Electronic Supplementary Material (ESI) for RSC Advances.

Supporting Information for

Thermo-responsive Rheological Behavior of Borinic Acid Polymer in Dilute Solution

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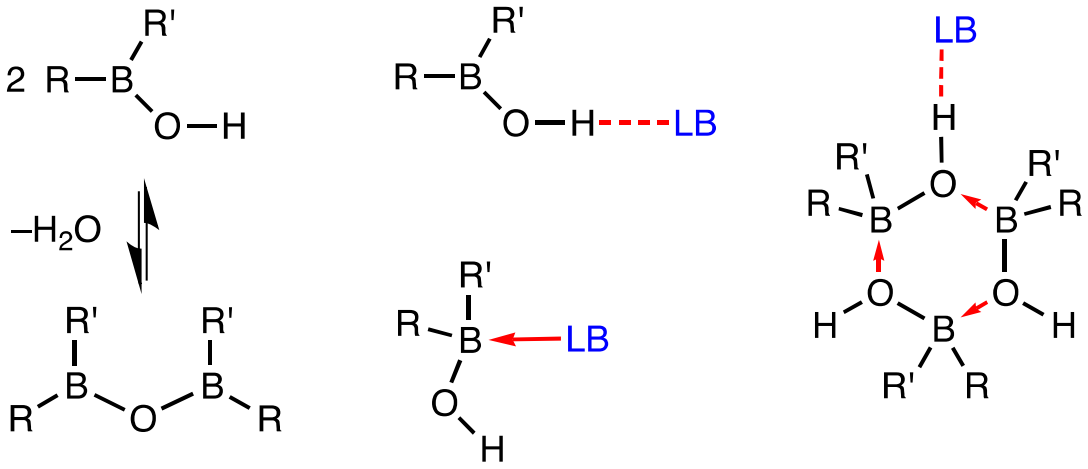

Figure S1. The illustration of dehydration of borinic acid compound. LB: Lewis base.

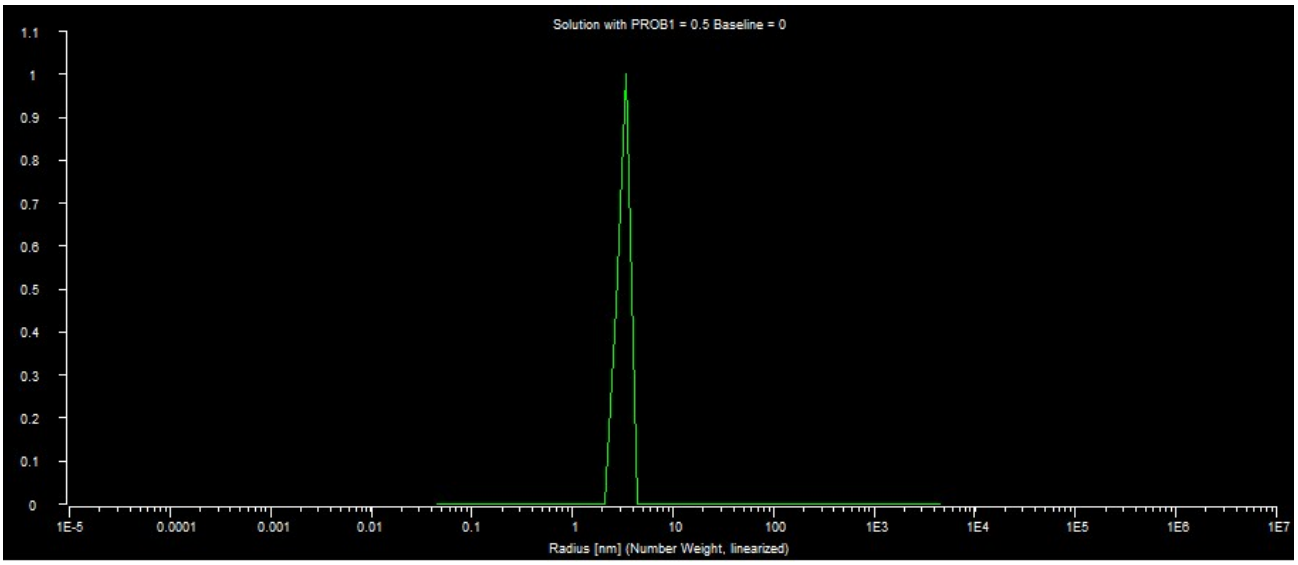

Figure S2. DLS result of PBA (0.1 wt%) in DMSO with 1% of H_2O at 70 ^oC by ALV Goniometer System.

