

Supplementary Information

Tetraphosphonic acid functionalized perylenediimide derivative: Synthesis and pH dependent photophysical properties

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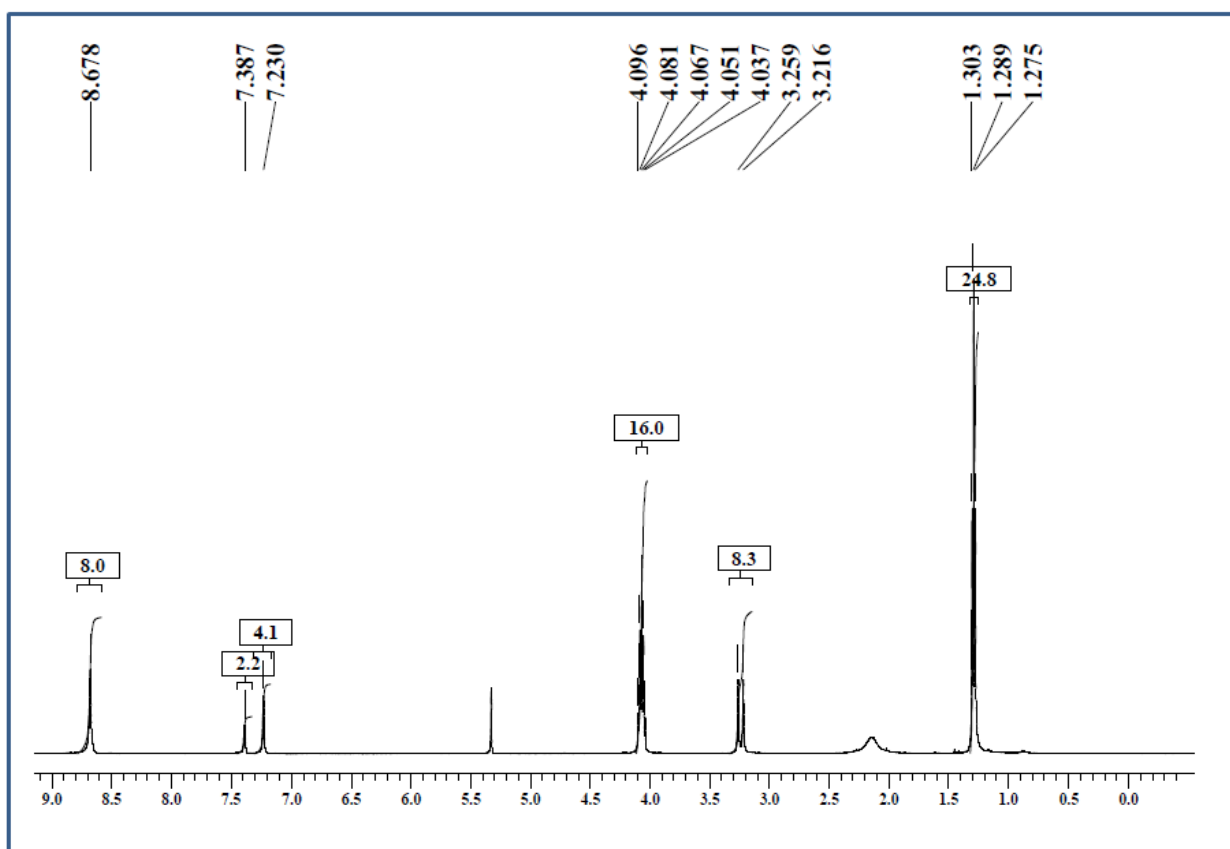


Figure S1-¹H NMR spectra of compound 3.

