Supporting Informations:

Figure S1. Electrospray mass spectrum of **6** in CH_3CN.

Figure S2. Electrospray mass spectrum of [**7**]$(ClO_4)_2$ in CH_3CN.

Figure S3. Electrospray mass spectrum of [**8**]$(ClO_4)_4$ in CH_3CN.

Figure S4. ^{1}H-NMR spectrum of $[(bpy)_2Ru^{II}(\mu\text{–}L)Ru^{II}(bpy)_2](ClO_4)_4$ [**8**]$(ClO_4)_4$ in $(CD_3)_2SO$.

Figure S5. ORTEP diagram of $(NC_5H_4)_2\text{–}N\text{–}C_6H_4\text{–}N\text{–}(NC_5H_4)_2$ (L).

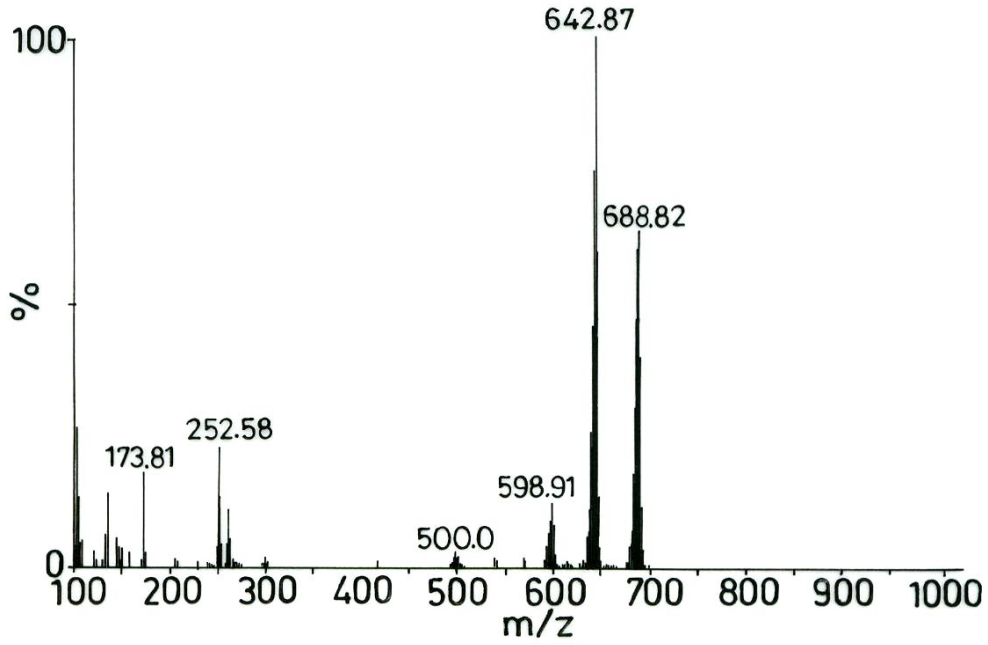
Figure S6. Packing diagram of **6** down (a) *a*-axis, (b) *b*-axis and (c) *c*-axis.

Figure S7. Plots of the reciprocal of magnetic susceptibility versus temperature for (a) $[(acac)_2Ru^{III}(\mu\text{–}L)Ru^{III}(acac)_2](ClO_4)_2$ [**7**]$(ClO_4)_2$ and (b) $[(acac)_2Ru^{III}(\mu\text{–}OC_2H_5)_2Ru^{III}(acac)_2]$ (**6**).

Figure S8. Cyclic voltammograms (———) and differential pulse voltammograms (– – – –) of $[(acac)_2Ru^{III}(\mu\text{–}L)Ru^{III}(acac)_2](ClO_4)_2$ [**7**]$(ClO_4)_2$.

Figure S9. Cyclic voltammograms (———) and differential pulse voltammograms (– – – –) of $[(bpy)_2Ru^{II}(\mu\text{–}L)Ru^{II}(bpy)_2](ClO_4)_4$ [**8**]$(ClO_4)_4$ in CH_3CN.

