Electronic Supplementary Material (ESI) for New Journal of Chemistry.

Supporting Information

Odd-Even effect in a thiazole based organogelator : Understanding the interplay of non-covalent interactions on property and applications

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Table-S1: Gelation studies of compounds 1e-1h, 2e-2h and 3e-3h

Solvents	**1e**	**1f**	**1g**	**1h**	**2e**	**2f**	**2g**	**2h**	**3e**	**3f**	**3g**	**3h**
Methanol	W.G	G (1.46)	C	G (2.60)	S	S	S	S	G (0.68)	G (0.48)	G (0.73)	G (0.70)
Ethanol	W.G	G (1.49)	C	G (4.06)	S	S	S	S	G (1.05)	G (0.66)	G (0.88)	G (0.70)
n-pentanol	S	G (2.73)	S	G (7.46)	S	S	S	S	G (2.96)	G (2.33)	G (2.94)	G (0.32)
n-heptanol	S	G (3.31)	S	G (9.90)	S	S	S	S	G (3.14)	G (3.19)	G (4.23)	G (0.39)
Water	P	P	P	P	P	P	P	P	P	P	P	P
THF	S	S	S	S	S	S	S	S	S	S	S	S
Iso octane	P	P	P	P	P	P	P	P	G (1.50)	G (1.05)	P	P
Xylene	C	P	C	S	P	P	P	P	P	P	S	S
Cyclohexane	P	P	P	P	P	P	P	P	P	G (2.56)	P	P
n-octadecane	G (1.47)	G (0.69)	G (0.90)	G (1.10)	S	S	S	S	G (1.42)	G (1.30)	G (2.29)	G (2.42)

*G=Gel, S=solution, C=crystals,W.G.= weak gel, P= Precipitate (value in parenthesis stand for cgc in wt%)

Table-S2: Gelation studies of compounds 1a-1d, 2a-2d and 3a-3d*[#]

Solvents	1a	1b	1c	1d	2a	2b	2c	2d	3a	3b	3c	3d
Methanol	S	C	C	G (1.86)	S	S	S	S	S	G (2.57)	G (2.11)	G (0.65)
Ethanol	S	S	C	G (2.16)	S	S	S	S	S	G (2.82)	G (2.17)	G (0.80)
n-pentanol	S	S	S	G (2.80)	S	S	S	S	S	G (4.44)	G (4.20)	G (2.12)
n-heptanol	S	S	S	S	S	S	S	S	S	G (4.76)	G (4.92)	G (3.83)
Water	P	P	P	P	P	P	P	P	P	P	P	P
THF	S	S	S	S	S	S	S	S	S	S	S	S
Iso octane	S	P	P	G (2.42)	S	S	S	S	P	P	P	G (0.90)
Xylene	S	S	C	C	S	S	S	S	S	S	S	P
Cyclohexane	P	P	P	G (2.40)	S	P	S	P	P	P	P	G (3.17)
n-octadecane	P	W.G	G (1.00)	G (0.70)	S	P	S	P	P	G (2.21)	G (2.37)	G (1.16)

*G=Gel, S=solution, W.G.= weak gel, P= Precipitate (value in parenthesis stand for cgc in wt%)

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Table S3: Crystallographic information table

