(1)	15(1)
C(2)	3941(4)	5584(2)	2391(1)	15(1)
C(3)	4694(4)	6307(2)	2230(2)	17(1)
C(4)	4730(4)	6517(2)	1601(1)	16(1)
C(5)	5496(4)	7259(2)	1407(2)	18(1)
C(6)	5432(4)	7405(2)	790(2)	19(1)
C(7)	4631(4)	6846(2)	326(2)	17(1)
C(8)	3872(4)	6097(2)	491(1)	15(1)
C(9)	3940(4)	5946(2)	1143(1)	14(1)
C(10)	507(4)	3364(2)	-456(1)	15(1)
C(11)	47(4)	3105(2)	-1078(1)	16(1)
C(12)	492(4)	3633(2)	-1523(1)	17(1)
C(13)	1374(4)	4408(2)	-1369(1)	16(1)
C(14)	1853(4)	4983(2)	-1811(2)	19(1)
C(15)	2724(4)	5709(2)	-1612(2)	19(1)
C(16)	3149(4)	5921(2)	-980(2)	18(1)
C(17)	2705(4)	5382(2)	-529(1)	15(1)
C(18)	1804(4)	4620(2)	-735(1)	14(1)
C(19)	3929(4)	5324(2)	3059(2)	20(1)
C(20)	5219(5)	4605(3)	3242(2)	27(1)
C(21)	2115(5)	5086(3)	3176(2)	30(1)
C(22)	-880(4)	2259(2)	-1214(1)	17(1)
C(23)	123(5)	1538(2)	-844(2)	24(1)
C(24)	-1224(5)	2037(2)	-1902(2)	24(1)
C(25)	748(4)	2014(2)	1372(2)	24(1)
F(1)	-331(3)	2266(1)	1749(1)	40(1)
F(2)	1517(3)	1304(1)	1603(1)	37(1)
F(3)	-211(3)	1832(1)	827(1)	38(1)
C(26)	6727(6)	234(3)	52(2)	39(1)
C(27)	5553(6)	769(3)	258(2)	38(1)
C(28)	3827(6)	540(3)	210(2)	38(1)

Table 3. Bond lengths [Å] and angles [°] for **9**.

