

Supporting Information

Calorimetry of phase transitions in liquid crystal 8CB under shear flow

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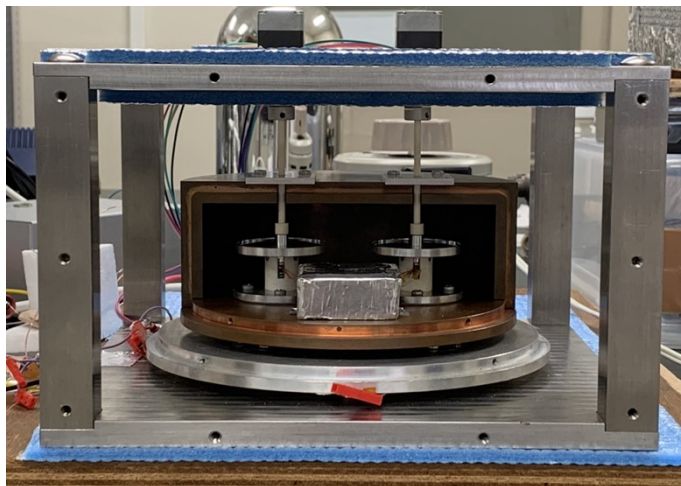


Figure S1 A photograph of the developed DSC equipped with a shearing system.

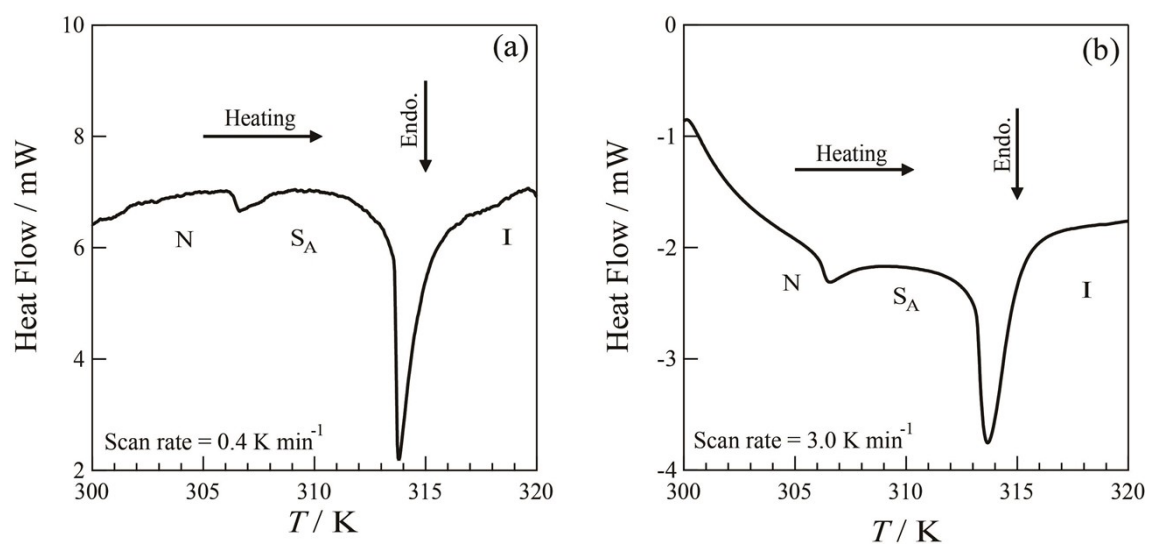


Figure S2 DSC curves of 8CB without shear flow (a) obtained by the developed calorimeter and (b) by a commercial DSC (Rigaku DSC8230).

