

Supplementary Data

Self-assembly of tetranuclear $\{[\text{Co}(\text{trien})]_2[\text{W}(\text{CN})_8]_2\}^{2-}$ or $\{[\text{Co}(\text{trien})]_2[\text{W}(\text{CN})_8]_2\}^{2-}$ square of alternating aliphatic tetramine Co(III) and octacyanotungstate(IV) corners

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Table S2 follows.

Table S2. Rate constants and activation parameters for the reaction of *cis*- α -[Cr(trien)Cl(OH₂)]²⁺ with [W(CN)₈]⁴⁻ in aqueous solution *.

T	[W(CN) ₈] ⁴⁻	k _{obs} ^I	k _{obs} ^{II}	k _a	k _b	k _b
°C	10 ² dm ³ ·mol ⁻¹	dm ³ ·mol ⁻¹ ·s ⁻¹	10 ³ s ⁻¹	10 ⁻² dm ⁶ ·mol ⁻² ·s ⁻¹	10 dm ³ ·mol ⁻¹ ·s ⁻¹	10 ³ s ⁻¹
10	0.8	1.3 ± 0.3	0.39 ± 0.02	1.56 ± 0.02	0.20 ± 0.01	0.15 ± 0.02
	0.9	1.5 ± 0.1	0.41 ± 0.03			
	1.0	1.6 ± 0.1	0.46 ± 0.02			
	1.1	1.8 ± 0.2	0.47 ± 0.02			
	1.2	1.9 ± 0.2	0.54 ± 0.02			
	1.3	2.0 ± 0.3	0.56 ± 0.03			
	1.4	–	0.58 ± 0.07			
	1.5	–	0.60 ± 0.03			
15	0.8	1.9 ± 0.15	0.63 ± 0.02	2.47 ± 0.02	0.44 ± 0.02	0.28 ± 0.02
	0.9	2.1 ± 0.1	0.68 ± 0.03			
	1.0	2.4 ± 0.1	0.71 ± 0.02			
	1.1	2.8 ± 0.5	0.76 ± 0.05			
	1.2	3.0 ± 0.6	0.83 ± 0.02			
	1.3	3.3 ± 1.0	0.86 ± 0.04			
	1.4	–	0.91 ± 0.01			
	1.5	–	0.94 ± 0.02			
20	0.8	2.4 ± 0.1	1.2 ± 0.05	3.58 ± 8.7	0.98 ± 0.03	0.40 ± 0.04
	0.9	3.4 ± 0.2	1.3 ± 0.05			
	1.0	3.8 ± 0.1	1.4 ± 0.1			
	1.1	3.8 ± 0.6	1.5 ± 0.2			
	1.2	4.2 ± 0.8	1.6 ± 0.2			
	1.3	4.6 ± 1.4	1.7 ± 0.2			
	1.4	–	1.8 ± 0.1			
	1.5	–	1.9 ± 0.4			
25	0.8	3.8 ± 0.5	2.4 ± 0.08	4.89 ± 0.06	2.14 ± 0.05	0.66 ± 0.07
	0.9	4.7 ± 0.1	2.5 ± 0.05			
	1.0	5.0 ± 0.2	2.7 ± 0.05			
	1.1	5.3 ± 0.3	3.0 ± 0.06			
	1.2	5.8 ± 1.3	3.3 ± 0.1			
	1.3	6.3 ± 1.0	3.4 ± 0.06			
	1.4	–	3.6 ± 0.05			
	1.5	–	3.8 ± 0.3			
30	0.8	4.3 ± 0.2	6.6 ± 0.4	6.11 ± 0.07	6.77 ± 0.16	1.18 ± 0.2
	0.9	5.7 ± 0.2	7.2 ± 0.2			
	1.0	6.1 ± 0.2	7.9 ± 0.1			
	1.1	6.7 ± 0.6	8.6 ± 0.1			
	1.2	7.2 ± 1.7	9.3 ± 0.5			
	1.3	8.0 ± 2.3	10.0 ± 0.7			
	1.4	–	10.7 ± 0.7			
	1.5	–	11.3 ± 1.0			
ΔH^\ddagger (kJ mol ⁻¹)				46 ± 3	121 ± 7	68 ± 3
ΔS^\ddagger (J K ⁻¹ mol ⁻¹)				-38 ± 11	+149 ± 23	-77 ± 12

* I = 0.5 mol·dm⁻³ (KCl); pH= 2; λ =550nm,