Supporting information

A_3-type Star Stilbene and Cyanostilbene molecules: Synthesis, Fluorescent properties and bio-imaging application

A. Gopinath[1], K. Ramamurthy[2], Mamangam Subaraja[3], Chellappan Selvaraju[*2], A. Sultan Nasar [*1]

[1]Department of Polymer Science, University of Madras, Guindy Campus, Chennai 25, India

[2]National Centre for Ultrafast Processes, University of Madras, Chennai- 600 113, India

[3]Department of Biochemistry, University of Madras, Guindy Campus, Chennai 25, India

* Corresponding authors: drasultannasar@unom.ac.in and selvaraj24@hotmail.com

NMR Spectrum

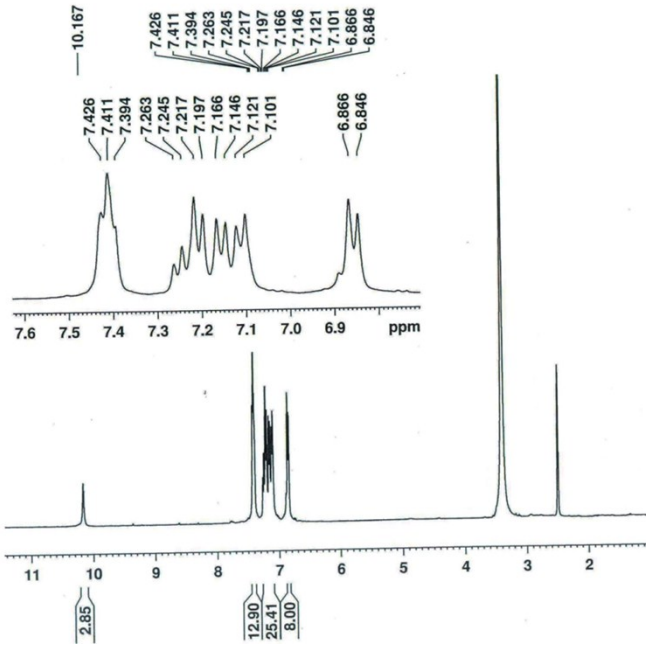

Figure S1. ^{1}H NMR (300 MHz) spectrum of star stilbene **4** in DMSO-d_6.

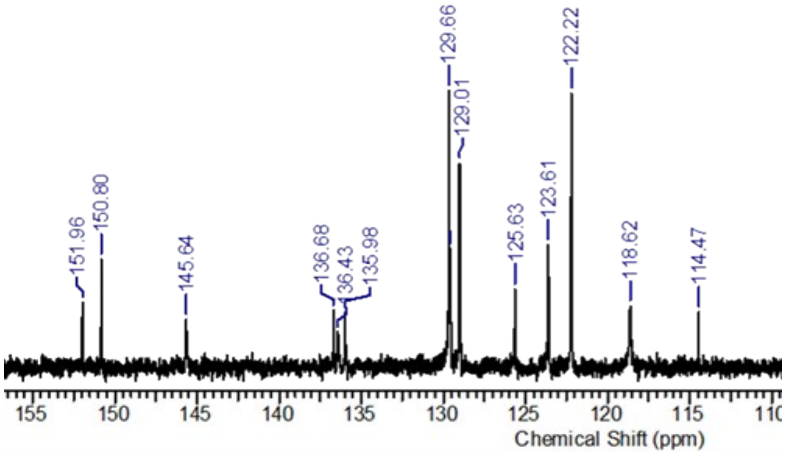

Figure S2. ^{13}C NMR (75 MHz) spectrum of star stilbene **4** in DMSO-d_6.