Crystal data	**1c**	**1d**	**2d**	**3c**
CCDC No.	958233	966725	957407	965887
Source	Mo K_α	Cu K_α	Cu K_α	Cu K_α
Wavelength (Å)	0.7107	1.5418	1.5418	1.5418
Empirical formula	$C_{16}H_{28}N_2OS$	$C_{17}H_{30}N_2OS$	$C_{18}H_{32}N_2OS$	$C_{17}H_{30}N_2OS$
Formula weight	296.46	310.49	324.52	310.49
Crystal size (mm)	0.9x 0.15 x 0.15	0.18x 0.12 x 0.02	1.0 x 0.8 x 0.56	0.54x 0.45 x 0.15
Crystal system	Monoclinic	Monoclinic	Monoclinic	Triclinic
Space group	P $2_1/c$	P $2_1/c$	P $2_1/c$	P-1
a/Å	20.6963(8)	23.237(2)	22.1166(3)	4.9139(3)
b/Å	4.89894(19)	4.9497(3)	19.4545(2)	8.2041(5)
c/Å	16.9658(7)	15.6429(12)	9.42062(13)	23.1603(10)
α/°	90	90	90	84.043(4)
β/°	97.371(4)	90.966(8)	101.1861(13)	87.033(4)
γ/°	90	90	90	78.743(5)
Volume/ $Å^{-3}$	1705.95(12)	1798.9(2)	3976.39(9)	910.32(9)
Z	4	4	8	2
D_{calc}	1.154	1.146	1.084	1.1327
F(000)	648	680	1424	340
μ (mm^{-1})	0.189	1.594	1.460	1.575
Temperature (K)	298	298	298	293
Observed reflection [$I>2\sigma(I)$]	3034	1663	6244	2887
Parameters refined	186	195	409	196
Goodness of fit	1.067	1.135	1.032	1.044
Final R_1 on observed data	0.0455	0.1155	0.0493	0.0549
Final wR_2 on observed data	0.1231	0.2385	0.1351	0.1482

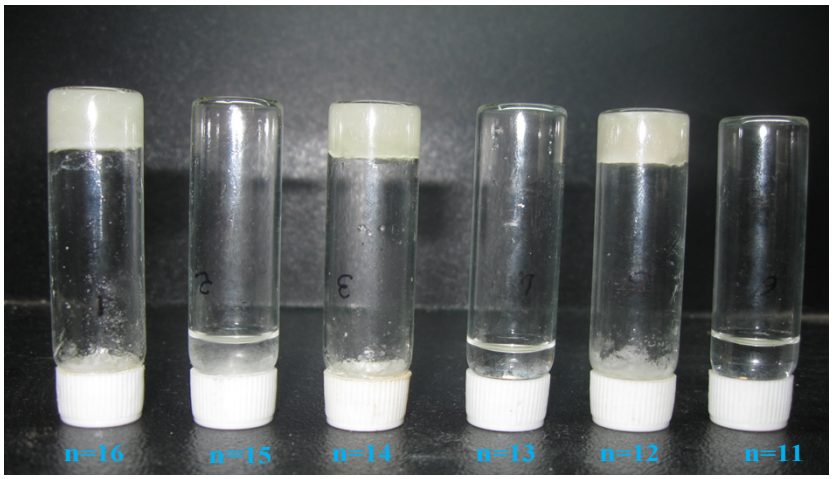

Fig. S1: Odd-even effect of compounds 1c-1h in methanol (n=number of methylene group in alkyl chain)