Pt-N(2)	1.946(2)	C(23)-H(23A)	0.91(3)
Pt-N(3)	1.990(2)	C(23)-H(23B)	0.98(3)
Pt-N(1)	1.994(2)	C(23)-H(23C)	0.95(3)
Pt-O(1)	2.097(2)	C(24)-H(24A)	0.99(3)
S-O(3)	1.425(2)	C(24)-H(24B)	1.00(4)
S-O(2)	1.428(2)	C(24)-H(24C)	0.93(4)
S-O(1)	1.474(2)	C(25)-F(3)	1.325(4)
S-C(25)	1.818(3)	C(25)-F(1)	1.327(4)
N(1)-C(1)	1.316(4)	C(25)-F(2)	1.328(4)
N(1)-C(9)	1.383(4)	C(26)-C(27)	1.371(6)
N(2)-C(8)	1.382(4)	C(26)-C(28)#1	1.385(6)
N(2)-C(17)	1.390(4)	C(26)-H(26)	1.05(4)
N(3)-C(10)	1.330(4)	C(27)-C(28)	1.374(6)
N(3)-C(18)	1.382(4)	C(27)-H(27)	0.91(4)
C(1)-C(2)	1.417(4)	C(28)-C(26)#1	1.385(6)
C(1)-H(1)	0.87(3)	C(28)-H(28)	1.00(4)
C(2)-C(3)	1.354(4)	N(2)-Pt-N(3)	83.33(10)
C(2)-C(19)	1.514(4)	N(2)-Pt-N(1)	83.63(10)
C(3)-C(4)	1.414(4)	N(3)-Pt-N(1)	166.94(10)
C(3)-H(3)	0.88(3)	N(2)-Pt-O(1)	179.13(9)
C(4)-C(9)	1.409(4)	N(3)-Pt-O(1)	96.14(9)
C(4)-C(5)	1.409(4)	N(1)-Pt-O(1)	96.90(9)
C(5)-C(6)	1.357(4)	O(3)-S-O(2)	117.59(16)
C(5)-H(5)	0.87(3)	O(3)-S-O(1)	114.26(14)
C(6)-C(7)	1.406(4)	O(2)-S-O(1)	113.51(14)
C(6)-H(6)	0.94(3)	O(3)-S-C(25)	104.22(15)
C(7)-C(8)	1.394(4)	O(2)-S-C(25)	104.54(15)
C(7)-H(7)	0.89(3)	O(1)-S-C(25)	99.96(14)
C(8)-C(9)	1.433(4)	S-O(1)-Pt	121.60(11)
C(10)-C(11)	1.406(4)	C(1)-N(1)-C(9)	120.1(3)
C(10)-H(10)	0.93(3)	C(1)-N(1)-Pt	129.1(2)
C(11)-C(12)	1.365(4)	C(9)-N(1)-Pt	110.86(19)
C(11)-C(22)	1.521(4)	C(8)-N(2)-C(17)	131.1(3)
C(12)-C(13)	1.415(4)	C(8)-N(2)-Pt	114.32(19)
C(12)-H(12)	0.92(3)	C(17)-N(2)-Pt	114.6(2)
C(13)-C(18)	1.407(4)	C(10)-N(3)-C(18)	119.8(3)
C(13)-C(14)	1.416(4)	C(10)-N(3)-Pt	129.0(2)
C(14)-C(15)	1.363(5)	C(18)-N(3)-Pt	111.17(19)
C(14)-H(14)	0.91(3)	N(1)-C(1)-C(2)	123.0(3)
C(15)-C(16)	1.403(4)	N(1)-C(1)-H(1)	116(2)
C(15)-H(15)	0.90(3)	C(2)-C(1)-H(1)	121(2)
C(16)-C(17)	1.385(4)	C(3)-C(2)-C(1)	117.4(3)
C(16)-H(16)	0.93(3)	C(3)-C(2)-C(19)	123.3(3)
C(17)-C(18)	1.425(4)	C(1)-C(2)-C(19)	119.3(3)
C(19)-C(21)	1.518(5)	C(2)-C(3)-C(4)	121.8(3)
C(19)-C(20)	1.520(5)	C(2)-C(3)-H(3)	120(2)
C(19)-H(19)	0.92(3)	C(4)-C(3)-H(3)	119(2)
C(20)-H(20A)	0.95(4)	C(9)-C(4)-C(5)	118.2(3)
C(20)-H(20B)	0.92(4)	C(9)-C(4)-C(3)	117.5(3)
C(20)-H(20C)	0.91(4)	C(5)-C(4)-C(3)	124.2(3)
C(21)-H(21A)	0.99(4)	C(6)-C(5)-C(4)	119.4(3)
C(21)-H(21B)	0.95(4)	C(6)-C(5)-H(5)	124(2)
C(21)-H(21C)	1.05(3)	C(4)-C(5)-H(5)	117(2)
C(22)-C(24)	1.519(4)	C(5)-C(6)-C(7)	123.1(3)
C(22)-C(23)	1.530(5)	C(5)-C(6)-H(6)	121(2)
C(22)-H(22)	1.02(3)	C(7)-C(6)-H(6)	115(2)