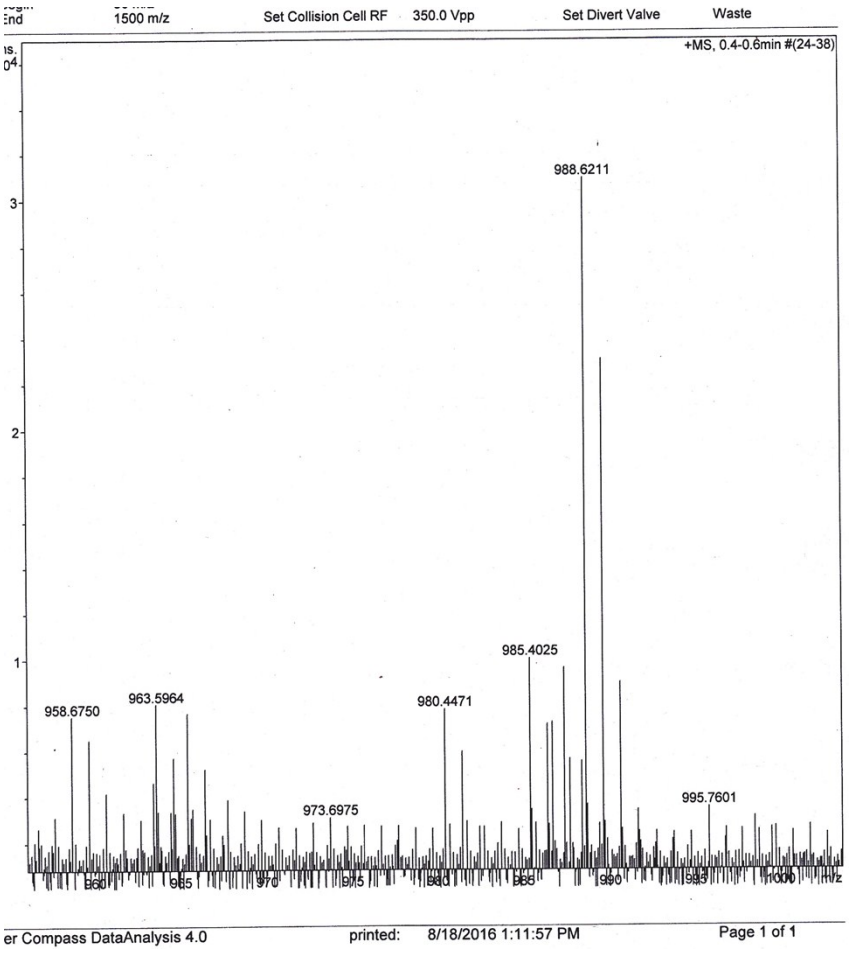

Figure S3. HR-Mass spectrum of star stilbene **4**.
Calcd: $[M]^+$ m/z = 956.3574.
Found: HR-MS 995.7601 [M + K]

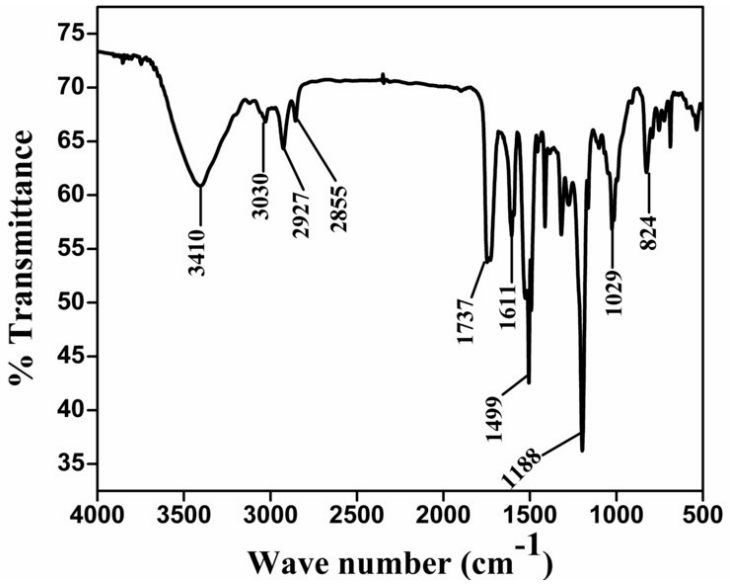

Figure S4. FT-IR spectrum of star stilbene **4**.