Table S1. Selected Bond Distances (Å) and Angles (deg) for L.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%
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642.87
688.82
252.58
173.81
598.91
500.0
100
200
300
400
500
600
700
800
900
1000
m/z

Figure S1

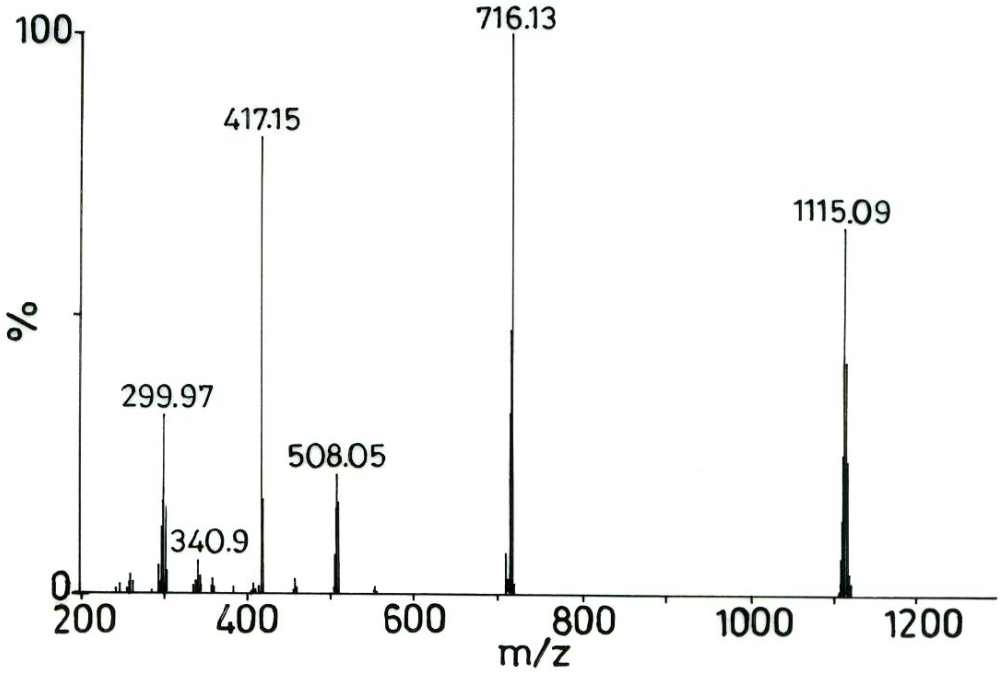
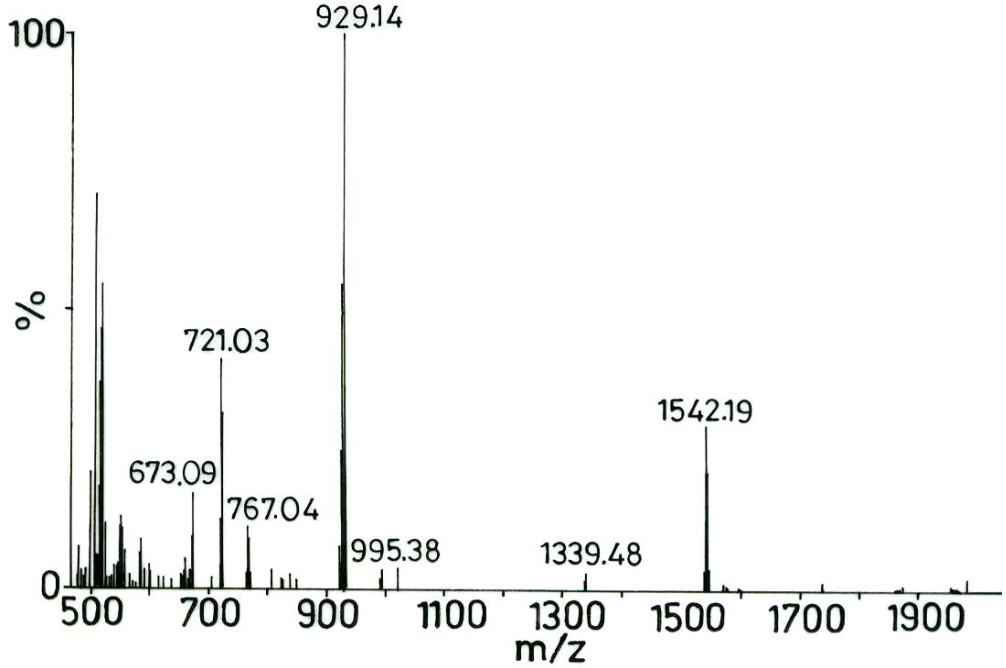

