

Electronic Supplementary Information for

Crystal structure diversity in the bis[hydrotris-(3,5-dimethylpyrazolyl)borate]iodouranium(III) complex; from neutral to cationic forms

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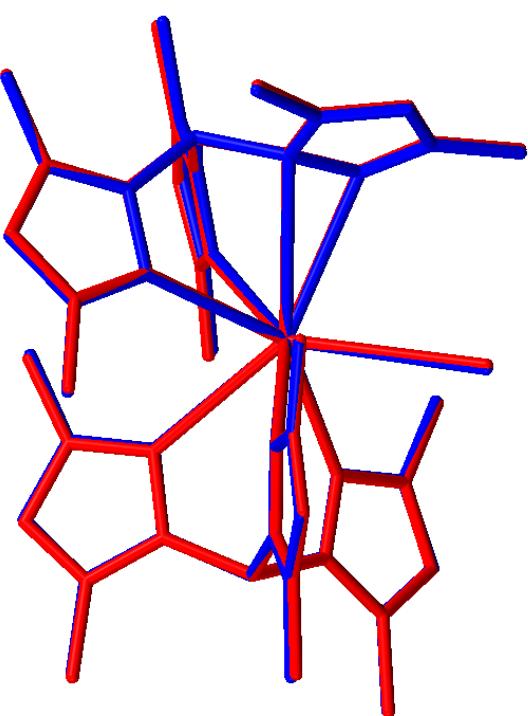


Figure SI1. Molecular Structures of $[U(Tp^{Me_2})_2I]$ at 296 K (red) and 150 K (blue).

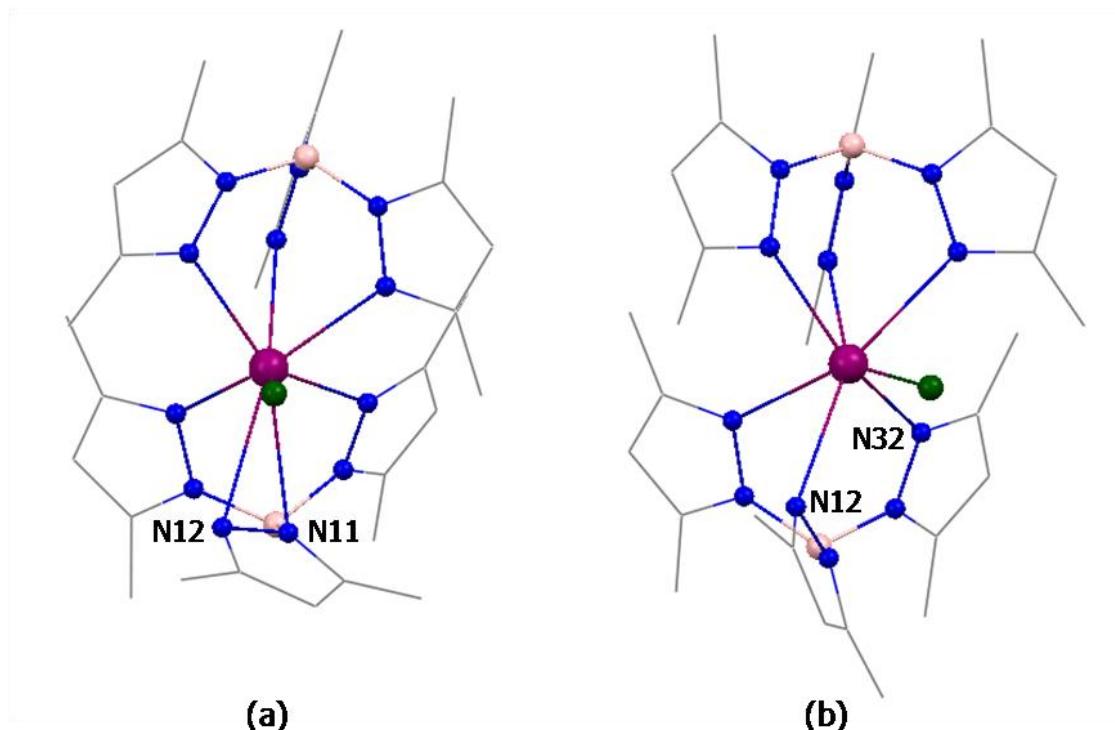


Figure SI2. Molecular Structures of Forms **1a** (a) and **1c** (b).

