

Supporting Information

Insight into the Chiral Induction in Supramolecular Stacks through Preferential Chiral Solvation

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General Methods

Optical spectroscopy. UV-vis and Circular Dichroism measurement were performed on a Jasco J-815 spectropolarimeter where the sensitivity, time constant and scan rate were chosen appropriately. Corresponding temperature dependent measurements were performed with a PFD-425S/15 Peltier-type temperature controller with a temperature range of 263-383 K and adjustable temperature slope.

Atomic Force Microscopy (AFM). AFM images were recorded under ambient conditions using a Digital Instrument Multimode Nanoscope IV operating in the tapping mode regime. Microfabricated silicon cantilever tips (NS) with a resonance frequency of approximately 300 kHz and a spring constant of about 50 Nm⁻¹ were used. Mica substrates were freshly cleaved before use.

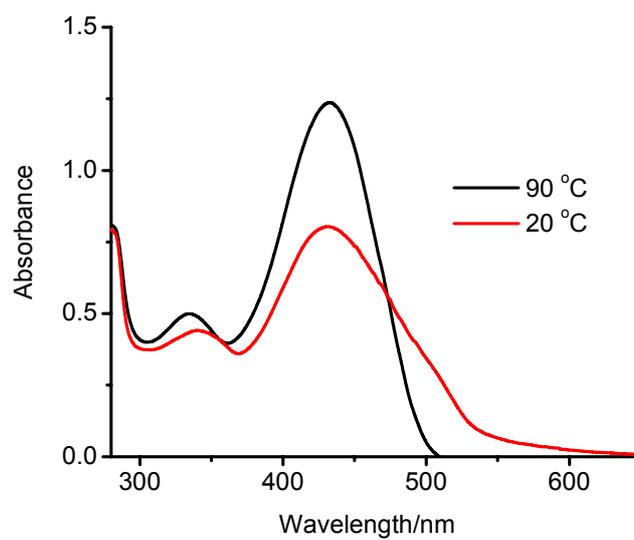


Fig S1. Absorption spectra of **A-OPV4UT** (2×10^{-4} M) in R-citronellol at molecularly dissolved state (90 °C) and at the self-assembled state (20 °C).

