

Solvent-Induced Unsymmetric Salamo-Like Trinuclear Ni^{II} Complexes: Syntheses, Crystal Structures, Fluorescent and Magnetic Properties

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Table S1 Crystal data and structure refinements for Ni^{II} complexes **2**, **3** and **4**.

Compound	2	3	4
Molecular formula	C ₄₀ H ₄₆ Ni ₃ N ₄ O ₂₀	C ₄₄ H ₅₈ Ni ₃ N ₄ O ₁₈	C ₄₄ H ₅₀ Ni ₃ N ₄ O ₁₆
Molecular weight	1078.94	1107.07	1067.01
Temperature (K)	294.29(10)	293(2)	294.29(10)
Crystal size, mm ³	0.33×0.27×0.25	0.20×0.13×0.12	0.33×0.31×0.27
Crystal system	triclinic	monoclinic	monoclinic
Space group	<i>P</i> -1	<i>C</i> 2/c	<i>P</i> 2 ₁ /n
<i>Unit cell dimensions</i>			
<i>a</i> (Å)	11.1760(11)	19.2947(6)	12.3164(7)
<i>b</i> (Å)	11.9520(10)	15.1426(6)	13.3441(6)
<i>c</i> (Å)	12.0854(14)	20.4291(6)	15.2621(8)
α (°)	68.606(9)	90	90
β (°)	66.295(10)	103.384(3)	111.426(7)
γ (°)	77.351(8)	90	90
<i>V</i> (Å ³)	1371.3(3)	5806.7(3)	2335.0(2)
<i>Z</i>	1	4	2
<i>D</i> _{calc} (Mg/m ³)	1.307	1.266	1.518
μ (mm ⁻¹)	1.089	1.683	1.272
<i>F</i> (000)	558	2312	1108
<i>hkl</i> range	-14 ≤ <i>h</i> ≤ 15, -12 ≤ <i>k</i> ≤ 15, -16 ≤ <i>l</i> ≤ 16	-19 ≤ <i>h</i> ≤ 23, -18 ≤ <i>k</i> ≤ 15, -21 ≤ <i>l</i> ≤ 24	-15 ≤ <i>h</i> ≤ 15, -15 ≤ <i>k</i> ≤ 16, -13 ≤ <i>l</i> ≤ 18
θ range(°)	3.3–26.0	3.8– 69.6	3.4–26.0
Reflections collected / unique	10747/5386	11733 / 5377	10245/ 4595
<i>R</i> _{int}	0.0306	0.0227	0.0423
Data / restraints / parameters	5386/5/313	5377 /35/338	4595/0/ 308
<i>R</i> ₁ / <i>wR</i> ₂ [<i>I</i> ≥ 2σ(<i>I</i>)] ^a	0.0618 /0.1752	0.0557 / 0.1646	0.0607 / 0.1396
<i>R</i> ₁ / <i>wR</i> ₂ (all data)	0.0843/0.1934	0.0692 /0.1768	0.0996 /0.1662

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Goodness of fit (GOF)	1.104	1.090	1.037
$\Delta\rho_{\max,\min}$ (e \AA^{-3})	1.12 / -0.47	1.04 / -0.40	0.63 / -0.34

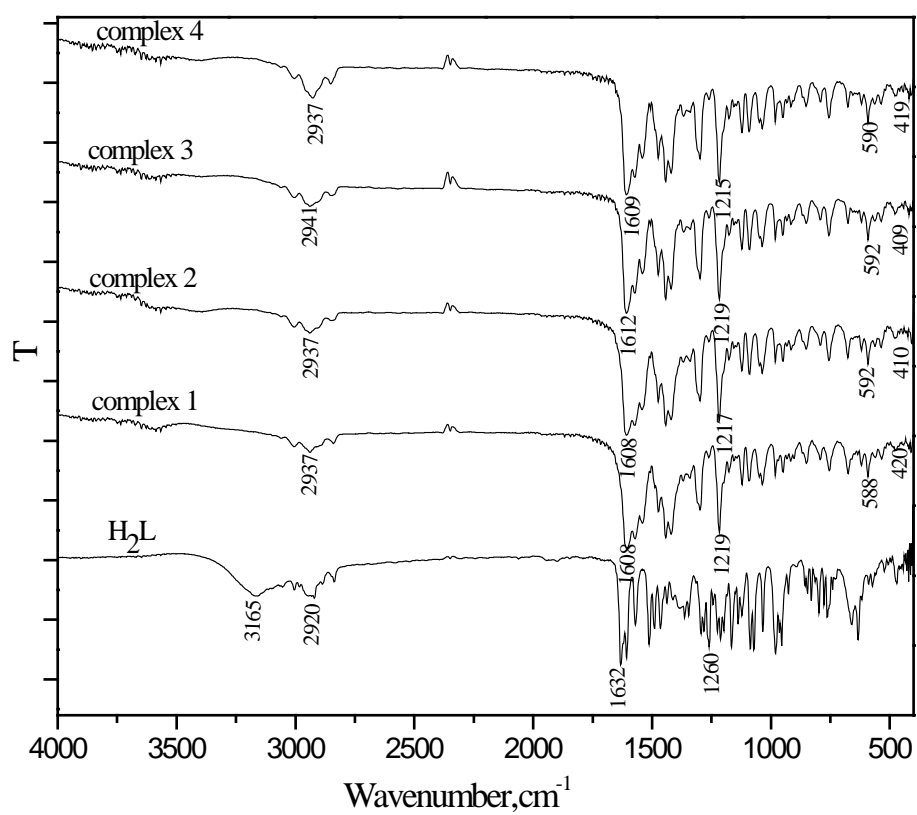


Fig. S1 The IR spectra of H_2L and its corresponding Ni^{II} complexes **1**, **2**, **3** and **4**.