Electronic Supplementary Information (ESI)

Salt-induced LCST-type thermal gelation of methylcellulose: Quantifying non-specific interactions via fluctuation theory

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1. Data extraction

The extraction of data from the literature was performed with a software (Engauge Digitizer, version 10.1).
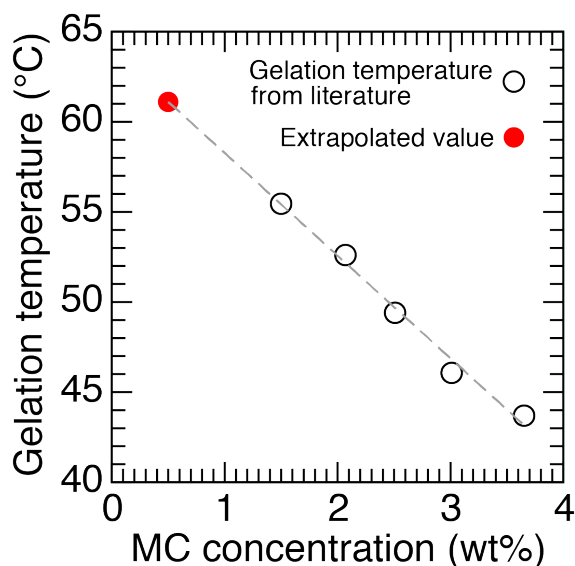
2. Figures used in KBI calculation

Fig. S1. Gelation temperature plotted upon MC concentration (open circles) and extrapolated value at gelation temperature of 61.1°C (filled circle in red).
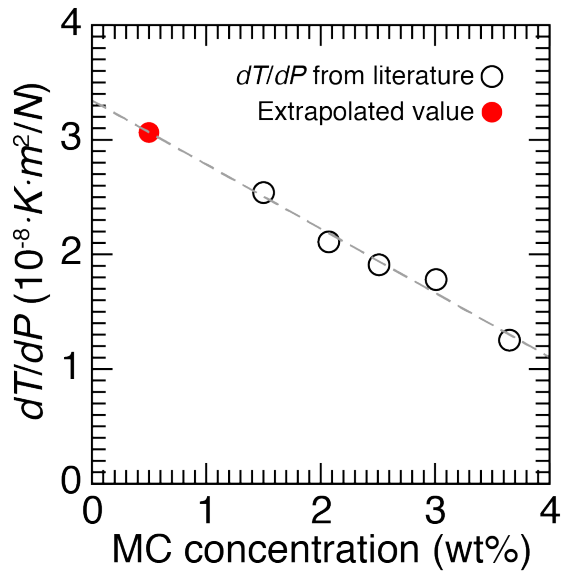
Fig. S2. $\frac{\delta T_{s \to g}}{\delta P}$ values plotted upon MC concentration (open circles) and extrapolated value at MC concentration of 0.5 wt% (filled circle in red).
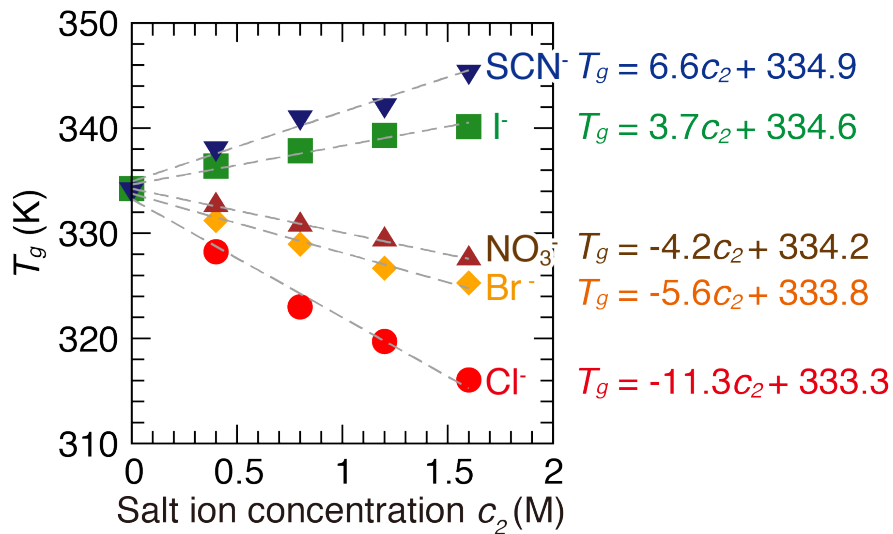

Fig. S3. T_g upon ion concentration c_2 of NaCl (Cl$^-$), NaBr (Br$^-$), NaNO$_3$ (NO$_3$$^-$), NaI (I$^-$), and NaSCN (SCN$^-$).
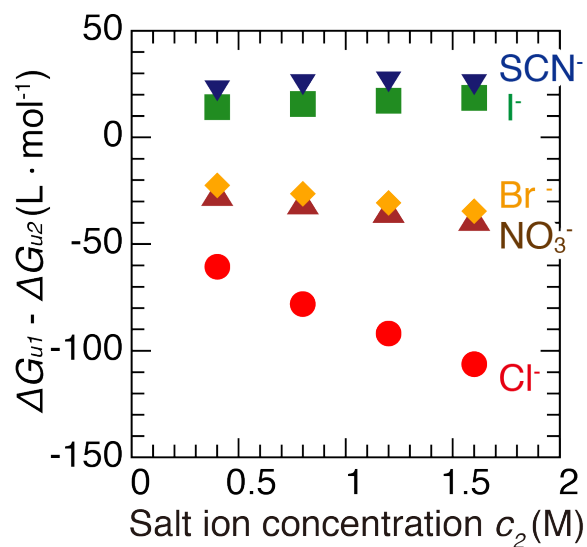
Fig. S4. $\Delta G_{u1} - \Delta G_{u2}$ upon ion concentration c_2 of NaCl (Cl⁻), NaBr (Br⁻), NaNO₃ (NO₃⁻), NaI (I⁻), and NaSCN (SCN⁻).
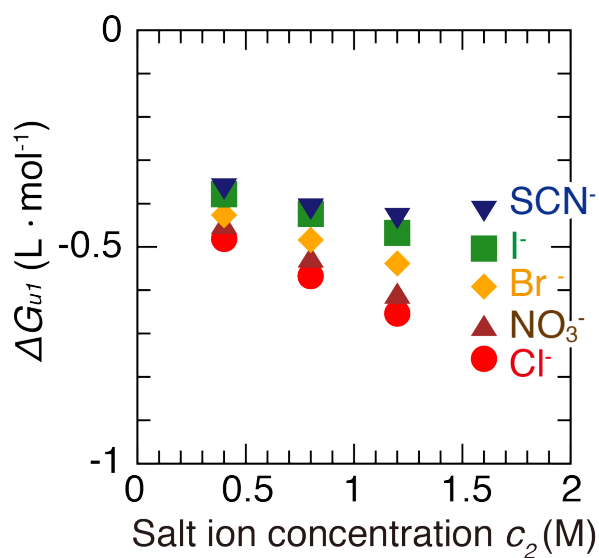

Fig. S5. ΔG_{u1} upon ion concentration c_2 of NaCl (Cl⁻), NaBr (Br⁻), NaNO₃ (NO₃⁻), NaI (I⁻), and NaSCN (SCN⁻).