Supporting Information for

Intermolecular Anagostic Interactions in Group 10 Metal Dithiocarbamates

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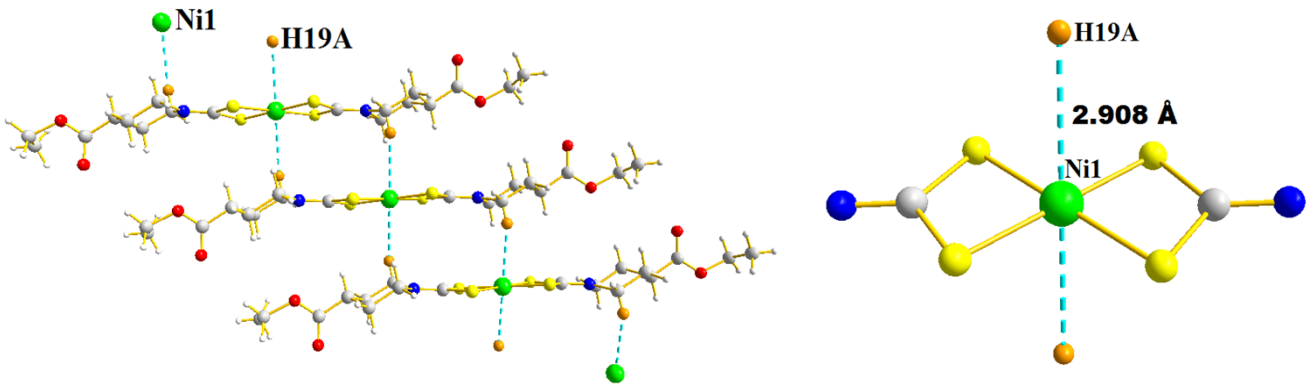
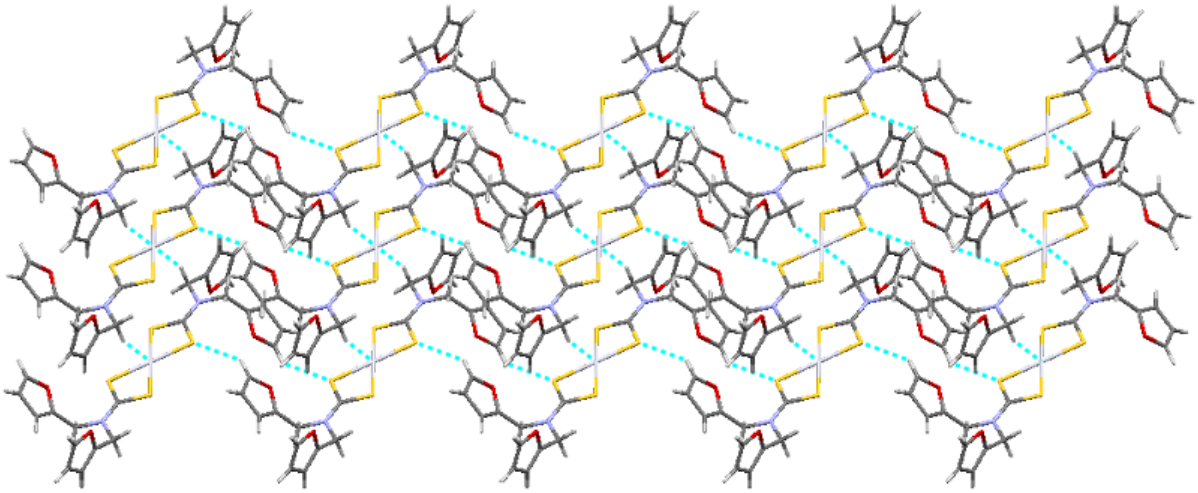
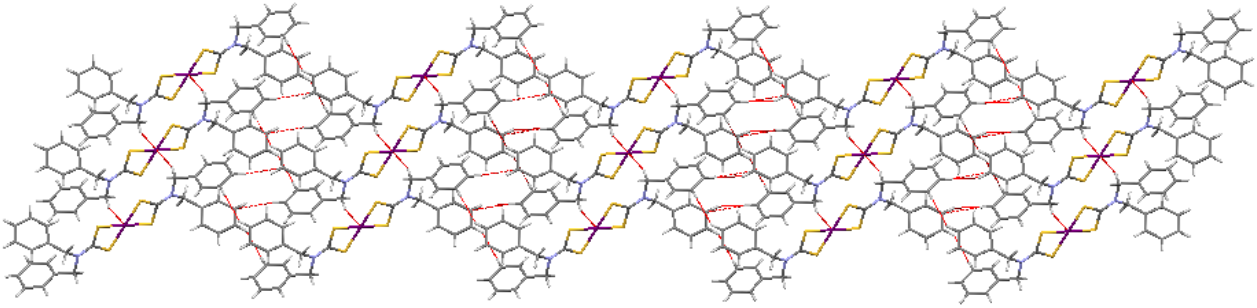