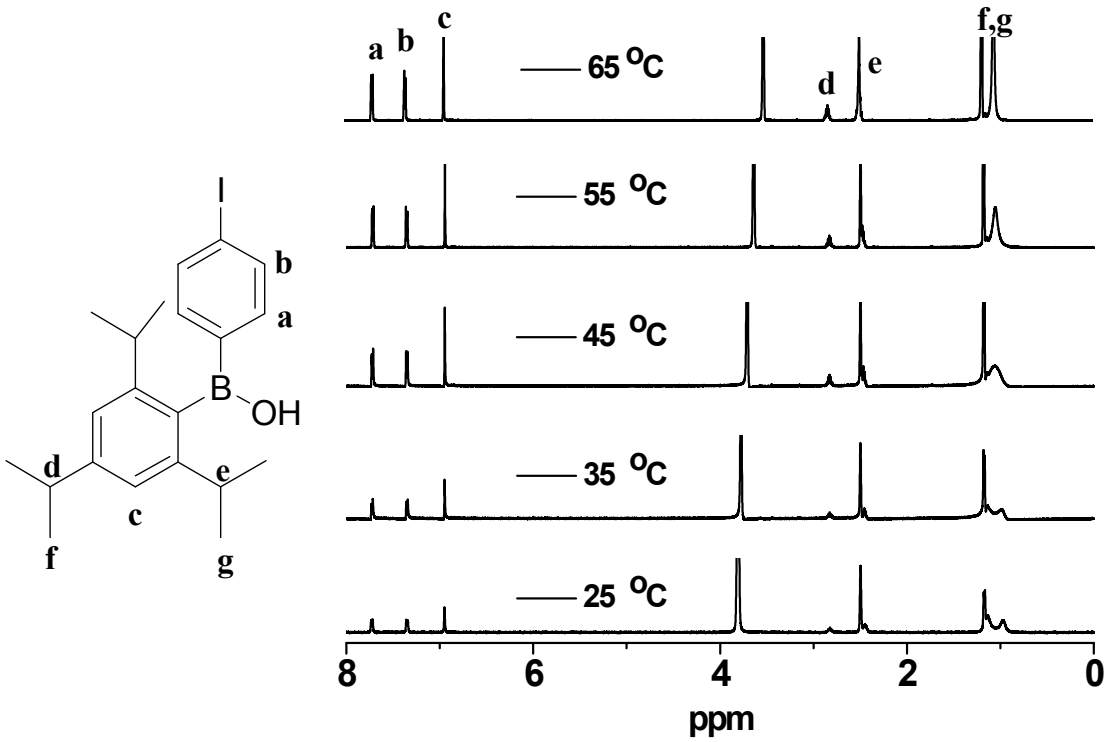

Figure S3. Temperature dependent ^{1}H NMR spectra of borinic acid model compound in [D_6]DMSO with 1% of D_2O at different temperatures ranging from 65 ^{o}C, 55 ^{o}C, 45 ^{o}C, 35 ^{o}C to 25 ^{o}C, respectively.

Table S1. ^{1}H NMR integrations of aromatic protons of borinic acid model compound in DMSO with 1% of H_2O at different temperatures. †

Temperature/ ^{o}C	a-c	a	b	c
65	0.48	0.16	0.16	0.16
55	0.30	0.10	0.10	0.10
45	0.24	0.08	0.08	0.08
35	0.18	0.06	0.06	0.06
25	0.15	0.05	0.05	0.05
Decrease ratio	69%	69%	69%	69%

† The assignments of aromatic protons of borinic acid model compound are the same as the ones in Figure S3. All integrations were normalized by comparing with the integration of H_2O.

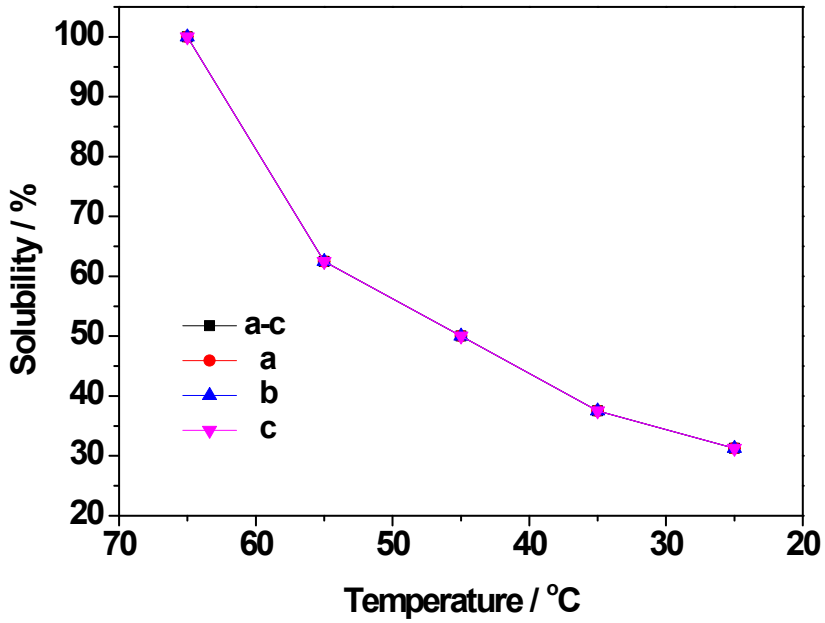

Figure S4. Temperature dependent ^{1}H NMR integration decrease of aromatic protons of borinic acid model compound in [D_6]DMSO with 1% of D_2O at different temperatures ranging from 65 ^{o}C, 55 ^{o}C, 45 ^{o}C, 35 ^{o}C to 25 ^{o}C, respectively. The assignments of aromatic protons of borinic acid model compound are the same as the ones in Figure S3.