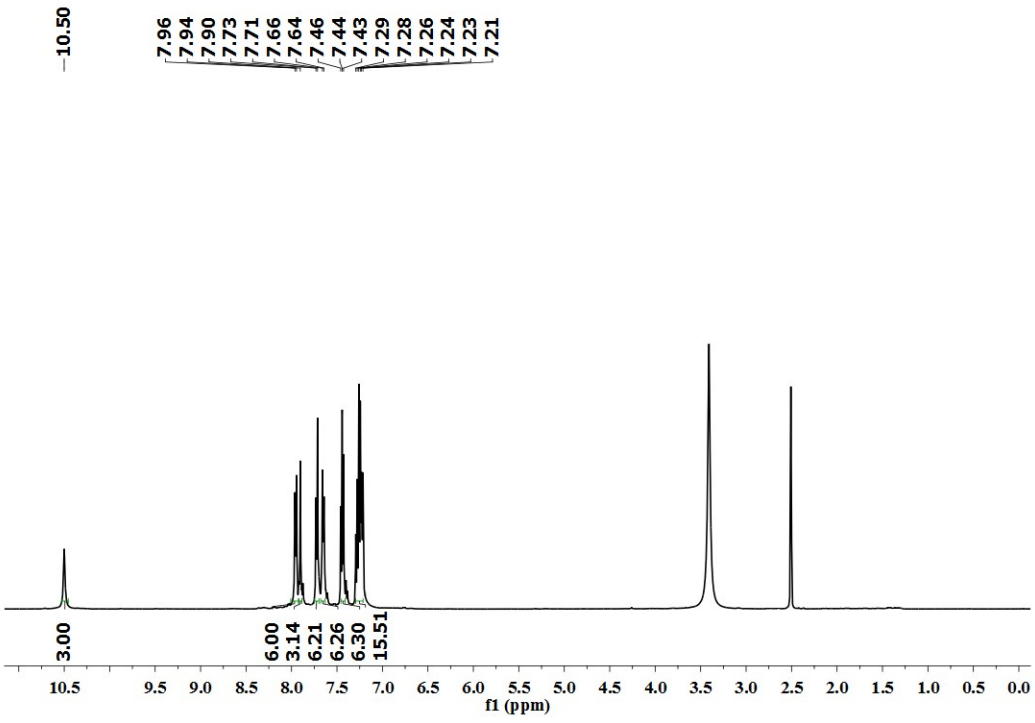

Figure S5. ^{1}H NMR (300 MHz) spectrum of star α-cyanostilbene **8** in DMSO-d_6.

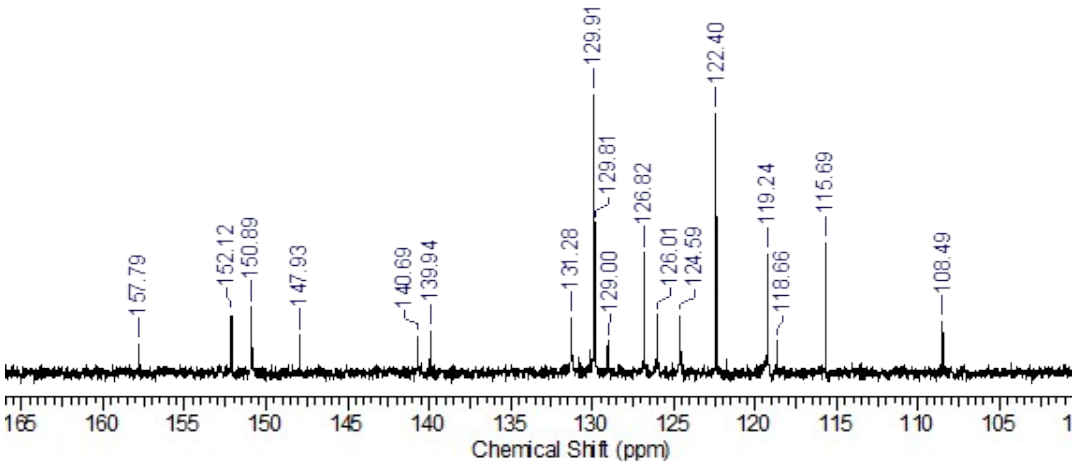

Figure S6. ^{13}C NMR (75 MHz) spectrum of star α-cyanostilbene **8** in DMSO-d_6.