Fig. S1 Intermolecular M...H-C anagostic interactions in **2** presenting 1-D polymeric chain motifs along with their core.Colour code: Ni, Bright green;S, Yellow; N, Ink blue; C, Grey; O, Red; H, Light orange.



(a)



(b)

Figure S2.The supramolecular architecture (a) via Pt···H and S···H interactions in **4** along the b axis (b) via Pd···H and H···Hinteractions in **5** along the b axis.

Table S1

Compound	**1**	**2**	**3**	**4**	**5**
Chemical formula	C20H22NiO4S4	C18H28N2NiO4S4	C22H20N2NiO4S4	C22H20N2O4PtS4	C28H26N4PdS4
Formula weight	513.32	523.37	563.35	699.73	653.17
Crystal system	monoclinic	triclinic	monoclinic	monoclinic	triclinic
Space group	$P2_1/n$	P-1	$P2_1/c$	$P2_1/c$	P-1
a(Å)	4.7556(2)	6.2640(13)	5.6942(9)	5.7453(3)	6.503(6)
b (Å)	5.8030(4)	6.4556(14)	18.8463(14)	19.0518(10)	10.171(9)
c (Å)	39.1558(19)	14.969(3)	10.8100(7)	11.0760(7)	11.709(10)
α (°)	90	78.985(17)	90	90	75.41(8)
β (°)	90.537(4)	86.378(16)	90.696(9)	91.441(4)	80.37(8)
γ (°)	90	86.602(17)	90	90	72.19(8)
V (Å^3)	1080.53(10)	592.3(2)	1160.0(2)	1211.98(12)	710.2(11)
Z	2	1	2	2	1
ρ_{calc}(g cm^{-3})	1.578	1.467	1.613	1.156	1.527
T (K)	150(2)	293(2)	150(2)	150(2)	293(2)
μ (Mo Kα) (mm^{-1})	1.309	1.197	1.230	6.166	0.972
F(000)	532	274	580	680	332
Reflections collected	7232	4224	5412	4254	5245
Independent reflections	3156	2600	3292	2128	3100
Reflections with I > 2σ(I)	2500	1576	2213	1440	1479
Final indices[I>2σ(I)] R_1[a], wR_2[b]	0.0583, 0.1021	0.0564, 0.1313	0.0588, 0.0977	0.0378, 0.0590	0.0763, 0.1631
$R_{1[a]}$,$wR_{2[b]}$ [all data]	0.0791, 0.1096	0.1038, 0.1591	0.1001, 0.1114	0.0660, 0.0671	0.1376, 0.2144
GOF [c]	1.092	0.963	0.982	0.927	0.930
Residual electron Density, e/Å^{-3}	0.669, -0.547	0.515, -0.341	0.569, -0.422	1.156, -0.795	1.266, -1.391

[a]$R_1 = \Sigma \| F0 | - | Fc \| / \Sigma | F0 |$, [b]$wR2 = \{[\Sigma w (F_0^2 - Fc^2)/ \Sigma w (F_0^2)^2]\}^{1/2}$, [c]$GOF = S = \{ \Sigma [w(F_0^2 - F_c^2)^2]/(n-p)\}^{1/2}$, where n is the number of reflections, and p is the number of the refined parameters.