C(8)-C(7)-C(6)	120.1(3)
C(8)-C(7)-H(7)	123(2)
C(6)-C(7)-H(7)	117(2)
N(2)-C(8)-C(7)	129.4(3)
N(2)-C(8)-C(9)	113.9(3)
C(7)-C(8)-C(9)	116.6(3)
N(1)-C(9)-C(4)	120.2(3)
N(1)-C(9)-C(8)	117.3(3)
C(4)-C(9)-C(8)	122.6(3)
N(3)-C(10)-C(11)	123.3(3)
N(3)-C(10)-H(10)	115.5(17)
C(11)-C(10)-H(10)	121.1(18)
C(12)-C(11)-C(10)	117.0(3)
C(12)-C(11)-C(22)	124.3(3)
C(10)-C(11)-C(22)	118.7(3)
C(11)-C(12)-C(13)	121.8(3)
C(11)-C(12)-H(12)	120.9(19)
C(13)-C(12)-H(12)	117.2(19)
C(18)-C(13)-C(12)	117.7(3)
C(18)-C(13)-C(14)	118.0(3)
C(12)-C(13)-C(14)	124.3(3)
C(15)-C(14)-C(13)	119.6(3)
C(15)-C(14)-H(14)	122(2)
C(13)-C(14)-H(14)	119(2)
C(14)-C(15)-C(16)	122.4(3)
C(14)-C(15)-H(15)	126(2)
C(16)-C(15)-H(15)	112(2)
C(17)-C(16)-C(15)	120.3(3)
C(17)-C(16)-H(16)	119(2)
C(15)-C(16)-H(16)	121(2)
C(16)-C(17)-N(2)	129.2(3)
C(16)-C(17)-C(18)	117.4(3)
N(2)-C(17)-C(18)	113.4(3)
N(3)-C(18)-C(13)	120.2(3)
N(3)-C(18)-C(17)	117.5(3)
C(13)-C(18)-C(17)	122.3(3)
C(2)-C(19)-C(21)	112.4(3)
C(2)-C(19)-C(20)	110.2(3)
C(21)-C(19)-C(20)	111.1(3)
C(2)-C(19)-H(19)	111(2)
C(21)-C(19)-H(19)	106(2)
C(20)-C(19)-H(19)	106(2)
C(19)-C(20)-H(20A)	108(2)
C(19)-C(20)-H(20B)	105(2)
H(20A)-C(20)-H(20B)	109(3)
C(19)-C(20)-H(20C)	112(2)
H(20A)-C(20)-H(20C)	110(3)
H(20B)-C(20)-H(20C)	112(3)
C(19)-C(21)-H(21A)	110(3)
C(19)-C(21)-H(21B)	108(2)
H(21A)-C(21)-H(21B)	109(3)
C(19)-C(21)-H(21C)	113.1(18)
H(21A)-C(21)-H(21C)	104(3)
H(21B)-C(21)-H(21C)	112(3)
C(24)-C(22)-C(11)	113.2(3)
C(24)-C(22)-C(23)	109.9(3)
C(11)-C(22)-C(23)	111.5(3)
C(24)-C(22)-H(22)	105.6(16)
C(11)-C(22)-H(22)	107.6(16)
C(23)-C(22)-H(22)	108.8(16)
C(22)-C(23)-H(23A)	111(2)
C(22)-C(23)-H(23B)	113.7(19)
H(23A)-C(23)-H(23B)	104(3)
C(22)-C(23)-H(23C)	113(2)
H(23A)-C(23)-H(23C)	109(3)
H(23B)-C(23)-H(23C)	106(3)
C(22)-C(24)-H(24A)	108(2)
C(22)-C(24)-H(24B)	111(2)
H(24A)-C(24)-H(24B)	111(3)
C(22)-C(24)-H(24C)	113(2)
H(24A)-C(24)-H(24C)	109(3)
H(24B)-C(24)-H(24C)	105(3)
F(3)-C(25)-F(1)	107.6(3)
F(3)-C(25)-F(2)	107.9(3)
F(1)-C(25)-F(2)	107.9(3)
F(3)-C(25)-S	111.4(2)
F(1)-C(25)-S	111.9(2)
F(2)-C(25)-S	110.0(2)
C(27)-C(26)-C(28)#1	120.0(4)
C(27)-C(26)-H(26)	121(2)
C(28)#1-C(26)-H(26)	119(2)
C(26)-C(27)-C(28)	120.3(4)
C(26)-C(27)-H(27)	118(3)
C(28)-C(27)-H(27)	122(3)
C(27)-C(28)-C(26)#1	119.7(4)
C(27)-C(28)-H(28)	120(2)
C(26)#1-C(28)-H(28)	120(2)

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

Table 4. Anisotropic displacement parameters ($Å^2 x\ 10^3$) for **9**. The anisotropic displacement factor exponent takes the form: $-2\pi^2[\ h^2\ a^{*2}U^{11} + ... + 2\ h\ k\ a^*\ b^*\ U^{12}\ ]$

	U^{11}	U^{22}	U^{33}	U^{23}	U^{13}	U^{12}
Pt	13(1)	11(1)	12(1)	0(1)	2(1)	1(1)
S	21(1)	13(1)	24(1)	2(1)	1(1)	-1(1)
O(1)	17(1)	15(1)	15(1)	2(1)	3(1)	-2(1)
O(2)	50(2)	21(2)	33(2)	4(1)	-18(1)	-2(1)
O(3)	35(1)	18(1)	57(2)	5(1)	27(1)	4(1)
N(1)	12(1)	13(1)	15(1)	-1(1)	2(1)	1(1)
N(2)	15(1)	14(1)	13(1)	3(1)	4(1)	-1(1)
N(3)	11(1)	12(1)	14(1)	1(1)	0(1)	1(1)
C(1)	16(2)	9(2)	19(2)	1(1)	3(1)	0(1)
C(2)	16(1)	14(2)	15(2)	-1(1)	0(1)	4(1)
C(3)	16(2)	14(2)	19(2)	-5(1)	-1(1)	1(1)
C(4)	12(1)	12(2)	22(2)	0(1)	2(1)	2(1)
C(5)	15(2)	14(2)	22(2)	-2(1)	-1(1)	-2(1)
C(6)	16(2)	16(2)	26(2)	4(1)	4(1)	-1(1)
C(7)	19(2)	18(2)	14(2)	3(1)	3(1)	2(1)
C(8)	10(1)	14(2)	21(2)	-1(1)	3(1)	3(1)
C(9)	12(1)	10(2)	19(2)	2(1)	3(1)	2(1)
C(10)	14(1)	15(2)	17(2)	3(1)	4(1)	3(1)
C(11)	11(1)	17(2)	18(2)	-3(1)	0(1)	3(1)
C(12)	15(2)	23(2)	12(2)	-2(1)	-1(1)	4(1)
C(13)	12(1)	21(2)	15(2)	1(1)	2(1)	3(1)
C(14)	18(2)	24(2)	14(2)	3(1)	1(1)	6(1)
C(15)	19(2)	21(2)	17(2)	9(1)	3(1)	2(1)
C(16)	18(2)	17(2)	21(2)	2(1)	4(1)	1(1)
C(17)	11(1)	17(2)	16(2)	2(1)	1(1)	4(1)
C(18)	10(1)	15(2)	17(2)	2(1)	3(1)	4(1)
C(19)	27(2)	17(2)	14(2)	-2(1)	1(1)	-2(1)
C(20)	39(2)	22(2)	19(2)	3(2)	-3(2)	3(2)
C(21)	34(2)	37(2)	19(2)	-3(2)	8(2)	-9(2)
C(22)	16(2)	18(2)	18(2)	-3(1)	2(1)	-2(1)
C(23)	29(2)	17(2)	23(2)	-4(2)	0(2)	-2(2)
C(24)	28(2)	22(2)	21(2)	-4(2)	3(2)	-2(2)
C(25)	30(2)	20(2)	23(2)	2(2)	9(2)	-1(2)
F(1)	53(1)	29(1)	47(1)	4(1)	34(1)	-1(1)
F(2)	41(1)	18(1)	53(1)	12(1)	11(1)	-2(1)
F(3)	43(1)	35(1)	34(1)	-2(1)	-1(1)	-19(1)
C(26)	41(2)	50(3)	24(2)	9(2)	-1(2)	-3(2)
C(27)	67(3)	22(2)	20(2)	2(2)	-7(2)	-1(2)
C(28)	55(3)	39(3)	21(2)	2(2)	4(2)	22(2)

