ELECTRONIC SUPPORTING INFORMATION

Unprecedented Layered Coordination Polymers of Dithiolene Group 10 Metals. Magnetic and Electrical Properties

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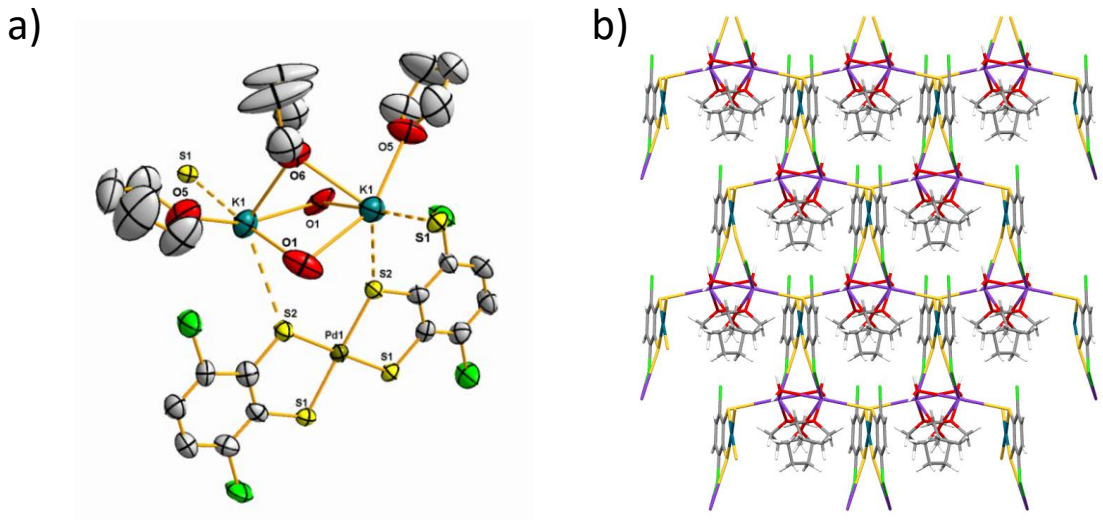

Figure S1. (a) ORTEP of $\{[K_2(\mu\text{-}H_2O)_2(\mu\text{-thf})(thf)_2][Pd(SC_6H_2Cl_2S)_2]\}_n$ (**2**). (b) Representation of the bidimensional network of $\{[K_2(\mu\text{-}H_2O)_2(\mu\text{-thf})(thf)_2][Pd(SC_6H_2Cl_2S)_2]\}_n$ (**2**).