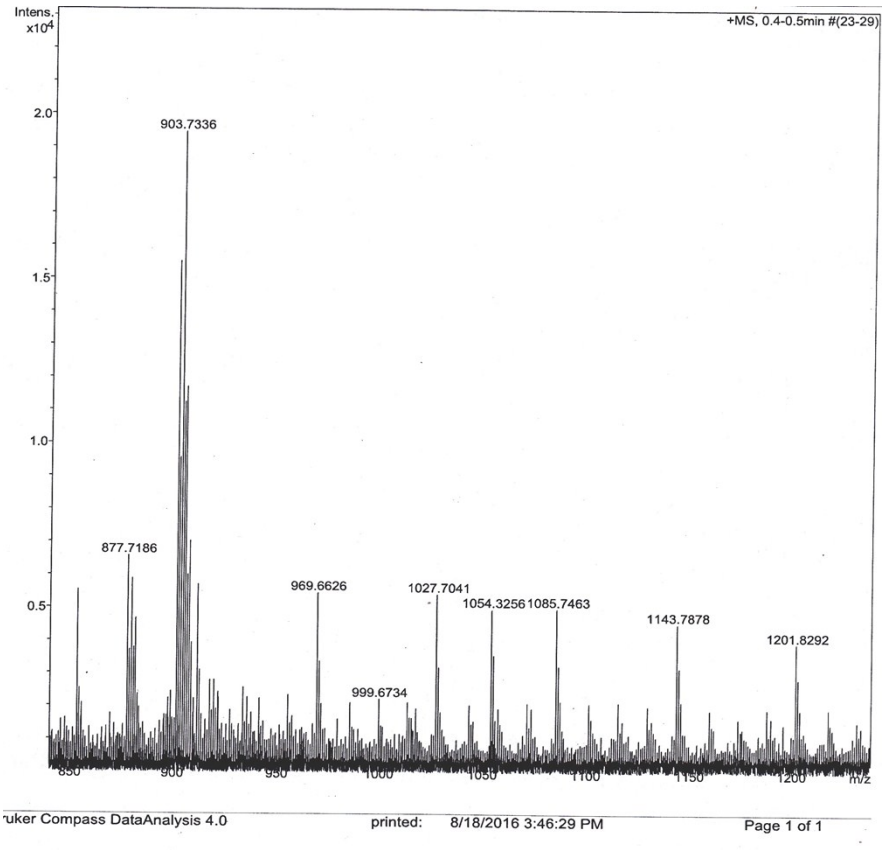

Figure S7. HR-Mass spectrum of star α-cyanostilbene **8**.

Calcd: $[M]^+$ m/z = 1031.3431.

Found: HR-MS 1054.3251 [M + Na]

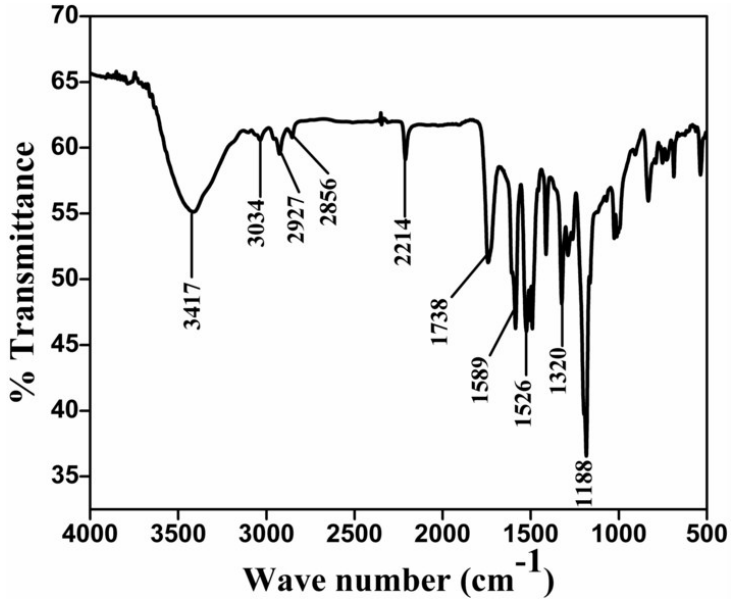

Figure S8. FT-IR spectrum of star α-cyanostilbene **8**.

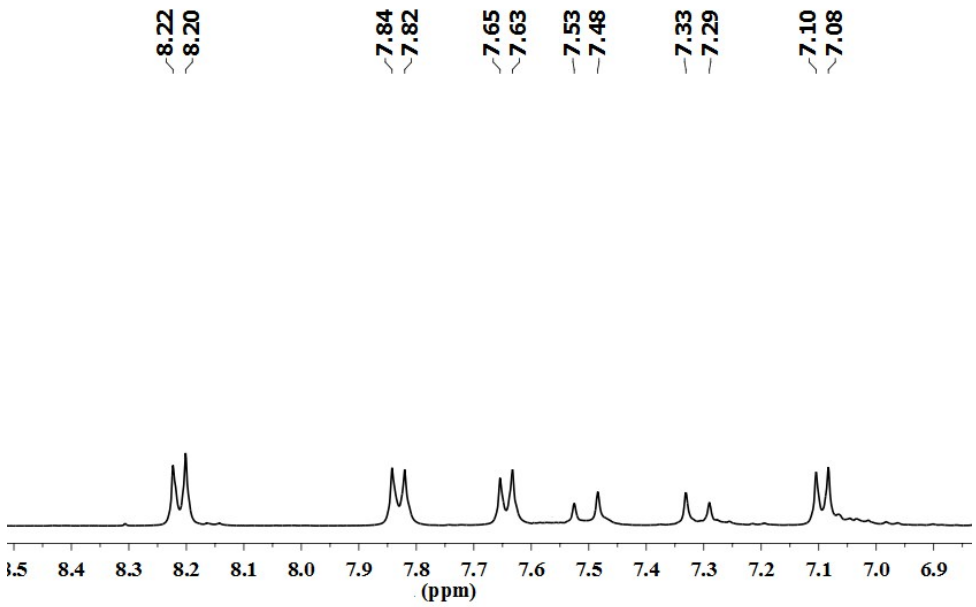

Figure S9. ^{1}H NMR (300 MHz) spectrum of compound **3** in DMSO-d_6.