Table 5. Hydrogen coordinates (x 10^4) and isotropic displacement parameters ($Å^2$x 10^3) for **9**.

	x	y	z	U_{eq}
H(1)	2680(40)	4563(19)	1980(14)	9(8)
H(3)	5190(40)	6660(20)	2522(14)	15(8)
H(5)	5990(40)	7600(20)	1699(15)	13(8)
H(6)	5960(40)	7890(20)	645(15)	23(9)
H(7)	4670(40)	6993(19)	-64(15)	14(8)
H(10)	200(40)	3044(18)	-133(13)	7(7)
H(12)	230(40)	3490(20)	-1940(15)	14(8)
H(14)	1620(40)	4840(20)	-2220(16)	23(9)
H(15)	3060(40)	6120(20)	-1859(14)	15(8)
H(16)	3770(40)	6410(20)	-857(15)	22(9)
H(19)	4290(40)	5760(20)	3327(15)	20(9)
H(20A)	4850(50)	4130(30)	2986(18)	39(11)
H(20B)	5120(50)	4470(20)	3648(18)	31(10)
H(20C)	6330(50)	4750(20)	3201(16)	27(10)
H(21A)	1290(60)	5550(30)	3040(20)	56(14)
H(21B)	2170(40)	5000(20)	3608(18)	29(10)
H(21C)	1590(40)	4560(20)	2914(16)	25(9)
H(22)	-2080(40)	2309(18)	-1086(12)	5(7)
H(23A)	-500(40)	1050(20)	-895(14)	14(8)
H(23B)	340(40)	1630(20)	-395(16)	21(9)
H(23C)	1240(50)	1440(20)	-958(15)	29(10)
H(24A)	-90(50)	1980(20)	-2043(16)	28(10)
H(24B)	-1960(40)	2480(20)	-2150(16)	27(10)
H(24C)	-1840(40)	1530(20)	-1985(16)	28(10)
H(26)	8040(60)	410(20)	80(20)	55(13)
H(27)	5960(50)	1270(30)	434(19)	51(13)
H(28)	3010(50)	890(30)	411(19)	54(13)

Table 6. Crystal data and structure refinement for **10.**

Empirical formula	$C_{30}H_{29}N_3Pt$
Formula weight	626.65
Crystal Size	0.37 x 0.30 x 0.28 mm^3
Crystal color	wine red
Crystal shape	rough block

Data Collection

Type of diffractometer	Bruker SMART 1000 CCD	
Wavelength	0.71073 Å MoKα	
Temperature	96 K	
Crystal system	monoclinic	
Space group	$P2_1/c$ (#14)	
Unit cell dimensions	a = 16.5811(15) Å	α= 90°
	b = 9.2876(8) Å	β= 97.478(2)°
	c = 15.9001(14) Å	γ = 90°
Volume	2427.8(4) $Å^3$	
Z	4	
Density (calculated)	1.714 Mg/m^3	
Absorption coefficient	5.803 mm^{-1}	
F(000)	1232	
Theta range for data collection	2.48 to 28.37°.	
Index ranges	-21<=h<=22, -12<=k<=12, -20<=l<=21	
Reflections collected	48457	
Independent reflections	5799 [R_{int}= 0.0425]	
Completeness to theta = 28.37°	95.3 %	
Absorption correction (TMax., TMin.)	SADABS v2.03 (1.000, 0.769)	