100
%
0
716.13
417.15
1115.09
299.97
508.05
340.9
200
400
600
800
1000
1200
m/z

Figure S2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%
0
929.14
721.03
673.09
767.04
995.38
1339.48
1542.19
500
700
900
1100
1300
1500
1700
1900
m/z

Figure S3

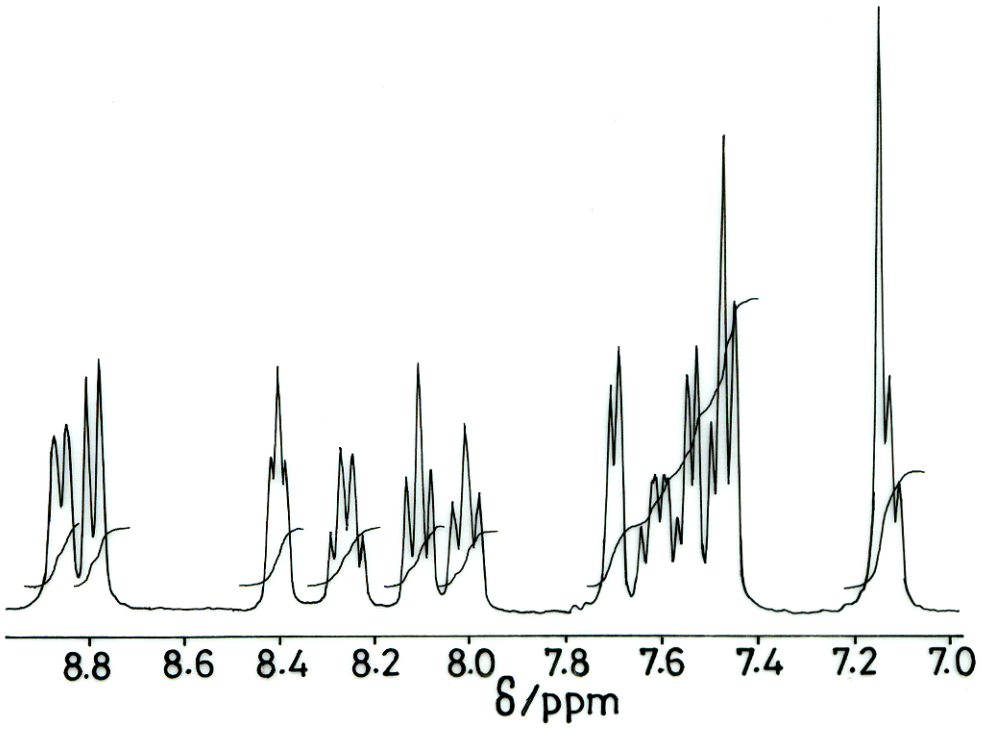
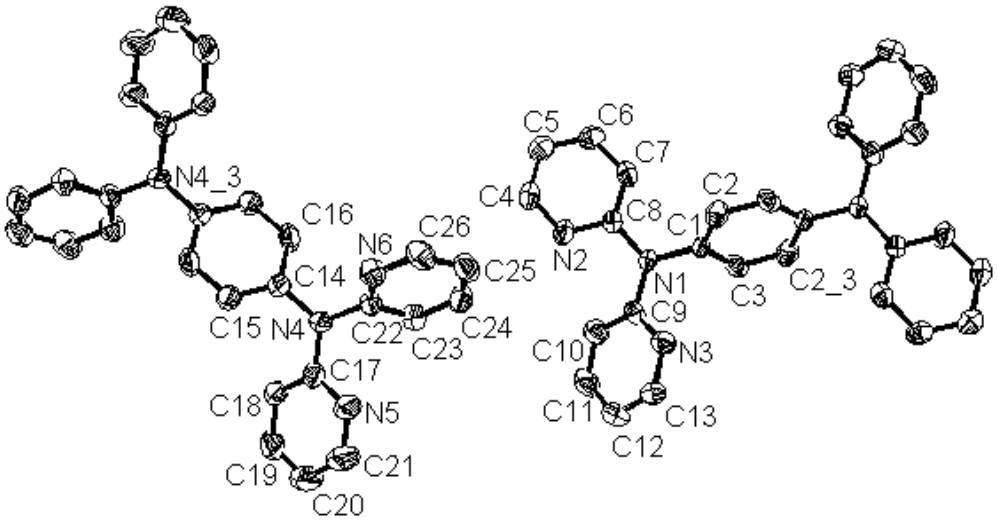