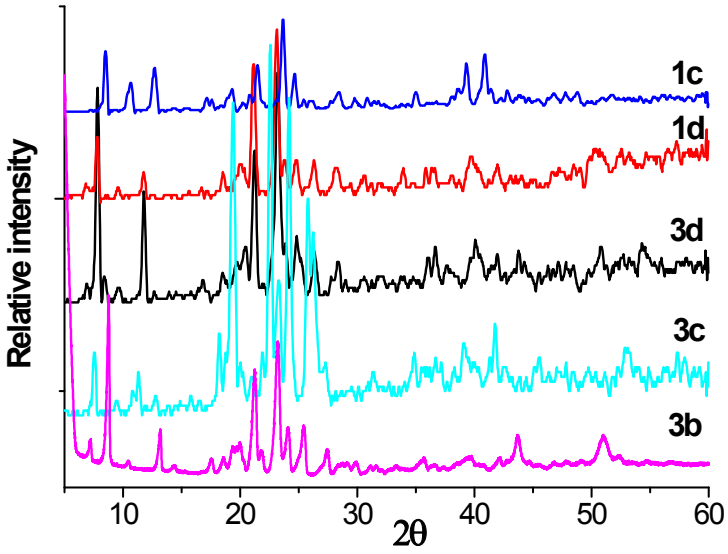

Fig. S2: PXRD pattern of 1c-1d and 3b-3d

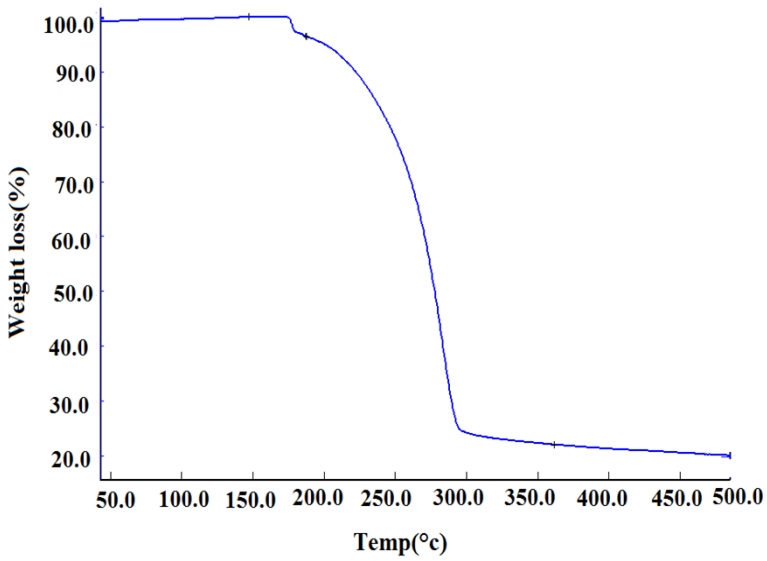

Fig. S3: TGA curves for the Zno nanoparticles embedded in gelator

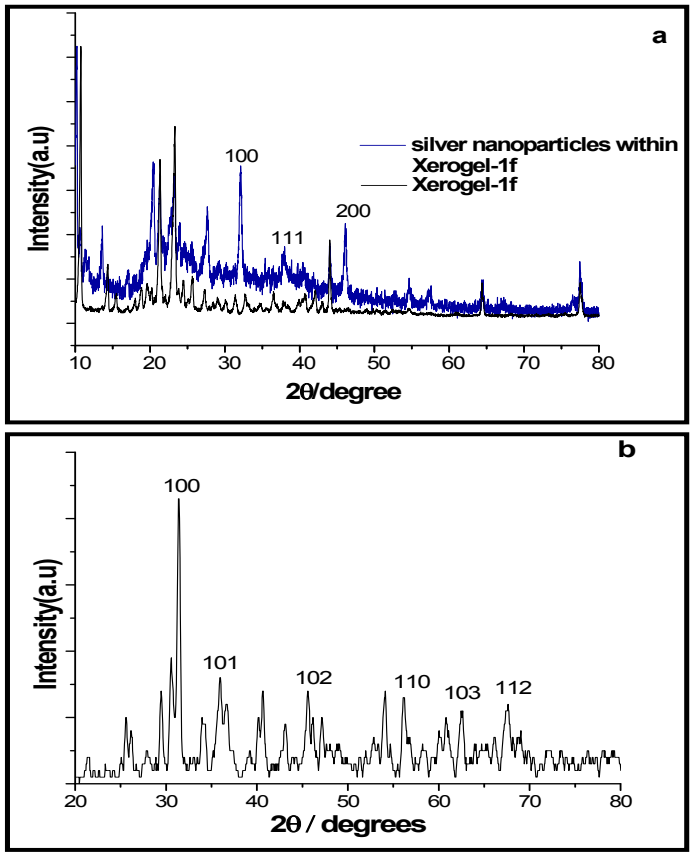

Fig. S4: XRD pattern of (a) silver nanoparticles (b)ZnO nanoparticles