Structure solution and Refinement

Structure solution program	SHELXS-97 (Sheldrick, 1990)
Primary solution method	Direct Methods
Secondary solution method	Difference Fourier map
Hydrogen placement	calculated
Structure refinement program	SHELXL-97 (Sheldrick, 1997)
Refinement method	Full-matrix least-squares on F^2
Data / restraints / parameters	5799 / 0 / 311

Goodness-of-fit on F^2	2.511
Treatment of hydrogen atoms	Unrestrained
Final R indices [I>2σ(I)]	R1 = 0.0278, wR2 = 0.0611
R indices (all data)	R1 = 0.0342, wR2 = 0.0622
Largest diff. peak and hole	2.106 and -1.705 e·Å^{-3}

Special Refinement Details

There is a superstructure in which the b axis is tripled, giving a cell with a = 16.5811, b = 27.8628, c = 15.9001, α = 90.00, β = 97.478, γ = 90.00. The space group is $P2_1/c$ (#14). In this larger cell there are three independent molecules in the asymmetric unit. This superstructure was ignored in this refinement since all three of the molecules have approximately the same conformation. The differences in conformation are most noticeable in the elongations of the displacement ellipsoids of atoms C5, C6, and C7 of the quinolinyl ring, and C19 and C20 of one isopropyl pendant group (the peaks Q2{1.97} and Q4{-1.68} in the final difference map are also a result of this superstructure).

Refinement of F^2 against ALL reflections: The weighted R-factor *w*R and goodness of fit (S) are based on F^2, conventional R-factors R are based on F, with F set to zero for negative F^2. The threshold expression of $F^2 > 2\sigma(F^2)$ is used only for calculating R-factors(gt) etc. and is not relevant to the choice of reflections for refinement.

Table 7. Atomic coordinates (x 10^4) and equivalent isotropic displacement parameters ($Å^2$ x 10^3) for **10**. U_{eq} is defined as one third of the trace of the orthogonalized U^{ij} tensor.

	x	y	z	U_{eq}
Pt	2663(1)	4871(1)	2953(1)	18(1)
N(1)	3878(2)	5067(3)	3162(2)	20(1)
N(2)	2744(2)	5935(3)	4069(2)	22(1)
N(3)	1469(2)	5038(2)	3040(2)	21(1)
C(1)	4433(2)	4588(4)	2695(2)	24(1)
C(2)	5259(3)	4898(4)	2876(3)	33(1)
C(3)	5516(2)	5725(4)	3578(3)	36(1)
C(4)	4953(2)	6242(4)	4087(3)	33(1)
C(5)	5180(3)	7163(6)	4790(3)	60(2)
C(6)	4581(3)	7706(6)	5216(4)	77(2)
C(7)	3771(3)	7338(5)	5010(3)	58(2)
C(8)	3511(2)	6400(4)	4361(2)	29(1)
C(9)	4127(2)	5890(3)	3873(2)	25(1)
C(10)	845(2)	4670(3)	2467(2)	22(1)
C(11)	29(2)	4882(3)	2578(3)	24(1)
C(12)	-120(2)	5481(4)	3336(3)	28(1)
C(13)	519(2)	5907(3)	3955(2)	25(1)
C(14)	390(2)	6601(4)	4722(2)	29(1)
C(15)	1044(3)	7057(4)	5261(2)	30(1)
C(16)	1841(2)	6880(4)	5089(2)	27(1)
C(17)	2013(2)	6203(3)	4353(2)	23(1)
C(18)	1322(2)	5693(3)	3786(2)	22(1)
C(19)	5843(2)	4348(6)	2283(3)	51(1)
C(20)	6241(4)	5656(9)	1845(4)	100(3)
C(21)	6538(3)	3505(4)	2755(3)	40(1)
C(22)	-626(2)	4513(4)	1859(2)	28(1)
C(23)	-787(3)	5816(5)	1267(3)	57(1)
C(24)	-1412(2)	3992(4)	2149(3)	38(1)
C(25)	2579(2)	3870(3)	1814(2)	20(1)
C(26)	2874(2)	4508(4)	1120(2)	25(1)
C(27)	2808(2)	3870(4)	327(2)	31(1)
C(28)	2452(2)	2532(4)	192(2)	30(1)
C(29)	2150(2)	1868(4)	864(3)	30(1)
C(30)	2208(2)	2527(4)	1648(2)	27(1)

Table 8. Bond lengths [Å] and angles [°] for **10**.

