Supporting informations

Table S1. Crystal data and structure refinement for the hybrid compound $(HQ)_2[ZnCl_4]$ and the HQCl salt.

	$(HQ)_2[ZnCl_4]$	HQCl
Empirical formula	$C_{18}H_{16}Cl_4N_2O_2Zn$	$C_9H_{10}Cl_1N_1O_2$
Fw	499.52	199.63
Crystal colour	yellow	yellow
Wavelength (Å)	0.71073	0.71073
Temperature (K)	298	100
Crystal system, Z	Monoclinic, 4	Triclinic, 2
Space group	*C2/c*	*P*-1
a (Å)	15.2108(17)	7.2651(8)
b (Å)	8.1418(8)	8.2751(9)
c (Å)	16.7204(19)	8.4760(9)
α (°)	90	78.281(3)
β (°)	91.503(7)	86.099(3)
γ (°)	90	66.537(3)
V (Å³)	2070.0(4)	457.65(9)
ρ_{calc} (g.cm^{-3})	1.603	1.449
μ(MoKα) (mm^{-1})	1.718	0.381
ϑ range (°)	2.437–32.458	2.454- 45.405
Data collected	12032	59879
Data unique	3700	7659
Data observed	1816	6366
R(int)	0.0796	0.0437
Nb of parameters / restraints	125/0	158/0
R1 [$F^2 > 2s(F^2)$],[a]	0.1186 [0.0488]	0.0466 [0.0339]
wR2 [$F^2 > 2s(F^2)$],[b]	0.1390 [0.1100]	0.1066 [0.0954]
$S(F^2)$,[c]	0.954	0.987

[a] $R1(F) = \Sigma\|\|F_0\|-\|F_C\|\|/\Sigma|F_0|$; [b] $wR2(F^2) = [\Sigma w(F_0^2-F_C^2)^2/\Sigma wF_0^4]^{1/2}$; [c] $S(F^2) = [\Sigma w(F_0^2-F_C^2)^2/(n+r-p)]^{1/2}$.

Table S2. Selected bond distances for the hybrid compound $(HQ)_2[ZnCl_4]$.

Bond	Length (Å)
Zn-Cl1	2.2725(8)
Zn-Cl2	2.2654(9)
N5-H5…Cl2	2.3444(9)
O4-H4…Cl1	2.2846(9)

Table S3. Selected bond distances for the HQCl salt.

Bond	Length (Å)
O1-H8…Ow1	1.70(3)
C1-H2…Cl	2.74(1)
C1-H2…Cl	2.91(2)
N1-H1…Cl	2.36(1)
C9-H5…Ow	2.59(1)
C3-H4…Cl	2.74(2)

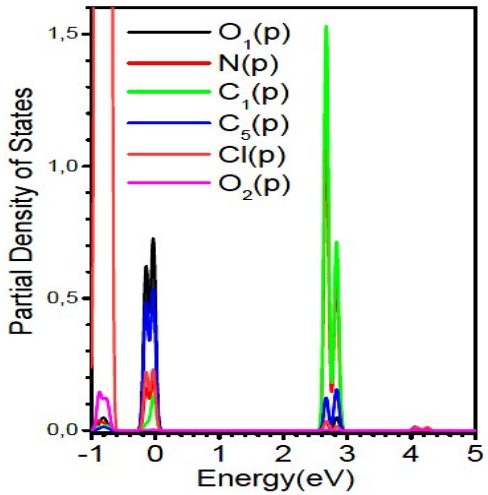

Figure S1*. Calculated electronic density of states of (HQ.Cl) salt.*