Table S11. U–I Bond Lengths in Uranium(III) Complexes

Complex	d(U–I)/Å	Ref.	Complex	d(U–I)/Å	Ref.
[U(Tp ^{Me²}) ₂ I], 1a	3.2121(2)		[U(Nacnac) ₂ I]	3.0665(8)	7
[U(Tp ^{Me²}) ₂ I], 1c	3.1936(4)		[U(Cp ^{Me^{4,SiR³}}) ₂ I(THF)]	3.0851(3)	8
[U(TTCN)I ₃ (NCMe) ₂]	3.0872(3)	1	[U(Cp [*]) ₂ I(bipy)]	3.2134(4)	9
	3.1489(3)				
	3.1544(3)				
[U{H ₂ B(pz ^{tBu,Me})(pz ^{Me,tBu}) ₂ }I]	3.1027(11)	2	[U(Cp ^{tBu}) ₂ I ₂ (py) ₃]	3.147(1) 3.191(1)	10
[U{H ₂ B(pz ^{tBu,Me})(pz ^{Me²}) ₂ }I]	3.0989(9)	2	[U(Cp ^{tBu}) ₂ I(py) ₂]	3.169(2) 3.172(2) 3.180(2)	10
[U(Cp [*]) ₂ I(NCMe) ₂]	3.2076(7)	3	[U(BIPM ^{TMS})I ₂ (THF)]	3.1519(9) 3.173(1)	11
[U(tpza)I ₃ (NCMe)]	3.2383(14)	4	[U(Cp ^{Me^{4,Et}}) ₂ I (THF)]	3.0929(4)	12
	3.2637(10)				
	3.1632(10)				
[U(tpza)I ₃ (THF)]	3.19114(6)	4	[U(Cp [*])I ₂ (THF) ₃]	3.161(1) 3.162(1) 3.179(1) 3.168(1)	13
	3.2087(7)				
	3.1439(6)				
[U(PNP) ₂ I]	3.109(1)	5	[UI ₃ (THF) ₄]	3.103(3) 3.168(2) 3.119(3)	14
[U(PNP)I ₂ (^t Bu-py) ₂]	3.106(1)	5	[U(tpa)I ₃ (py)]	3.2612(7)	15
	3.116(1)			3.2944(7) 3.1893(7)	
[U{H ₂ B(pz ^{tBu,Me}) ₂ }I ₂ (THF) ₂]	3.104(2)	6	[UI ₃ (bipy) ₂ (py)]	3.2032(9)	16
	3.132(2)			3.2073(8) 3.2511(8)	
[U{H ₂ B(pz ^{tBu,Me}) ₂ }I ₂ (OPPh ₃) ₂]	3.164(2)	6			
	3.199(2)				

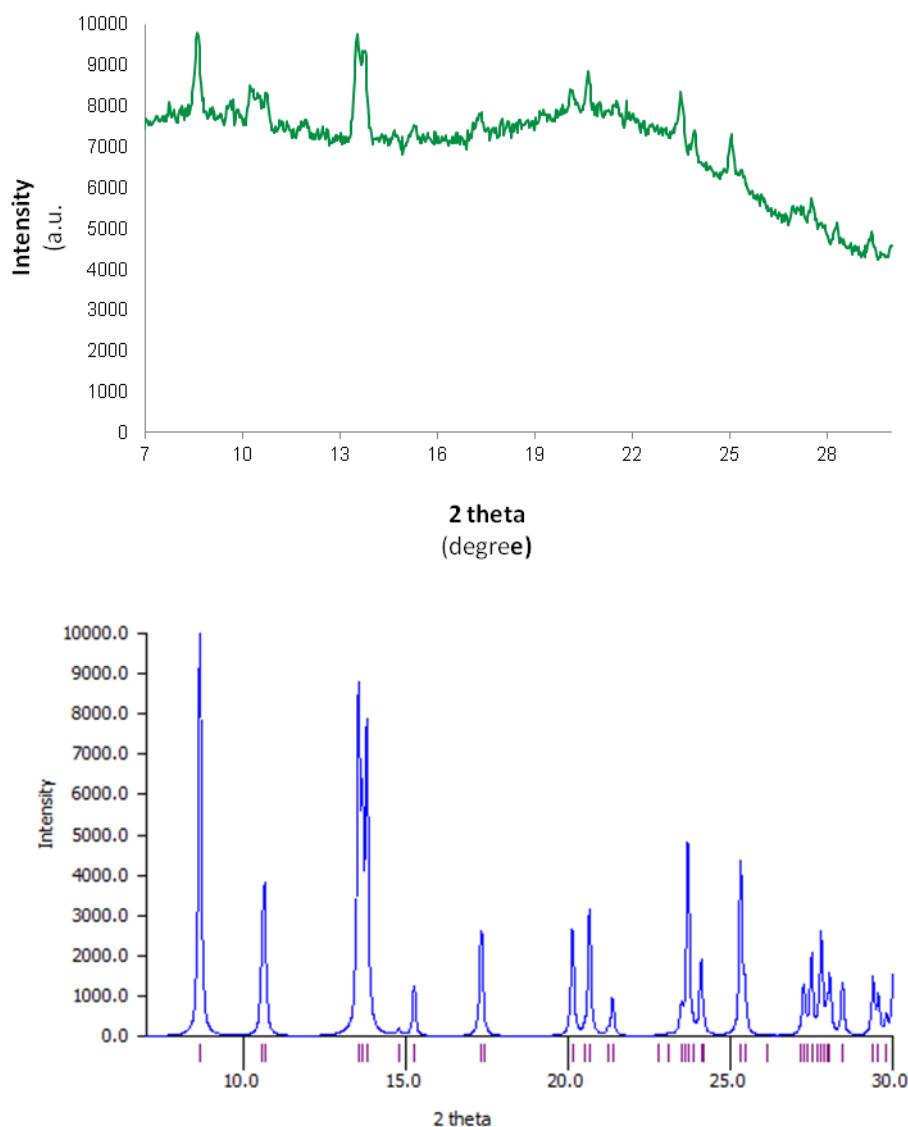


Figure SI3. Experimental powder X-ray diffractogram of the sample used for magnetic measurements (top) and powder X-ray diffractogram of **1b** simulated from the single crystal structure (bottom).

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