Pt-N(1)	2.007(3)	C(23)-H(23C)	0.9800
Pt-N(3)	2.009(3)	C(24)-H(24A)	0.9800
Pt-N(2)	2.020(3)	C(24)-H(24B)	0.9800
Pt-C(25)	2.023(4)	C(24)-H(24C)	0.9800
N(1)-C(1)	1.332(5)	C(25)-C(26)	1.397(5)
N(1)-C(9)	1.382(4)	C(25)-C(30)	1.400(4)
N(2)-C(8)	1.366(4)	C(26)-C(27)	1.383(5)
N(2)-C(17)	1.371(4)	C(26)-H(26)	0.9500
N(3)-C(10)	1.331(5)	C(27)-C(28)	1.381(5)
N(3)-C(18)	1.382(4)	C(27)-H(27)	0.9500
C(1)-C(2)	1.393(6)	C(28)-C(29)	1.384(5)
C(1)-H(1)	0.9500	C(28)-H(28)	0.9500
C(2)-C(3)	1.376(5)	C(29)-C(30)	1.381(5)
C(2)-C(19)	1.525(6)	C(29)-H(29)	0.9500
C(3)-C(4)	1.398(5)	C(30)-H(30)	0.9500
C(3)-H(3)	0.9500	N(1)-Pt-N(3)	163.45(12)
C(4)-C(9)	1.406(5)	N(1)-Pt-N(2)	81.91(12)
C(4)-C(5)	1.419(5)	N(3)-Pt-N(2)	81.64(12)
C(5)-C(6)	1.368(7)	N(1)-Pt-C(25)	98.11(13)
C(5)-H(5)	0.9500	N(3)-Pt-C(25)	98.26(13)
C(6)-C(7)	1.383(7)	N(2)-Pt-C(25)	178.07(11)
C(6)-H(6)	0.9500	C(1)-N(1)-C(9)	119.1(3)
C(7)-C(8)	1.376(5)	C(1)-N(1)-Pt	128.9(2)
C(7)-H(7)	0.9500	C(9)-N(1)-Pt	111.9(2)
C(8)-C(9)	1.440(5)	C(8)-N(2)-C(17)	130.9(3)
C(10)-C(11)	1.401(5)	C(8)-N(2)-Pt	113.9(2)
C(10)-H(10)	0.9500	C(17)-N(2)-Pt	114.7(2)
C(11)-C(12)	1.379(5)	C(10)-N(3)-C(18)	119.5(3)
C(11)-C(22)	1.510(5)	C(10)-N(3)-Pt	128.2(3)
C(12)-C(13)	1.405(5)	C(18)-N(3)-Pt	112.2(2)
C(12)-H(12)	0.9500	N(1)-C(1)-C(2)	123.2(3)
C(13)-C(18)	1.408(5)	N(1)-C(1)-H(1)	118.4
C(13)-C(14)	1.420(5)	C(2)-C(1)-H(1)	118.4
C(14)-C(15)	1.359(5)	C(3)-C(2)-C(1)	118.4(4)
C(14)-H(14)	0.9500	C(3)-C(2)-C(19)	122.3(4)
C(15)-C(16)	1.394(5)	C(1)-C(2)-C(19)	119.3(4)
C(15)-H(15)	0.9500	C(2)-C(3)-C(4)	120.1(4)
C(16)-C(17)	1.389(5)	C(2)-C(3)-H(3)	119.9
C(16)-H(16)	0.9500	C(4)-C(3)-H(3)	119.9
C(17)-C(18)	1.442(5)	C(3)-C(4)-C(9)	118.9(3)
C(19)-C(21)	1.509(6)	C(3)-C(4)-C(5)	122.3(4)
C(19)-C(20)	1.586(9)	C(9)-C(4)-C(5)	118.8(4)
C(19)-H(19)	1.0000	C(6)-C(5)-C(4)	118.5(4)
C(20)-H(20A)	0.9800	C(6)-C(5)-H(5)	120.8
C(20)-H(20B)	0.9800	C(4)-C(5)-H(5)	120.8
C(20)-H(20C)	0.9800	C(5)-C(6)-C(7)	122.4(4)
C(21)-H(21A)	0.9800	C(5)-C(6)-H(6)	118.8
C(21)-H(21B)	0.9800	C(7)-C(6)-H(6)	118.8
C(21)-H(21C)	0.9800	C(8)-C(7)-C(6)	122.2(4)
C(22)-C(24)	1.517(5)	C(8)-C(7)-H(7)	118.9
C(22)-C(23)	1.535(6)	C(6)-C(7)-H(7)	118.9
C(22)-H(22)	1.0000	N(2)-C(8)-C(7)	129.9(4)
C(23)-H(23A)	0.9800	N(2)-C(8)-C(9)	114.0(3)
C(23)-H(23B)	0.9800	C(7)-C(8)-C(9)	115.9(4)

