## **Supplementary Information**



**Figure S1.** UV-VIS diffuse-reflectance (solid black line), and solution spectra in DMSO  $(10^{-3} \text{ M}; \text{ dash-dotted blue line})$  and DMF  $(10^{-3} \text{ M}; \text{ dashed red line})$  of complexes **1** (left) and **2** (right) in the range from 400 to 1000 nm.



**Figure S2.** The results of simultaneous TG/DTA thermal analysis of **1** (**up**) and **2** (**down**) showing the TG and DTA curves, and observed and calculated weight losses.



Figure S3. ESI+ mass spectra of 1 (up) and 2 (down) dissolved in methanol.

<b>D</b> –H···A	<i>d</i> (D–H)	<i>d</i> (H····A)	<i>d</i> (D····A)	<(DHA)
O(3)–H(3W)···O(9)	0.86 (3)	2.14 (3)	2.883 (3)	145 (3)
$O(4)-H(4W)\cdots O(9)^{i}$	0.87 (3)	1.88 (3)	2.685 (3)	153 (3)
$N(1)-H(1A)\cdots O(9)^{ii}$	0.880 (3)	1.912 (2)	2.774 (3)	166.4 (2)
N(7)–H(7A)···O(7) <sup>iii</sup>	0.880 (2)	2.131 (2)	2.835 (3)	136.4 (2)
O(2)–H(2V)···O(8) <sup>iv</sup>	0.87 (3)	2.09 (4)	2.924 (3)	161 (3)
O(3)–H(3W)···O(1) <sup>v</sup>	0.86 (3)	2.49 (3)	3.041 (3)	123 (2)
O(2)–H(2W)····O(1) <sup>vi</sup>	0.85 (3)	1.98 (3)	2.808 (3)	163 (3)
O(3)–H(3V)···O(1) <sup>vii</sup>	0.82 (4)	1.90 (4)	2.717 (3)	174 (4)
O(4)–H(4V)···O(6) <sup>iv</sup>	0.77 (4)	1.92 (4)	2.683 (3)	170 (4)
C9…C6 <sup>vi</sup> /C6…C9 <sup>vi</sup>			3.378 (5)	
$C6\cdots C4^{vii}/C4\cdots C6^{vii}$			3.278 (4)	
$Cg1\cdots Cg2^{vi}$			3.5277 (1)	
$Cg2  {}^{ m i} \cdots Cg1  {}^{ m viii}$			3.5592 (1)	

**Table S1.** Selected hydrogen bonds and other non-covalent contacts (Å, °) in the crystal structure of  $1^{\dagger}$ .

*Symmetry codes*: (i) -x + 2, -y, -z + 2; (ii) x, y, z - 1; (iii) x, y + 1, z - 1; (iv) -x + 1, -y, -z + 2; (v) x, y, z + 1; (vi) -x + 1, -y + 1, -z + 1; (vii) -x + 2, -y + 1, -z + 1; (viii) x, y - 1, z + 1; <sup>†</sup> *Note*: The structural parameters of the non-covalent contacts were interpreted using *DIAMOND*.

**Table S2.** Selected hydrogen bonds and other non-covalent contacts (Å, °) in the crystal structure of  $2a^{\dagger}$ .

D−H···A	<i>d</i> (D–H)	<i>d</i> (H···A)	<i>d</i> (D····A)	<(DHA)
O(5)−H(5W)···O(1A)	0.824 (7)	1.826 (7)	2.646 (10)	172.8 (5)
N(7)–H(7A)····O(4A)	0.880 (10)	1.986 (8)	2.717 (13)	139.6 (6)
$O(5A)-H(5X)\cdots O(1)$	0.718 (7)	2.065 (7)	2.761 (10)	163.6 (6)
$N(7A)-H(7AA)\cdots O(2)$	0.881 (10)	2.217 (9)	3.005 (13)	148.7 (6)
O(5)–H(5V)…O(1) <sup>iii</sup>	0.762 (8)	1.972 (8)	2.721 (11)	167.5 (6)
O(5A)–H(5Y)····O(1A) <sup>iv</sup>	0.856 (8)	1.919 (7)	2.747 (11)	162.3 (6)
$N(1)-H(1A)\cdots O(3)^{v}$	0.880 (7)	1.952 (7)	2.765 (10)	152.8 (6)
$N(1A)-H(1AA)\cdots O(4A)^{vi}$	0.880 (9)	1.964 (8)	2.820 (12)	164.1 (6)
$N(1A)-H(1AA)\cdots O(3A)^{vi}$	0.880 (9)	2.341 (8)	3.006 (11)	132.5 (5)
C4…C6 <sup>vii</sup>			3.270 (12)	
C5···C5A			3.431 (13)	
$Cg1\cdots Cg2$			3.6358 (2)	
$Cg1 \ ^{i} \cdots Cg3 \ ^{iii}$			3.4416 (3)	
$Cg3^{ii}\cdots Cg2^{iv}$			3.6542 (2)	

Symmetry codes: (i) -x + 1, -y, -z + 1; (ii) -x, -y, -z; (iii) x + 1, y, z; (iv) x - 1, y, z; (v) x - 1, y + 1, z; (vi) x, y + 1, z; (vii) -x, -y, -z + 1; <sup>†</sup> Note: The structural parameters of the non-covalent contacts were interpreted using *DIAMOND*.