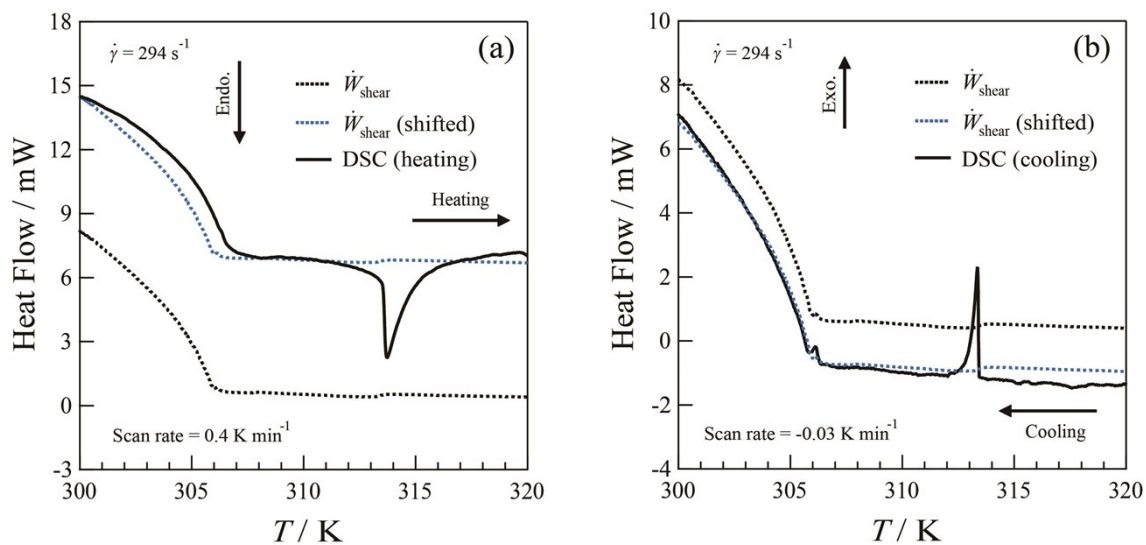


Figure S3 Comparison of \dot{W}_{shear} and the DSC curve in the (a) cooling and (b) heating scan. The blue dotted curves are the \dot{W}_{shear} vertically shifted.

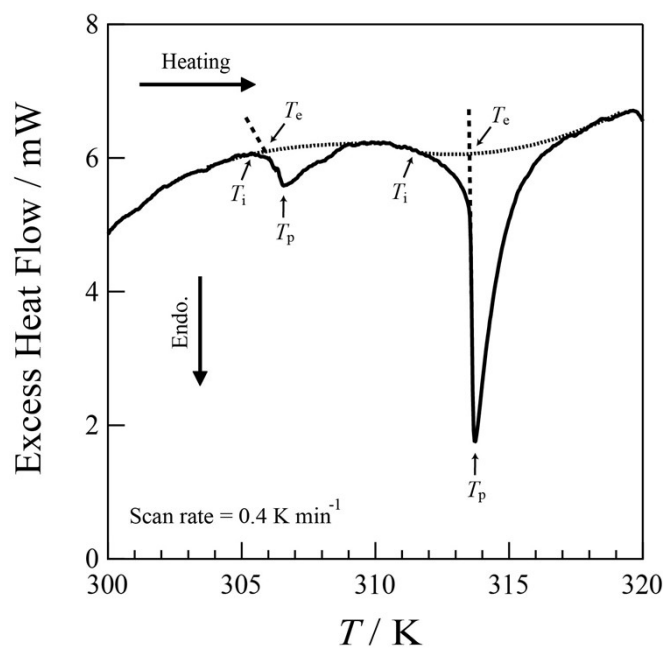


Figure S4 Demonstration of the three ways to determine the transition temperatures; the initiation temperature of the peak (T_i), the extrapolation start temperature (T_e), and the peak top temperature (T_p).

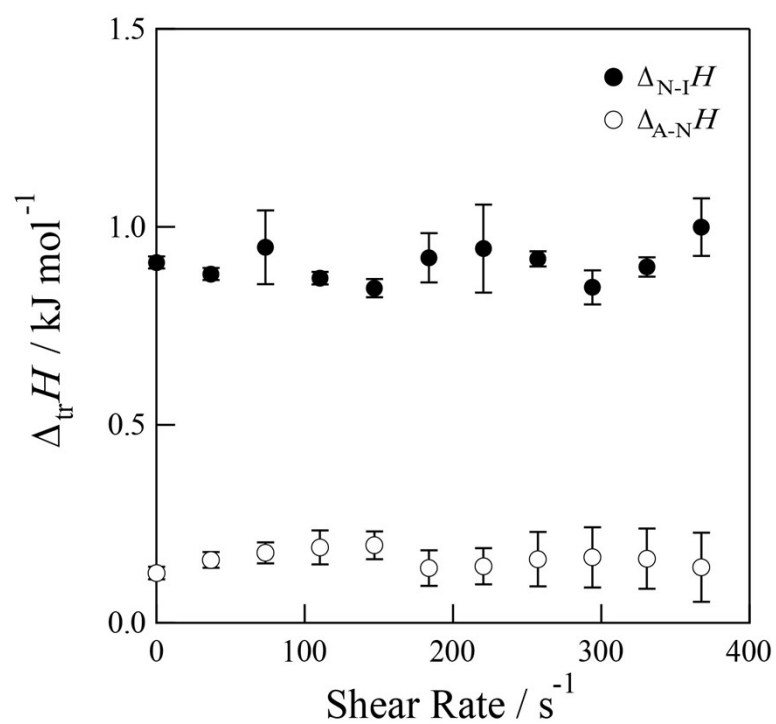


Figure S5 Enthalpy changes at the N-I ($\Delta_{N-I}H$, filled circles) and S_A -N transitions ($\Delta_{A-N}H$, unfilled circles) at various shear rates.