Electronic Supplementary Information

Electronic Circular Dichroism Imaging (CD*i*) Maps Local Aggregation Modes of Chiral Oligothiophenes

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Supplementary Figures

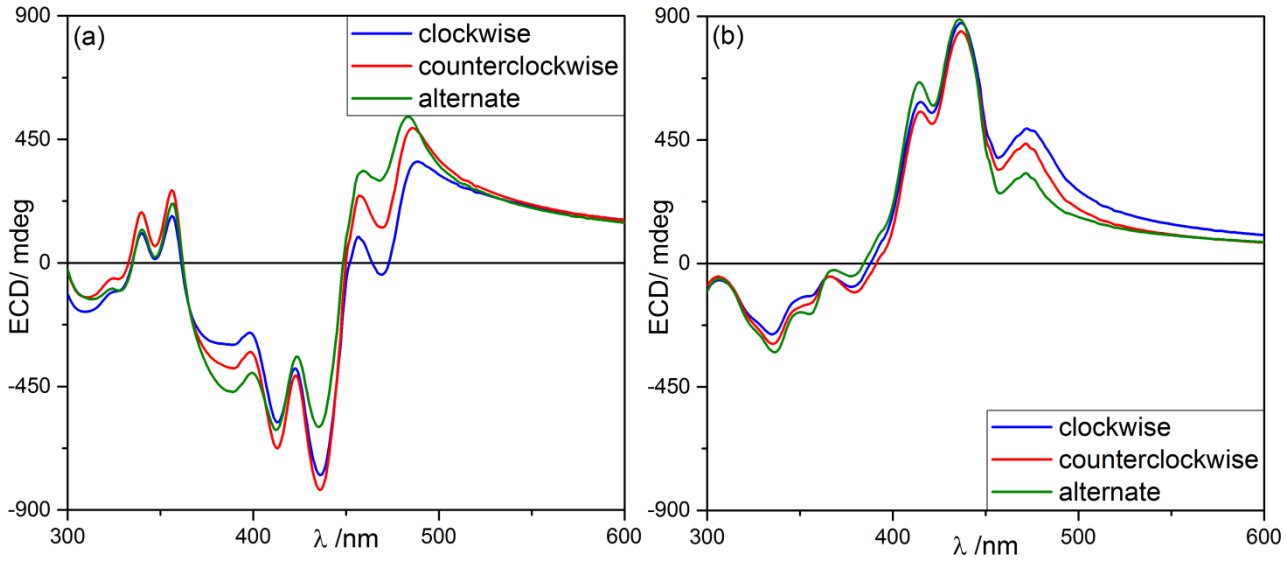

Figure S1. ECD spectra (normalized with respect to maximum absorbance (λ = 433 nm) recorded for the front side (a) and back side (b) of **SC-1** samples prepared with different spinning directions: clockwise (blue lines), counter-clockwise (red lines) and their alternation with cycles of 1 second (green lines).

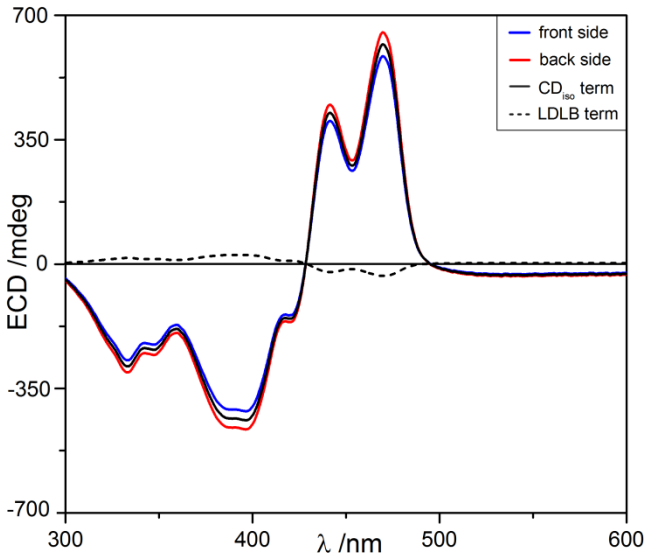

Figure S2. ECD spectra (normalized with respect to maximum absorbance (λ = 433 nm) recorded for the front side (blue line) and back side (red line) of **DC-1** samples prepared by drop casting of a $1.0 \cdot 10^{-3}$ M solution of **1** in $CHCl_3$. Black continuous line is the front-back ECD spectra semi-sum (CD_{iso} term); black dashed line is the front-back ECD spectra semi-difference (LDLB term).