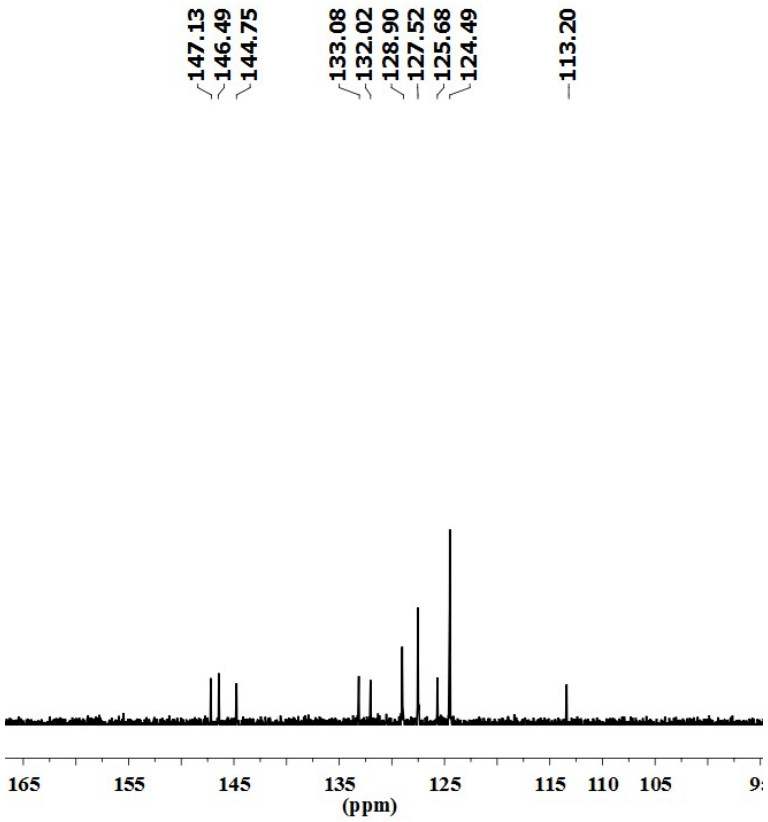

Figure S10. ^{13}C NMR (75 MHz) spectrum of compound **3** in DMSO-d_6.

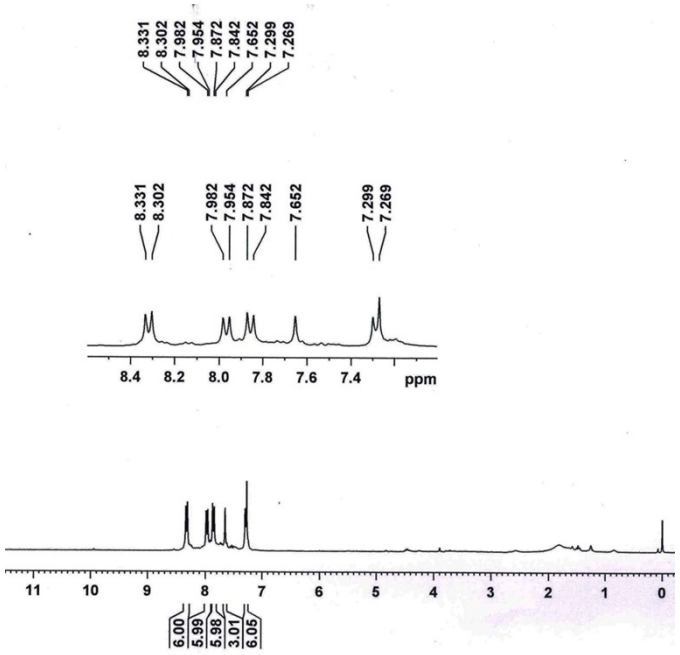

Figure S11. ^{1}H NMR (300 MHz) spectrum of compound **6** in $CDCl_3$.

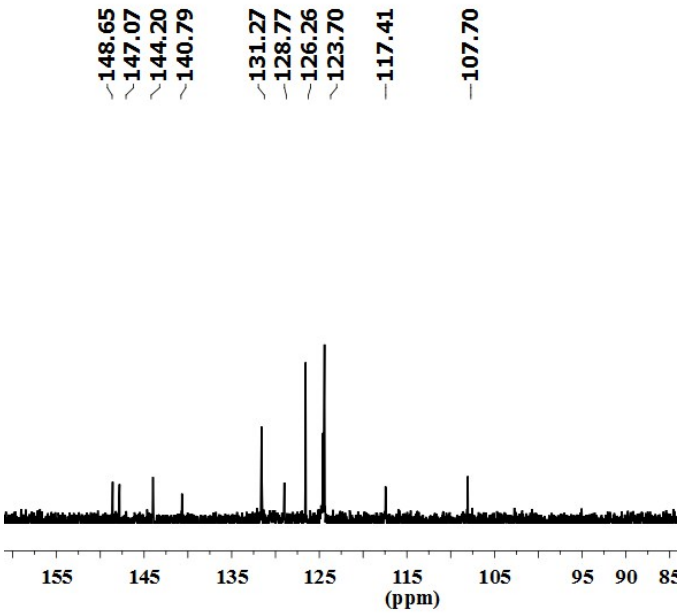

Figure S12. ^{13}C NMR (75 MHz) spectrum of compound **6** in $CDCl_3$.