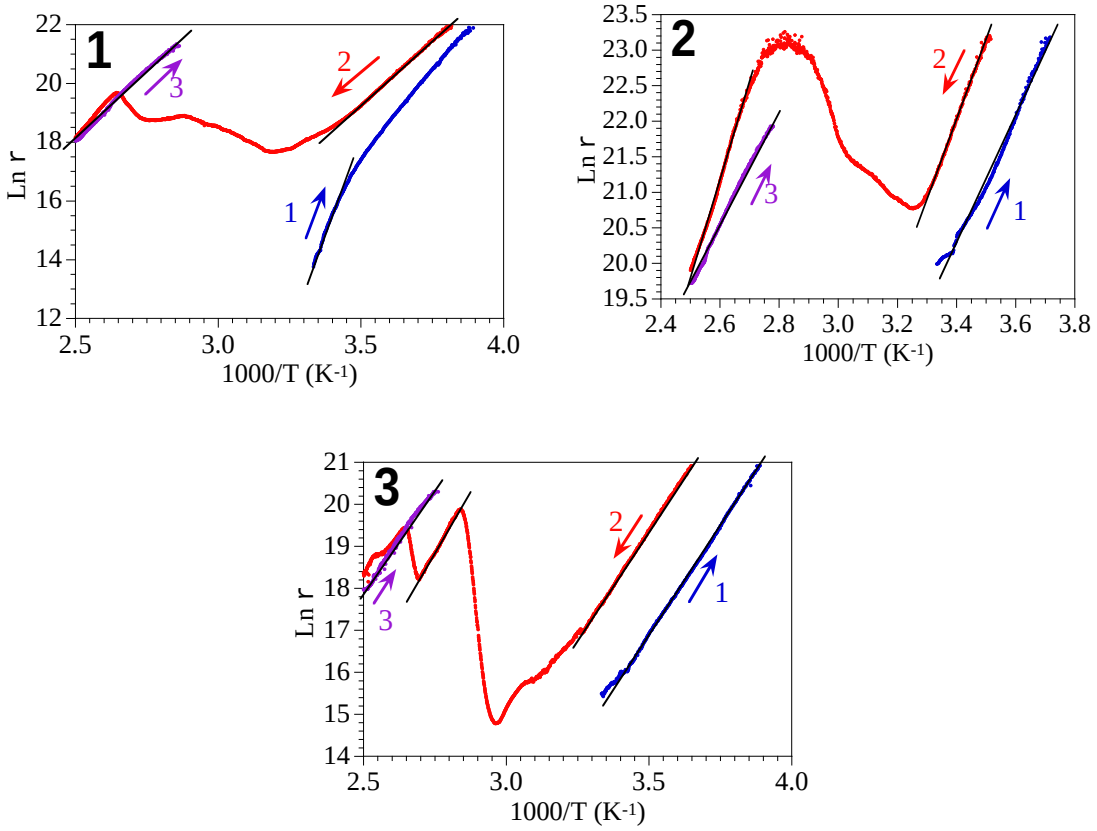

Figure S2. Arrhenius plots of compounds **1-3** showing the semiconducting regimes in the different cooling and heating scans.

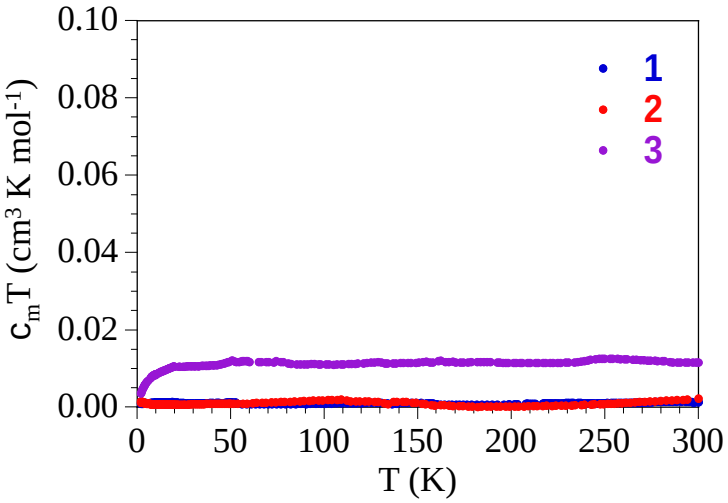

Figure S3. Thermal variation of the $\chi_m T$ product of compounds **1**-**3**.

Table S1. Crystal data and structure refinement for compounds **1-4.**

Compound	**1**	**2**	**3**	**4**
moiety formula	$C_{24}H_{28}Cl_4K_2NiO_5S_4$	$C_{24}H_{32}Cl_4K_2O_5PdS_4$	$C_{36}H_{56}Cl_4K_2O_8PtS_4$	$C_{20}H_{22}Cl_4K_2O_3PtS_4$
formula weight	807.44	855.13	1160.13	853.7
temperature [K]	200	200	200	200
wavelength ($Mo_{K\alpha}$) [Å]	0.71073	0.71073	0.71073	0.71073
crystal system	monoclinic	monoclinic	monoclinic	triclinic
space group	*C*2/*c*	*C*2/*c*	$P2_1/c$	*P-1*
a [Å]; α(°)	9.064(3)	9.064(3)	13.933(5)	8.2056(7); 82.782(5)
b [Å]; β(°)	14.446(5); 97.27(1)	14.446(5); 97.27(1)	9.234(3); 99.24(2)	12.704(1); 74.848(5)
c [Å]; γ(°)	26.473(4)	26.473(4)	18.4983(7)	14.4749(8); 76.633(7)
μ (mm^{-1})	1.393	1.365	3.614	5.954
Z ; F(000)	4; 1656	4; 1728	2; 1168	2; 828
crystal size [mm^3]	0.26 x 0.24 x 0.14	0.10 x 0.10 x 0.10	0.36 x 0.30 x 0.29	0.38 x 0.26 x 0.13
θ *range*	3.10 to 27.55°	3.10 to 27.74°	3.14 to 27.62°	3.26 to 27.5°
index ranges	-11 to 11, -18 to 18, -34 to 34	-11 to 11, -18 to 18, -12 to 34	-18 to 17, -11 to 11, 0 to 24	-10 to 10, -16 to 16, -18 to 17
collected reflections	26810	35756	44170	30685
independent reflections	3952 [R_{int} = 0.061]	3939 [R_{int} = 0.144]	5405 [Rint = 0.089]	6479 [R_{int} = 0.094]
goodness-of-fit on F^2	1.081	1.045	0.948	1.228
final R indices [F>4σ(F)]	R1=0.081,wR2=0.212	R1=0.095,wR2=0.241	R1=0.042,wR2=0.085	R1=0.064,wR2=0.144
R indices (all data)	R1=0.124,wR2=0.228	R1=0.173,wR2=0.269	R1=0.082,wR2=0.097	R1=0.099,wR2=0.158
largest diff. peak/hole [$eÅ^{-3}$]	1.331 / -1.000	1.693 / -0.995	1.393/-2.331	2.900 / -1.894