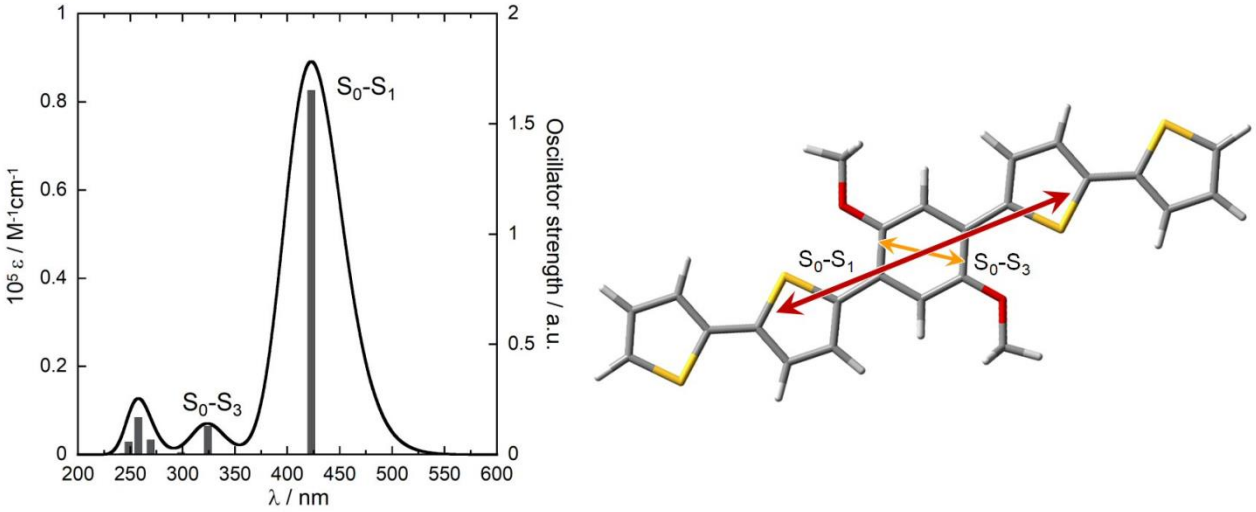

Figure S3. TDDFT-calculated UV spectrum for the model shown (alkyl chains in **1** replaced by methyl groups) and polarization of the main transitions. Level of calculation: CAM-B3LYP/def2-TZVP//ωB97X-D/6-31+G(d) in vacuo. The geometry shown corresponds to the lowest-energy minimum with *cis* arrangement between the phenyl and thienyl moieties; the *trans* isomer was slightly less stable (+0.15 kcal/mol) but the relative position and intensity of the two relevant transitions was consistent with the *cis* isomer. Calculations run with Gaussian16 (Rev. A.03, Gaussian, Inc., Wallingford CT, 2016).

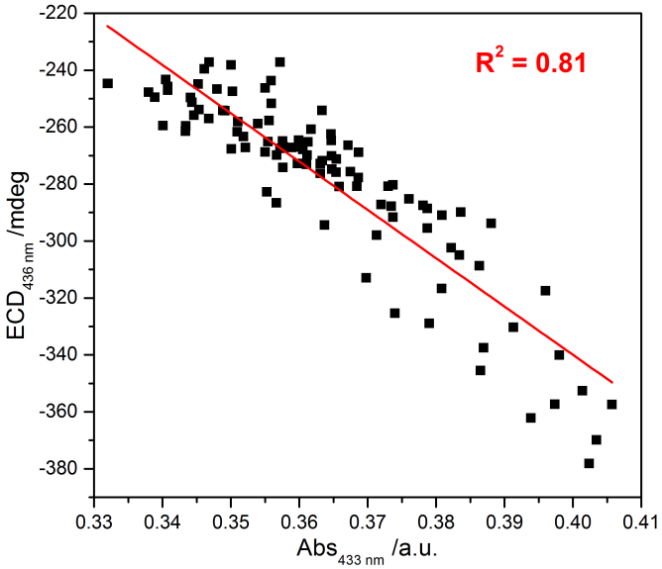

Figure S4. Linear correlation plot between CD*i* at 436 nm and UV*i* at 433 nm recorded for the 100 spots of a 10×10 grid array with 0.5 mm step size of sample **SC-1**. R^2 = 0.81074.

