Supporting Information

for

Functionality-Oriented Molecular Gels: Synthesis and Properties of Nitrobenzoxadiazole (NBD)-containing Low-molecular Mass Gelators

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Figure Legends and Video Captios

Fig. S1 ¹H NMR spectra of NLC.

Fig. S2 ¹H NMR spectra of NDC.

Table S1 Gelation behaviors, T_{gel} values (°C) and CGCs of NLC and NDC in different liquids (2.5%, w/v).

Fig. S3 Concentration-dependent UV-Vis spectra of NDC/DMSO system at room temperature (a), and temperature-dependent UV-Vis spectra of NDC/DMSO system at a concentration of 1.0 % (w/v) (b).

Fig. S4 T_{gel} of NDC gel systems as a function of one of the solubility parameters of the liquids under study: (a) δ_h , (b) δ_p , (c) δ_d .

Fig. S5 A conceptual device for monitoring "ammonia leaking". (a) The light is off and the number on the display screen is "0" because there had been no ammonia nearby during the test; (b) The light is on, however, and the number increased to 58 upon placing a bottle cap nearby, of which the cap had been contaminated by a little amount of ammonia before the test.

Video S1 The video of ammonia monitoring by using a prototype device.



Fig. S1 ¹H NMR spectrum of **NLC**.



Fig. S2 ¹H NMR spectrum of NDC.

Solvent	NLC	NDC	Solvent	NLC	NDC
Methanol	Ι	S	<i>n</i> -Hexane	Ι	Ι
Ethanol	Ι	G ≈104 (1.1)	<i>n</i> -Heptane	Ι	Ι
<i>n</i> -Propanol	Ι	G ≈94 (1.2)	<i>n</i> -Octane	Ι	Ι
<i>n</i> -Butanol	Ι	G ≈87 (1.7)	<i>n</i> -Nonane	Ι	Ι
<i>n</i> -Pentanol	Ι	G ≈80 (2.0)	<i>n</i> -Decane	Ι	Ι
<i>n</i> -Hexanol	Ι	Р	Cyclohexane	Ι	Ι
<i>n</i> -Heptanol	Ι	Р	Acetonitrile	Ι	G ≈71 (2.0)
n-Octanol	Ι	Р	H ₂ O	Ι	Ι
<i>n</i> -Nonanol	Ι	Ι	Ethyl ether	Ι	Ι
<i>n</i> -Decanol	Ι	Ι	Ethyl acetate	S	S
Acetone	S	Р	DMSO	Ι	$G \approx 70 (0.3)$
Benzene	S	S	DMF	S	Р
Toluene	S	S	Acetic acid	Ι	Ι
THF	S	S	CH_2Cl_2	S	S
Pyridine	S	S	CHCl ₃	S	S
		G			

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Note: 1) The unit within the yellow box on the far left is the display unit with signal processing and amplifying functionality; 2) The component within the smallest yellow box next to the one described is the indicator light; 3) The units within the big yellow box in the middle are the pump and its control circuit; 4) The one within the yellow box bellow the one just described is the ammonia sensor containing the sensing film; 5) The last one is a battery.

Video S1 The video of ammonia monitoring by using a prototype device.