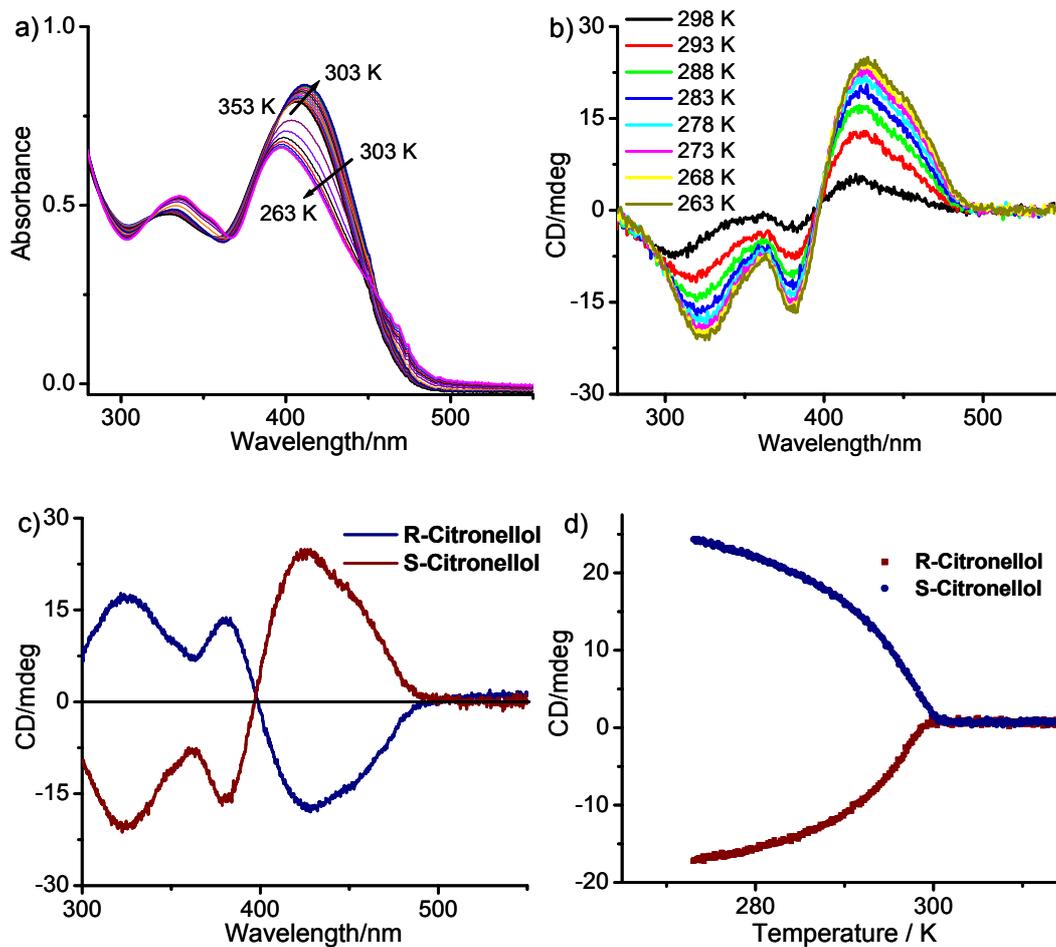


Fig S2. Temperature dependent a) absorption and b) CD spectra of **A-OPV3UT** in R-citronellol at an interval of 5 K when cooled from 353 K to 263 K. c) Mirror image CD spectra and d) cooling curves of **A-OPV3UT** in enantiomeric citronellol chiral solvents. The cooling curves are obtained by monitoring the CD intensity at 420 nm (2×10^{-4} M, $dT/dt = -60$ K/hr). The difference in CD intensity could be due to the difference in enantiomeric excess (ee); ee of R-citronellol is 98% and that of S-citronellol is > 99%.

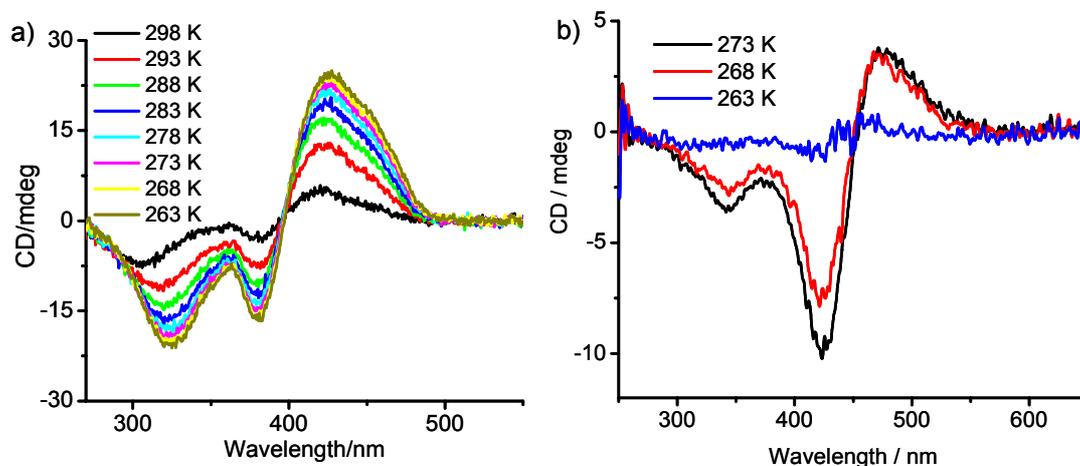


Fig. S3 Temperature dependent CD spectra of a) **A-OPV3UT** and b) **A-OPV4T** in *S*-citronellol at an interval of 5 K when cooled from molecularly dissolved state (2×10^{-4} M, $dT/dt = -60$ K/hr).