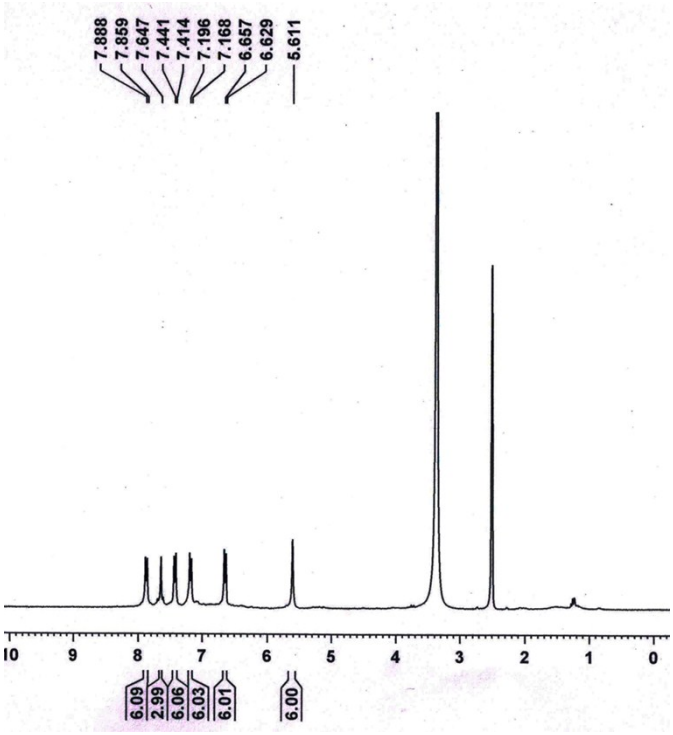

Figure S13. ^{1}H NMR (300 MHz) spectrum of compound **7** in DMSO-d_6.

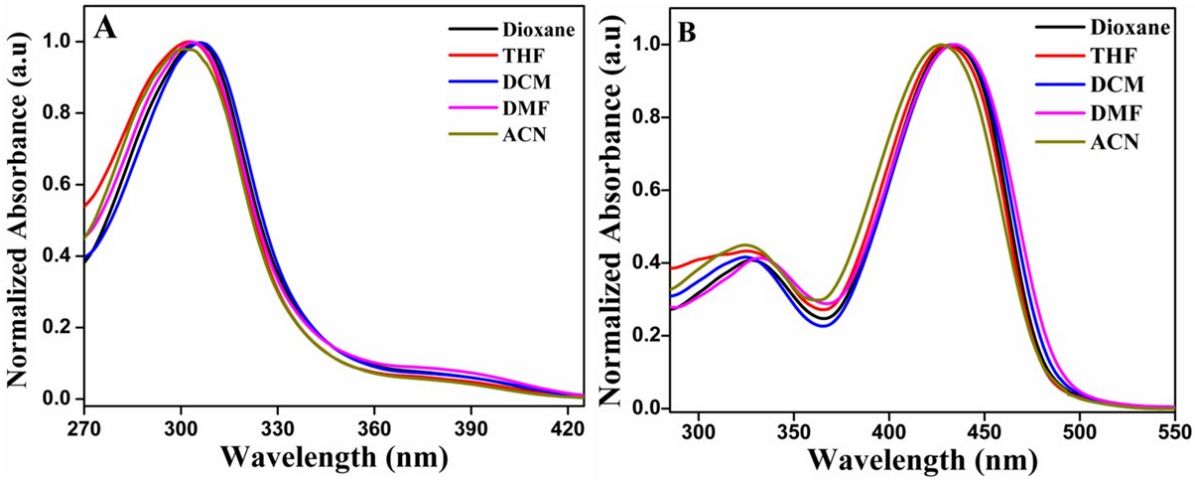

Figure S14. Absorption spectra of star stilbene [A] and star α-cyanostilbene [B] molecules recorded in deferent solvents.

