Supporting Information for:

# Hydrogen-bonding Driven Luminescent Assembly and Efficient Förster Resonance Energy Transfer (FRET) in Dialkoxynaphthalene-Based Organogel

Dipankar Basak, Anindita Das and Suhrit Ghosh*

Indian Association for the Cultivation of Science, Polymer Science Unit
2A & 2B Raja S. C. Mullick Road, Kolkata, India-700032
*Corresponding author Email: psusg2@iacs.res.in

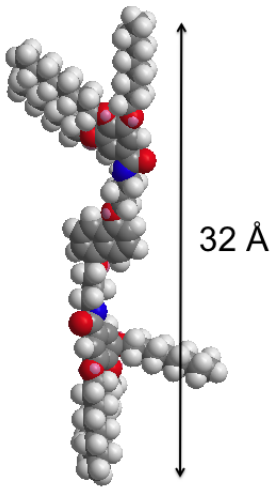


**Fig. S1**: Energy minimized structure of **DAN-1** obtained by molecular modeling using Chem 3D-ultra 8 using MM2 for energy minimization

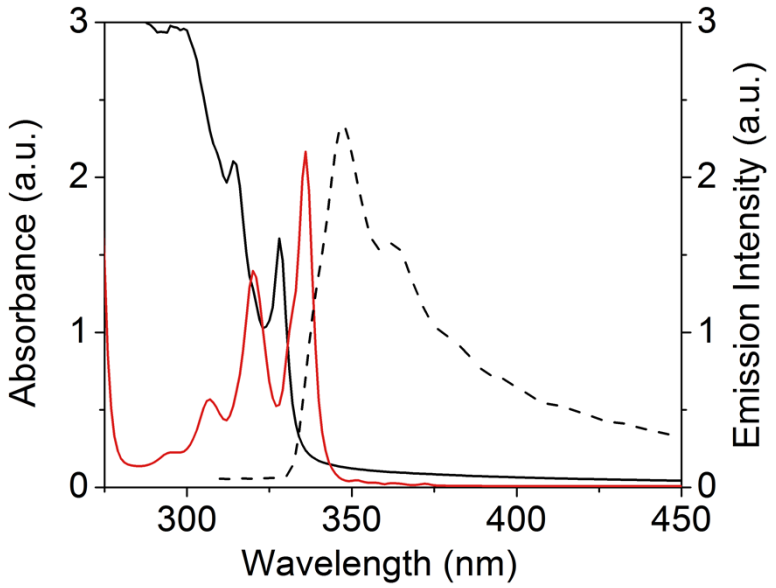


**Fig. S2:** Absorption (black solid line) and emission spectra (black dotted line) of **DAN-1** gel (in MCH, 2.0 mM) and absorption spectra (red solid line) of pyrene in MCH ($2.0 \times 10^{-4}$ M)

**Table S1:** Fluorescence lifetime data for **DAN-1** in (a) gel state (in MCH, 2 mM) and (b) sol State (in THF, 2 mM) $\lambda_{ex}$ = 295 nm, emission was monitored at 346 nm

| Sample | Component Lifetimes (ns)[a] | | |
|---|---|---|---|
| | $\tau_1$ | $\tau_2$ | $\tau_{avg}$ |
| a) Gel | 3.09 (48 %) | 6.07 (52%) | 5.11 |
| b) Sol | 7.2 (100%) | | 7.2 |

[a]Values in parenthesis shows the decay contribution in each life times. Average life time (in the gel state) was calculated using the following equation[1]: $\tau_{avg} = (a_1\tau_1^2 + a_2\tau_2^2)/(a_1\tau_1 + a_2\tau_2)$

Reference

1. Lakowicz JR (1999) Principles of Fluorescence Spectroscopy (2nd ed.). Kluwer Academic/Plenum Publishers, New York.