Supplementary Information

to

A $(bpy)_2Ru$-coordinated dehydro[12]annulene with exotopically fused diimine binding sites

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Analytical data for ruthenium complexes 1, 11 and 12:

Complex **1**:

^{1}H-NMR (CD_3CN, 500 MHz): δ = 9.57 (d, J = 8.1 Hz, 4 H, γ CH), 8.55 (d, J = 8.2 Hz, 4 H, δ bpy), 8.52 (d, J = 8.2 Hz, 4 H, δ bpy), 8.37 (s, 4 H, phenazine CH), 8.19 (d, J = 5.5 Hz, 4 H, α CH), 8.11 (m, 4 H, γ bpy), 8.03 (m, 4 H, γ bpy), 7.89 (dd, J = 8.1, 5.5 Hz, 4 H, β CH), 7.84 (m, 4 H, α bpy), 7.72 (m, 4 H, α bpy), 7.46 (m, 4 H, β bpy), 7.27 (m, 4 H, β bpy)

MALDI-TOF, *m/z* (%): 1919 (100) [M^+- 1 PF_6], 1773 (30) [M^+- 2 PF_6]

Elemental analysis: calcd. ($Ru_2C_{84}H_{48}N_{16}(PF_6)_4$• 8 H_2O): C 45.6, H 2.8, N 10.1; found C 45.3, H 2.9, N 8.7

Complex **11**:

^{1}H-NMR (DMSO-d_6, 500 MHz): δ = 9.60 (d, J = 8.2 Hz, 2 H, γ CH), 8.86 (d, J = 8.2 Hz, 2 H, δ bpy), 8.83 (d, J = 8.2 Hz, 2 H, δ bpy), 8.59 (s, 2 H, phenazine CH), 8.22 (m, 4 H, α CH, γ bpy), 8.13 (m, 2 H, γ bpy), 8.02 (dd, J = 8.2, 5.5 Hz, 2 H, β CH), 7.81 (m, 2 H, α bpy), 7.76 (m, 2 H, α bpy), 7.59 (m, 2 H, β bpy), 7.38 (m, 2 H, β bpy), 1.18 (m, 42 H, *i*-Pr)

FAB-MS, *m/z* (%): 1201 (4) [M^+- 1 PF_6], 1056 (6) [M^+- 2 PF_6]

Elemental analysis: calcd. ($RuC_{60}H_{66}N_8Si_2(PF_6)_2$•$H_2O$): C 52.8, H 4.9 N 8.2; found C 53.1, H 5.0, N 8.0

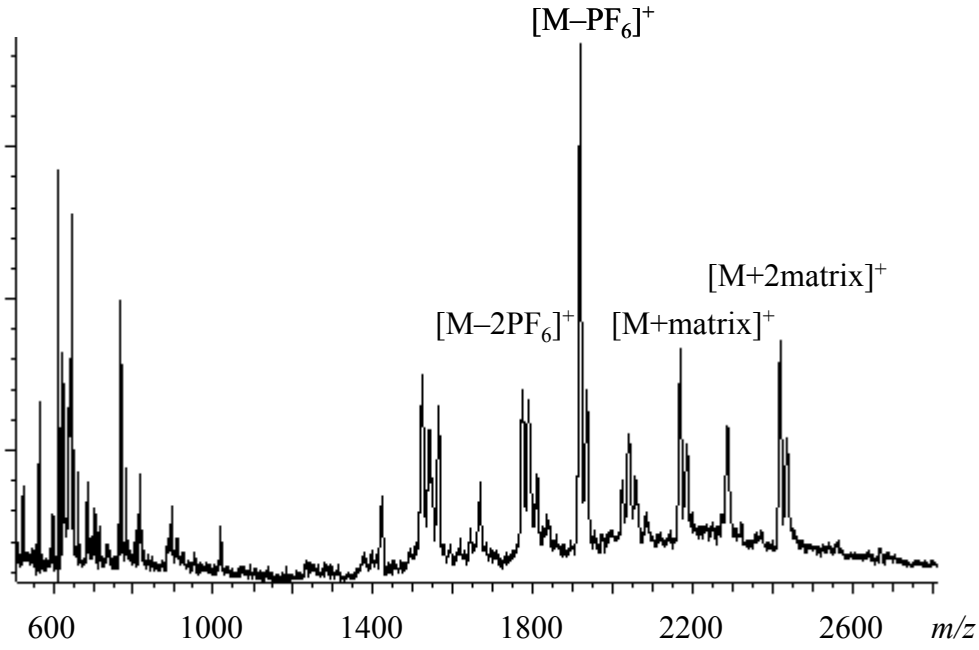
Complex **12**:

^{1}H-NMR (CD_3CN, 500 MHz): δ = 9.60-9.58 (m, 4 H, γ CH), 8.69 (2 s, 2 H, phenazine CH), 8.66 (2 s, 2 H, phenazine CH), 8.60 (d, *J* = 8.2 Hz, 4 H, δ bpy), 8.56 (d, *J* = 8.2 Hz, 4 H, δ bpy), 8.19 (dd, *J* = 4.3, 1.0 Hz, 4 H, α CH), 8.11(m, 4 H, γ bpy), 8.02 (m, 4 H, γ bpy), 7.91-7.85 (m, 4 H, β CH), 7.84 (m, 4 H, α bpy), 7.72 (m, 4 H, α bpy), 7.46 (m, 4 H, β bpy), 7.27 (m, 4 H, β bpy), 1.26 (m, 42 H, *i*-Pr)

MALDI-TOF, *m/z* (%): 2233 (100) [M^+- 1 PF_6], 2089 (20) [M^+- 2 PF_6]

Elemental analysis: calcd. ($Ru_2C_{102}H_{90}N_{16}Si_2(PF_6)_4 \bullet$ 2 H_2O): C 50.7, H 3.8, N 9.3; found C 51.0, H 3.7, N 8.7

MALDI-TOF mass spectrum of **1**: Calcd. mass for $Ru_2C_{84}H_{48}N_{16}(PF_6)_4$: 2063 g M^{-1};
Found: 1919 (100) [M^+- 1 PF_6], 1773 (30) [M^+- 2 PF_6].
2-[(2*E*)-3-(4-*tert*-butylphenyl)-2-methylprop-2-enylidene] malononitrile[i] was used as matrix.



[i] T. Brown, N. L. Clipston, N. Simjee, H. Luftmann, H. Hungerbuehler, T. Drewello, *Int. J. Mass Spectr.*, **2001**, *210/211*, 249-263.