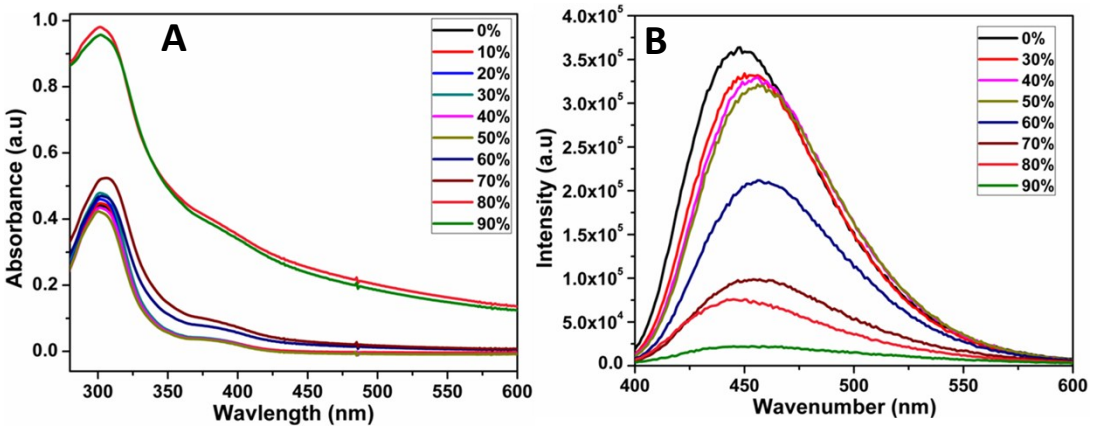

Figure S15. Absorption [A] and Fluorescence [B] spectra of star stilbene in THF and THF/water mixtures. Water content was increased from 0% to 90%.

