Table 1 Crystal data and structure refinement for compounds **1**.

Compound	**1**
Chemical Formula	$[Cd(C_8H_6O_3Cl)_2(C_{10}H_8N_2)]_n$
Empirical Formula	$C_{26}H_{20}CdCl_2N_2O_6$
Formula mass	639.75
Crystal system	Monoclinic
Space group	*C*2/c
a (Å)	22.930(5)
b(Å)	11.750(2)
c(Å)	9.6800(19)
α(°)	90.00
β(°)	98.82(3)
γ(°)	90.00
V(Å^3)	2577.2(9)
D_{calc} (g.cm^{-3})	1.649
Z	4
F(000)	1280
Limiting indices	-26 ≤ h≤ 29; -14 ≤ k≤15; -12 ≤ l ≤ 12
Goodness-of-fit on F^2	1.088
Collected reflections	10153
Independent reflections (R_{int})	2940
Observed reflections ($I>2\sigma(I)$)	2894
Final *R* factors ($I>2\sigma(I)$)	R_1[a]=0.0268; wR_2[b] = 0.0672
Final *R* factors (all data)	R_1 = 0.0277; wR_2 = 0.0677
Largest diff. map peak and hole eÅ^{-3}	0.477 and-0.359

[a] $R_1=\sum\big|\,|F_0|-|F_c|\,\big|/\sum|F_0|$. [b] $wR_2=\{\sum[w(F_0^2-F_c)^2]/\sum[w(F_0^2)^2]\}^{1/2}$

Table 2 Parameters of hydrogen bonds and aromatic-aromatic interactions for compound **1**.

D-H···Cg	d(D-H) (Å)	d (H···Cg) (Å)	d (D···Cg) (Å)	H-Prep (Å)
C9-H9···Cg(1)A	0.9301(2)	3.0501(7)	3.7101(9)	2.9915(3)
C2-H2···Cg(2)B	0.9301(3)	3.185	3.7785(11)	2.9821(10)
Cg(I) -> Cg(J)	d_{c-c}(Å)	dihedral angels (°)		
Cg(1) -> Cg(1)^i	3.5104(5)	0.647		

[a] A, *-x, y, 1/2-z*; B, *-x, -y, -z*. [b] i, *3/2+x, 1/2-y, 1-z*; ii, *-x, y, 1/2-z*. Definition of rings: Cg(1): C(1)-C(2)-C(3)-C(4)-C(5)-C(6); Cg(2):N(2)-C(12)-C(13)-C(14)-C(13)^{ii}-C(14)^{ii}.

Table 3 The assignments of FTIR spectra of all lignads and compounds **1** (cm^{-1}).

Compounds / Assignments	**1**	**bipy**	**PCPA**
ν (=C–H)	3068w	3068w	3013w
v_{as} (-CH_3)			
v_{as} (–CH_2–)	2936w		2916w
v (Aromatic respiration)	1588s	1598s 1531m	1584m 1490s
v_{as} (COO–)	1491s		1736s
v_s (COO–)	1420m		
v (C-N)	1282m	1222m	
v (C-O)	1256m		1274m
v_s (Ar-O-R)	1223m		1235m
γ (=C–H)	830m	810m	821m
v (C–Cl)	730w		707w

Table 4 The luminescent excitation and emission peaks of PCPA, 4,4'-bipy, compound **1**.

	λ_{ex} (nm)	λ_{em} (nm)
PCPA	296	313s，371w
4,4'-bipy	369	459s, 496s
Compound **1**	378	459s, 496s

s: strong ; m: middle ; w: weak .