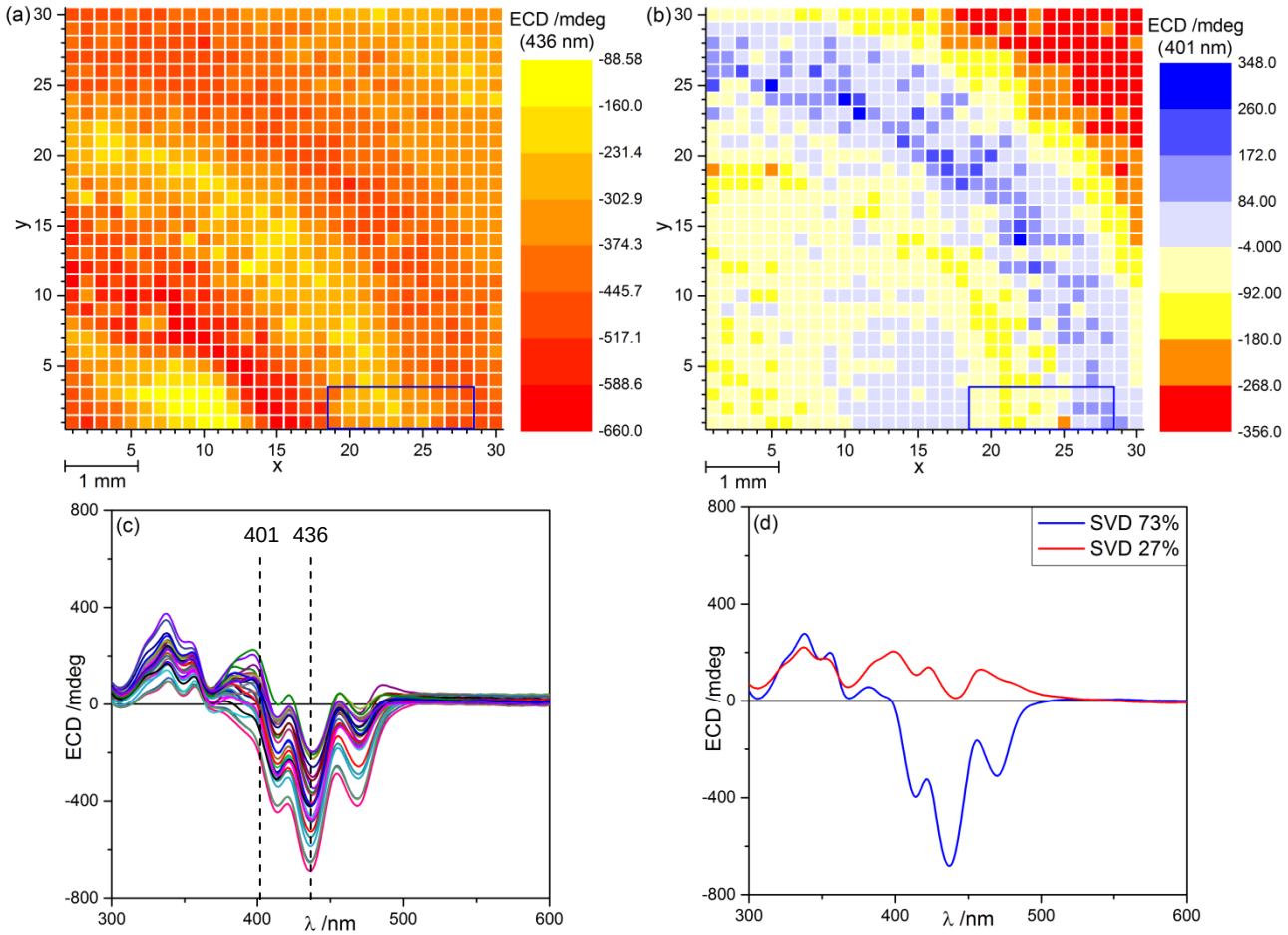

Figure S5. Investigation of the front side of **SC-1** by CD*i* technique on a thinner film region, performed by mapping a 30×30 grid array area of 0.2 mm step size with a beam diameter of 0.2 mm. 2D colour maps of: (a) ECD intensity at 436 nm *vs.* x-y (red/yellow hues); (b) ECD intensity at 401 nm *vs.* x-y (red/yellow/blue hues). (c) Local ECD spectra recorded for the 30 spots of the highlighted 10×3 area (blue box in **Figures S4a** and **S4b**). (d) Principal SVD (single value decomposition) spectral components extracted from the local ECD spectra of **Figure S4c**.