Supplementary Information for

Confocal Microsopic Investigation of a Single Squaraine Dye Aggregate

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Figure S1. Surface profile of the aggregates as measured by profilometry.



Figure S2. (a) Height and (b) phase AFM images of the VG1-C8 film. The calculated mean-square-roughness is 1.4 nm.

a



Figure S3. PL spectra taken at the three different regions namely, film, aggregated-border and centre, alongside the Gaussian fittings. We can see that, whereas the PL spectra coming from the film and border are in-fact a convolution of both monomeric and aggregate emission, the PL taken at the centre of the aggregate can be fitted effectively with one Gaussian (plus a broad background contribution).



Figure S4. PL time-decay profiles for the VG1-C₈ and aggregate. The time-constants for the aggregate are τ_1 = 39.1 ± 0.6 ps (A₁ = 95%) and τ_1 = 1.5 ± 0.2 ns (A₂ = 5%), and for the film are τ_1 = 38.2 ± 2 ps (A₁ = 62%) and τ_1 = 1.6 ± 1 ns (A₂ = 38%).