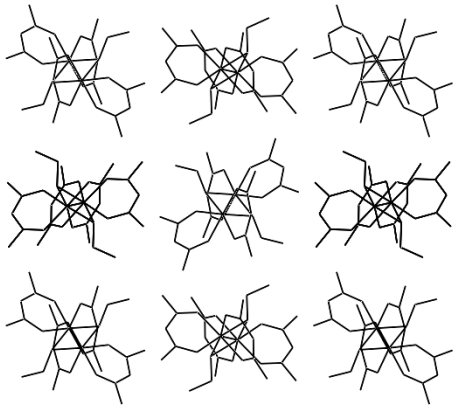
Figure S4


N4_3
C16
C14
C15
N4
C17
C18
N5
C19
C20
C21
N6
C26
C25
C22
C23
C24
C5
C6
C7
C4
C8
N2
N1
C9
C10
N3
C11
C12
C13
C2
C1
C3
C2_3

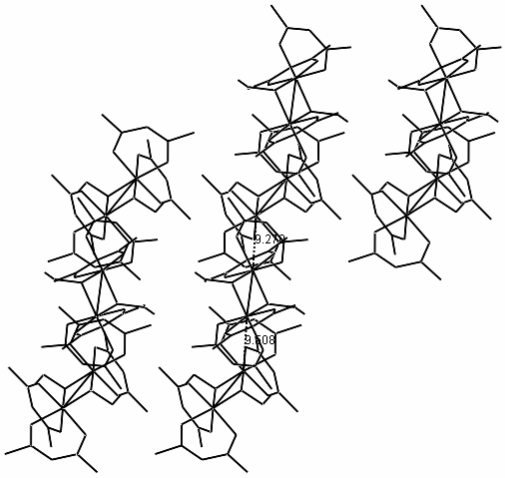
D **E**

Figure S5

(a)



(b)



(c)

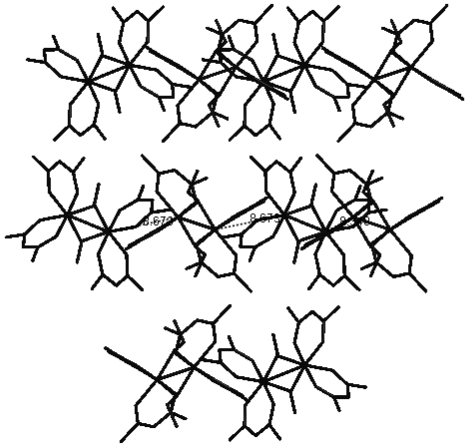
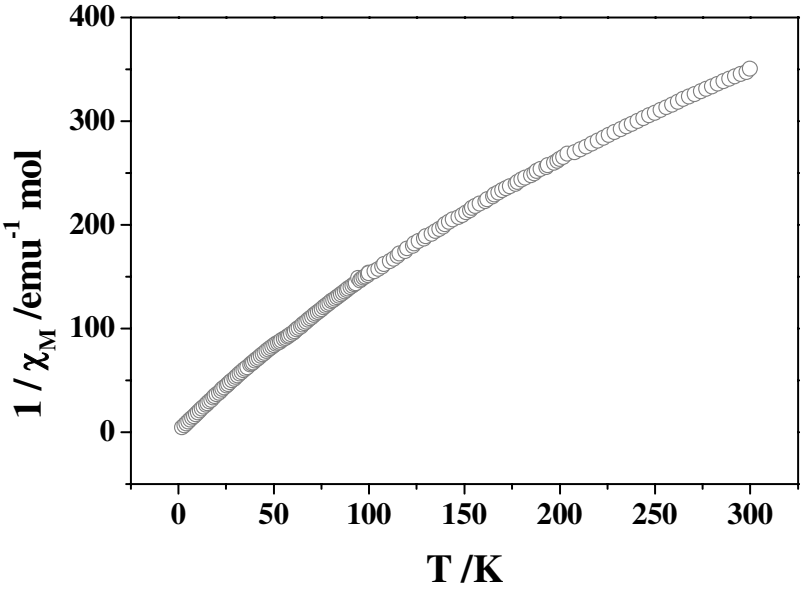