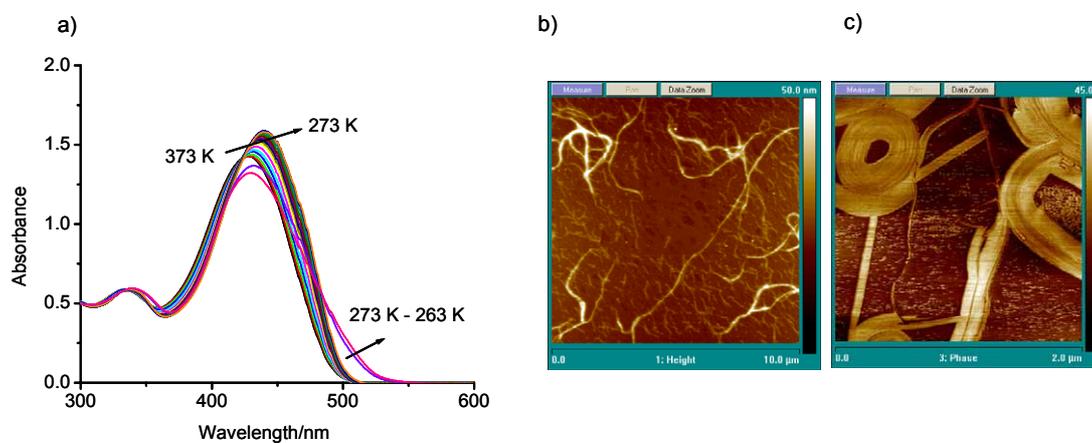


Fig S4. (a) Temperature dependent absorption spectra of **A-OPV4T** (2×10^{-4} M) in *S*-citronellol; (b) and (c) AFM images of the self-assembled fibers of **A-OPV4T** from *S*-citronellol.

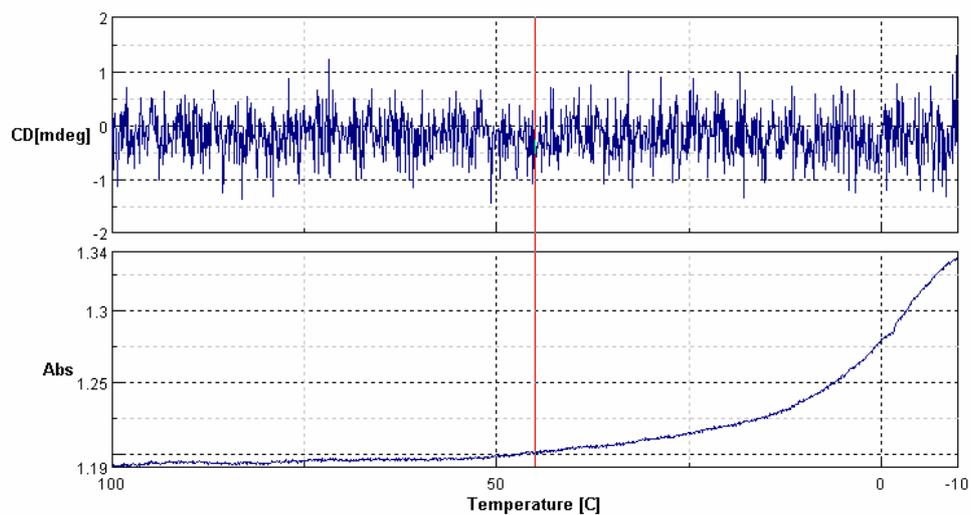


Fig S5. CD (top) and absorption (bottom) cooling curves of **AOPV4T** in S-2,6-dimethyl octane. The cooling curves are obtained by monitoring the CD intensity at 470 nm (2×10^{-4} M, $dT/dt = -60$ K/hr).