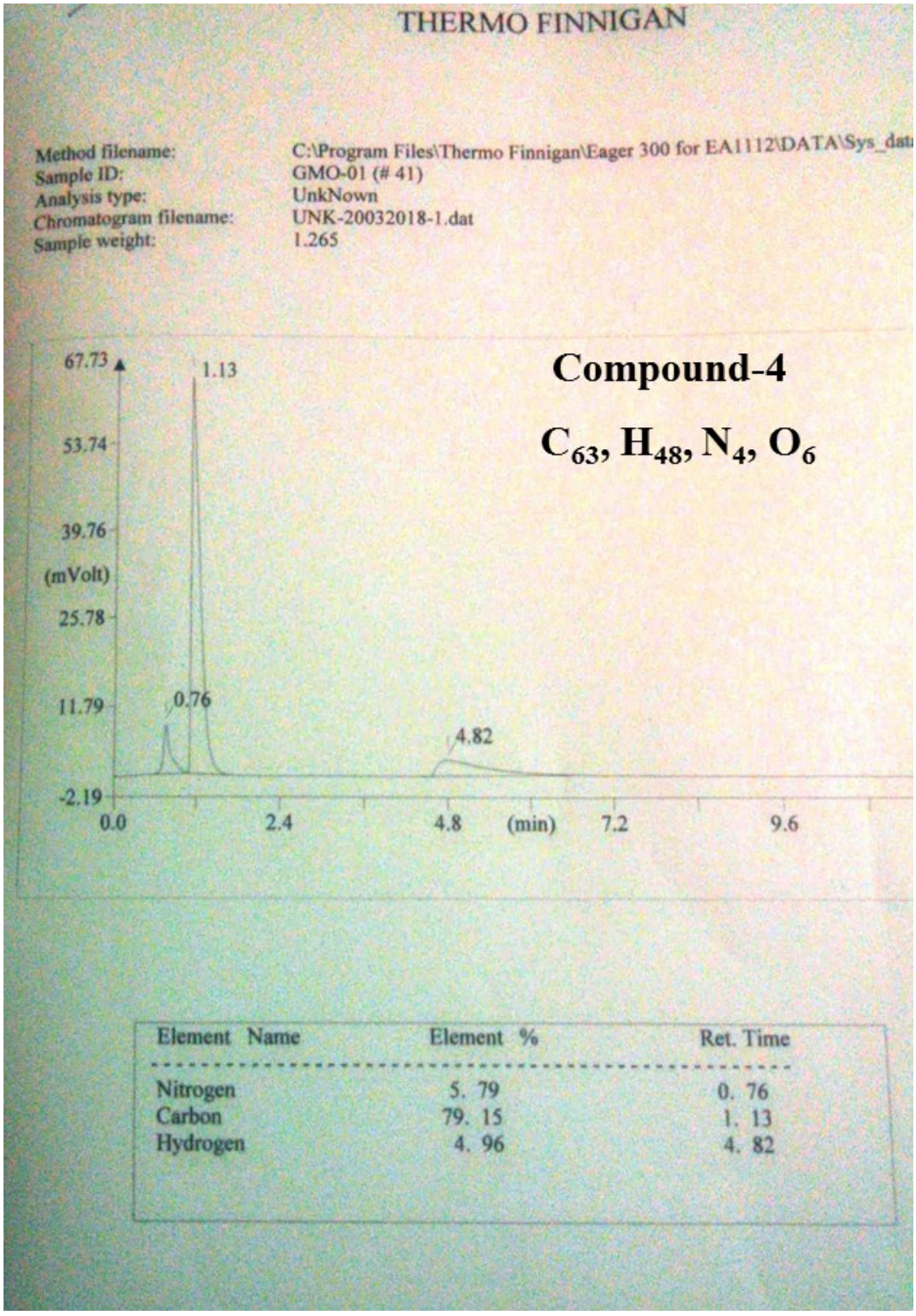

Figure S16. Elemental analysis report of compound 4.

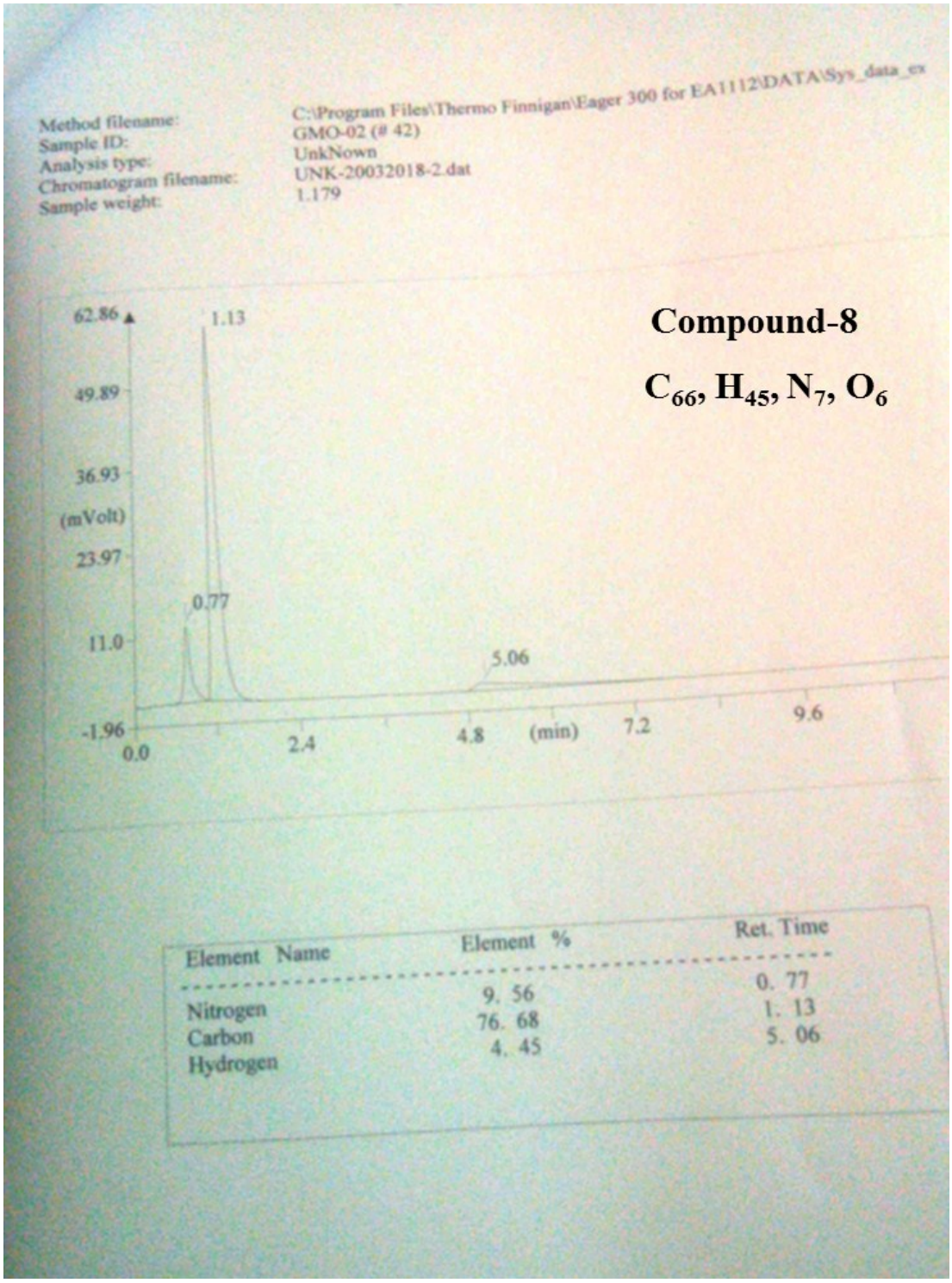

Figure S17. Elemental analysis report of compound 8.