Figure S6

(a)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300
200
100
0
1 / χM /emu-1 mol
0
50
100
150
200
250
300
T /K

(b)

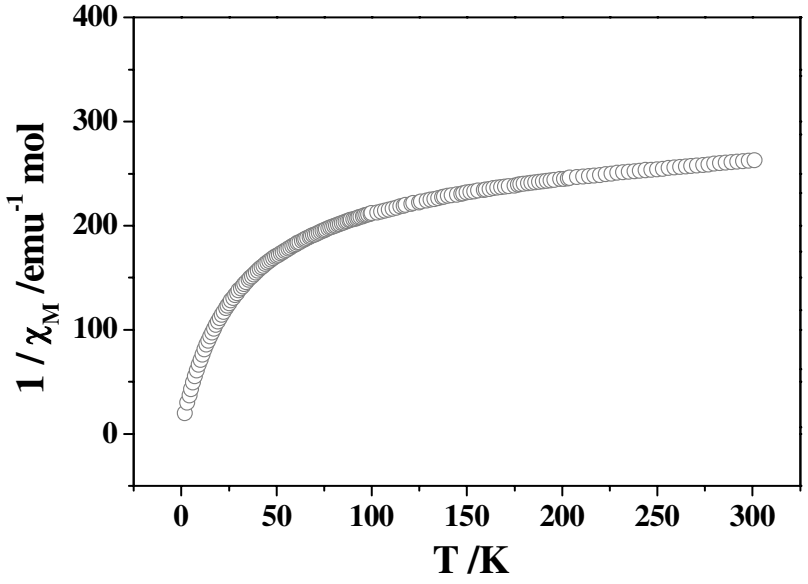
400
300
200
100
0
1 / χM /emu-1 mol
0
50
100
150
200
250
300
T /K