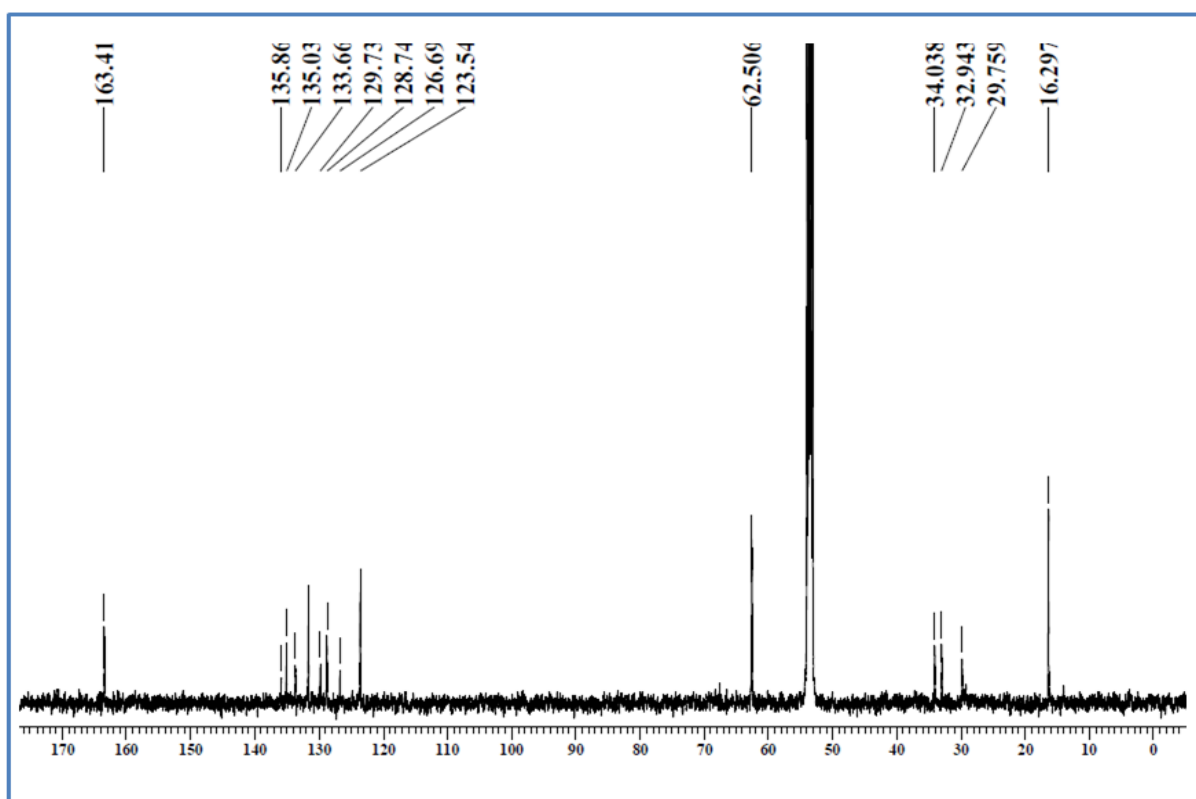


Figure S2 - ^{13}C NMR spectra of compound 3.