N(1)-C(9)-C(4)	120.3(3)	C(19)-C(21)-H(21A)	109.5
N(1)-C(9)-C(8)	117.7(3)	C(19)-C(21)-H(21B)	109.5
C(4)-C(9)-C(8)	122.0(3)	H(21A)-C(21)-H(21B)	109.5
N(3)-C(10)-C(11)	123.8(3)	C(19)-C(21)-H(21C)	109.5
N(3)-C(10)-H(10)	118.1	H(21A)-C(21)-H(21C)	109.5
C(11)-C(10)-H(10)	118.1	H(21B)-C(21)-H(21C)	109.5
C(12)-C(11)-C(10)	116.9(4)	C(11)-C(22)-C(24)	113.9(3)
C(12)-C(11)-C(22)	124.0(3)	C(11)-C(22)-C(23)	109.6(3)
C(10)-C(11)-C(22)	119.0(3)	C(24)-C(22)-C(23)	110.5(3)
C(11)-C(12)-C(13)	121.4(4)	C(11)-C(22)-H(22)	107.5
C(11)-C(12)-H(12)	119.3	C(24)-C(22)-H(22)	107.5
C(13)-C(12)-H(12)	119.3	C(23)-C(22)-H(22)	107.5
C(12)-C(13)-C(18)	118.2(3)	C(22)-C(23)-H(23A)	109.5
C(12)-C(13)-C(14)	123.0(3)	C(22)-C(23)-H(23B)	109.5
C(18)-C(13)-C(14)	118.7(3)	H(23A)-C(23)-H(23B)	109.5
C(15)-C(14)-C(13)	119.1(4)	C(22)-C(23)-H(23C)	109.5
C(15)-C(14)-H(14)	120.4	H(23A)-C(23)-H(23C)	109.5
C(13)-C(14)-H(14)	120.4	H(23B)-C(23)-H(23C)	109.5
C(14)-C(15)-C(16)	122.5(4)	C(22)-C(24)-H(24A)	109.5
C(14)-C(15)-H(15)	118.7	C(22)-C(24)-H(24B)	109.5
C(16)-C(15)-H(15)	118.7	H(24A)-C(24)-H(24B)	109.5
C(17)-C(16)-C(15)	121.5(4)	C(22)-C(24)-H(24C)	109.5
C(17)-C(16)-H(16)	119.3	H(24A)-C(24)-H(24C)	109.5
C(15)-C(16)-H(16)	119.3	H(24B)-C(24)-H(24C)	109.5
N(2)-C(17)-C(16)	130.3(3)	C(26)-C(25)-C(30)	114.8(3)
N(2)-C(17)-C(18)	113.4(3)	C(26)-C(25)-Pt	121.5(2)
C(16)-C(17)-C(18)	116.3(3)	C(30)-C(25)-Pt	123.7(3)
N(3)-C(18)-C(13)	120.2(3)	C(27)-C(26)-C(25)	122.9(3)
N(3)-C(18)-C(17)	117.9(3)	C(27)-C(26)-H(26)	118.5
C(13)-C(18)-C(17)	121.9(3)	C(25)-C(26)-H(26)	118.5
C(21)-C(19)-C(2)	111.8(4)	C(28)-C(27)-C(26)	120.6(4)
C(21)-C(19)-C(20)	106.3(4)	C(28)-C(27)-H(27)	119.7
C(2)-C(19)-C(20)	110.4(4)	C(26)-C(27)-H(27)	119.7
C(21)-C(19)-H(19)	109.4	C(27)-C(28)-C(29)	118.1(3)
C(2)-C(19)-H(19)	109.4	C(27)-C(28)-H(28)	121.0
C(20)-C(19)-H(19)	109.4	C(29)-C(28)-H(28)	121.0
C(19)-C(20)-H(20A)	109.5	C(30)-C(29)-C(28)	120.7(3)
C(19)-C(20)-H(20B)	109.5	C(30)-C(29)-H(29)	119.7
H(20A)-C(20)-H(20B)	109.5	C(28)-C(29)-H(29)	119.7
C(19)-C(20)-H(20C)	109.5	C(29)-C(30)-C(25)	122.9(3)
H(20A)-C(20)-H(20C)	109.5	C(29)-C(30)-H(30)	118.6
H(20B)-C(20)-H(20C)	109.5	C(25)-C(30)-H(30)	118.6

Symmetry transformations used to generate equivalent atoms:

Table 9. Anisotropic displacement parameters ($Å^2 \times 10^3$) for **10**. The anisotropic displacement factor exponent takes the form: $-2\pi^2 [h^2 a^{*2} U^{11} + ... + 2 h k a^* b^* U^{12}]$

	U^{11}	U^{22}	U^{33}	U^{23}	U^{13}	U^{12}
Pt	21(1)	12(1)	20(1)	1(1)	3(1)	-1(1)
N(1)	23(2)	16(1)	21(2)	1(1)	-2(1)	3(1)
N(2)	27(2)	17(1)	22(2)	-4(1)	3(1)	4(1)
N(3)	21(2)	12(1)	29(2)	2(1)	6(1)	-2(1)
C(1)	25(2)	28(2)	19(2)	-3(1)	-3(2)	5(2)
C(2)	26(2)	43(2)	29(2)	-10(2)	-5(2)	10(2)
C(3)	22(2)	42(2)	41(3)	-19(2)	-10(2)	10(2)
C(4)	25(2)	31(2)	39(2)	-18(2)	-8(2)	10(2)
C(5)	27(3)	73(4)	77(4)	-58(3)	-6(2)	8(2)
C(6)	34(3)	99(4)	94(4)	-84(4)	-4(3)	6(3)
C(7)	31(3)	71(3)	71(4)	-53(3)	5(2)	7(2)
C(8)	27(2)	20(2)	38(2)	-12(2)	-2(2)	6(2)
C(9)	27(2)	17(2)	28(2)	-7(1)	-5(2)	7(1)
C(10)	26(2)	14(2)	26(2)	0(1)	6(2)	-2(1)
C(11)	25(2)	14(2)	33(2)	4(1)	5(2)	1(1)
C(12)	28(2)	18(2)	39(2)	3(2)	10(2)	5(2)
C(13)	30(2)	15(2)	30(2)	3(1)	8(2)	4(1)
C(14)	36(2)	26(2)	29(2)	4(2)	12(2)	10(2)
C(15)	42(3)	26(2)	24(2)	-2(2)	8(2)	9(2)
C(16)	35(2)	22(2)	23(2)	-1(1)	1(2)	5(2)
C(17)	30(2)	13(2)	27(2)	3(1)	4(2)	5(1)
C(18)	32(2)	13(2)	23(2)	3(1)	7(2)	3(1)
C(19)	16(2)	84(4)	52(3)	-36(3)	-3(2)	10(2)
C(20)	74(5)	174(7)	55(4)	48(4)	23(3)	73(5)
C(21)	37(3)	28(2)	59(3)	-1(2)	17(2)	11(2)
C(22)	27(2)	24(2)	32(2)	-2(2)	4(2)	2(2)
C(23)	45(3)	49(3)	68(4)	25(3)	-21(3)	-12(2)
C(24)	31(2)	33(2)	52(3)	-19(2)	11(2)	-3(2)
C(25)	15(2)	16(2)	28(2)	4(1)	0(2)	0(1)
C(26)	30(2)	20(2)	24(2)	3(1)	-3(2)	-5(2)
C(27)	39(2)	33(2)	21(2)	6(2)	2(2)	-5(2)
C(28)	30(2)	34(2)	23(2)	-6(2)	-8(2)	0(2)
C(29)	25(2)	24(2)	42(3)	-9(2)	1(2)	-7(2)
C(30)	29(2)	21(2)	32(2)	-2(2)	12(2)	-6(2)

Table 10. Hydrogen coordinates (x 10^4) and isotropic displacement parameters ($Å^2$x 10^3) for **10**.

	x	y	z	U_{eq}
H(1)	4256	4007	2214	29
H(3)	6077	5946	3717	43
H(5)	5735	7397	4961	72
H(6)	4728	8359	5670	92
H(7)	3381	7747	5327	69
H(10)	960	4239	1954	26
H(12)	-666	5608	3442	33
H(14)	-146	6745	4856	35
H(15)	954	7513	5775	36
H(16)	2276	7230	5483	32
H(19)	5540	3724	1837	62
H(20A)	6664	6099	2253	150
H(20B)	5822	6373	1659	150
H(20C)	6485	5306	1354	150
H(21A)	6865	4140	3156	60
H(21B)	6878	3115	2349	60
H(21C)	6321	2712	3064	60
H(22)	-414	3718	1525	33
H(23A)	-1191	5557	785	85
H(23B)	-280	6103	1059	85
H(23C)	-993	6618	1578	85
H(24A)	-1301	3142	2511	57
H(24B)	-1801	3740	1653	57
H(24C)	-1641	4757	2471	57
H(26)	3132	5421	1195	30
H(27)	3008	4358	-128	38
H(28)	2417	2079	-348	36
H(29)	1899	949	786	36
H(30)	1988	2049	2095	32

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