Figure S7

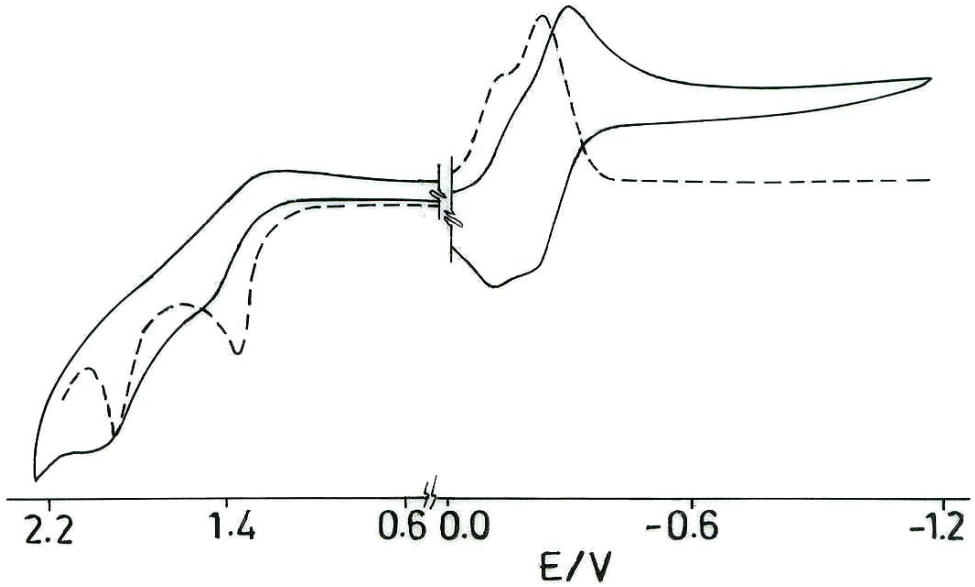

Figure S8

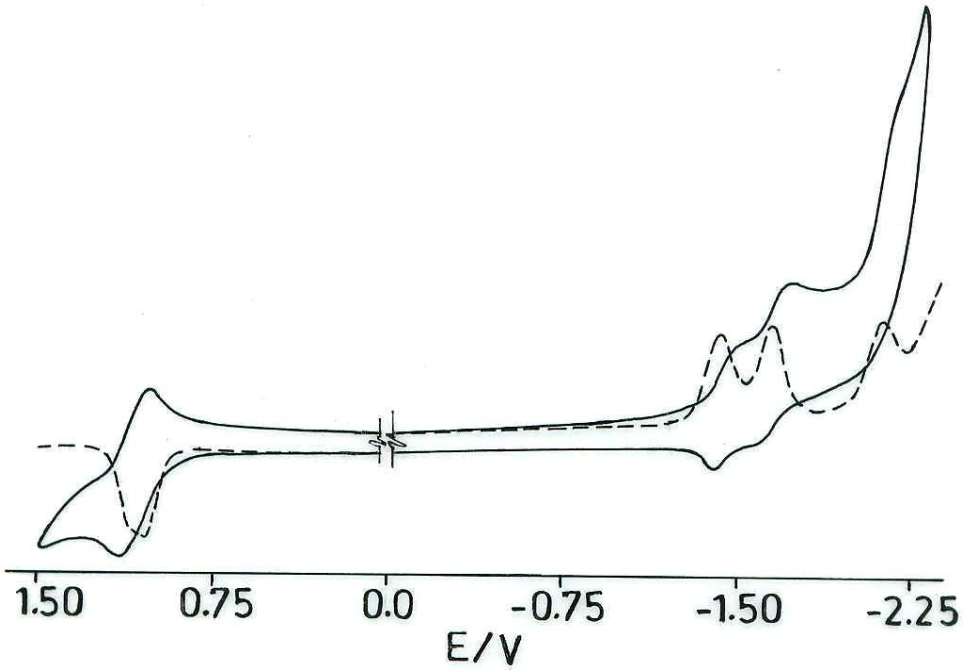

Figure S9

Table S1. Selected Bond Distances (Å) and Angles (deg) for L.

$(NC_5H_4)_2$–N–C_6H_4–N–$(NC_5H_4)_2$ (L)			
D		**E**	
C(1)-C(2)	1.379(6)	C(14)-C(15)	1.383(6)
C(1)-C(3)	1.379(6)	C(14)-C(16)	1.375(6)
C(2)-C(3)#1	1.381(6)	C(15)-C(16)#2	1.378(6)
N(1)-C(1)	1.445(5)	N(4)-C(14)	1.434(5)
N(1)-C(8)	1.403(5)	N(4)-C(17)	1.411(5)
N(1)-C(9)	1.425(5)	N(5)-C(17)	1.331(5)
N(2)-C(8)	1.331(5)	N(5)-C(21)	1.346(6)
N(2)-C(4)	1.355(6)	C(20)-C(21)	1.360(8)
C(4)-C(5)	1.360(7)	C(19)-C(20)	1.364(8)
C(5)-C(6)	1.376(6)	C(18)-C(19)	1.381(7)
C(6)-C(7)	1.362(6)	C(17)-C(18)	1.396(6)
C(7)-C(8)	1.385(6)	N(4)-C(22)	1.422(5)
N(3)-C(9)	1.326(5)	N(6)-C(22)	1.328(6)
N(3)-C(13)	1.344(6)	N(6)-C(26)	1.345(6)
C(9)-C(10)	1.385(6)	C(22)-C(23)	1.389(6)
C(10)-C(11)	1.365(7)	C(23)-C(24)	1.352(7)
C(11)-C(12)	1.369(7)	C(24)-C(25)	1.384(8)
C(12)-C(13)	1.362(7)	C(25)-C(26)	1.377(7)
C(8)-N(1)-C(9)	122.7(4)	C(17)-N(4)-C(14)	121.8(4)
C(8)-N(1)-C(1)	119.3(4)	C(22)-N(4)-C(14)	119.6(4)
C(9)-N(1)-C(1)	118.0(4)	C(17)-N(4)-C(22)	118.7(4)
C(8)-N(2)-C(4)	116.5(4)	C(17)-N(5)-C(21)	117.8(5)
C(9)-N(3)-C(13)	116.1(5)	C(22)-N(6)-C(26)	116.3(5)