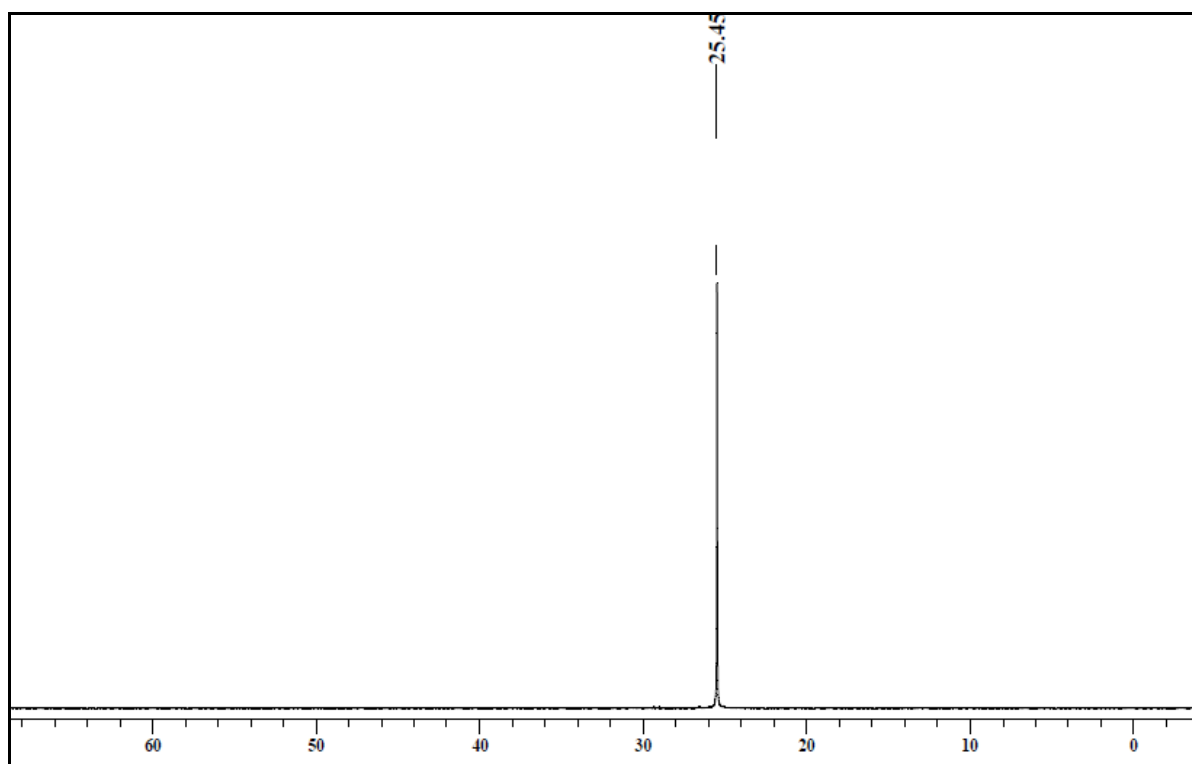


Figure S3 - ^{31}P NMR spectra of compound 3.

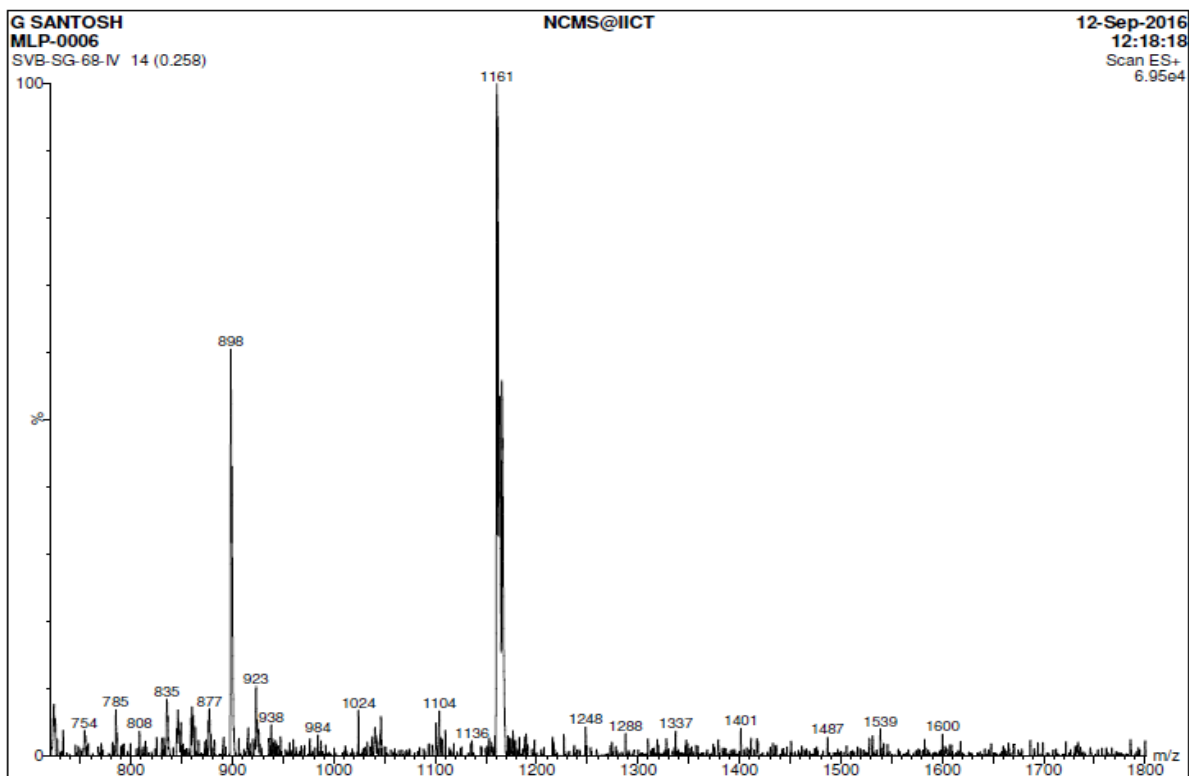


Figure S4 -ESI-Massspectrum of compound 3.

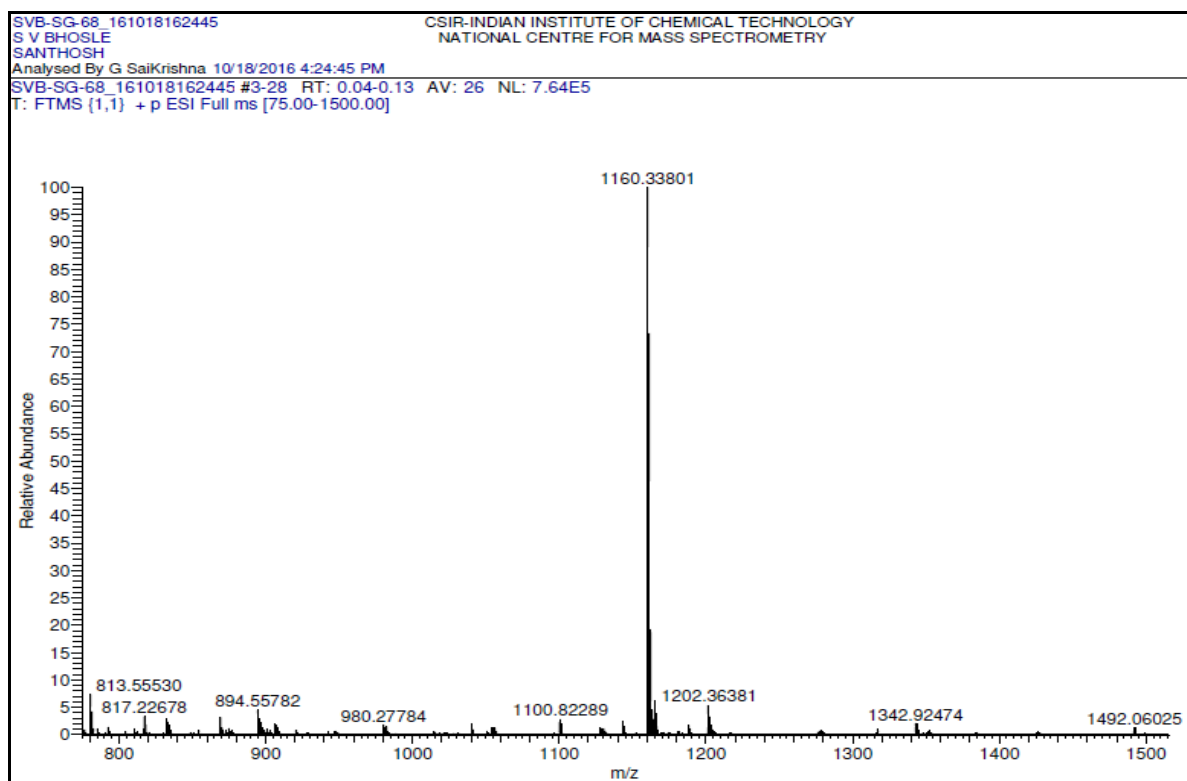


Figure S5 -HRMS spectrum of compound 3.

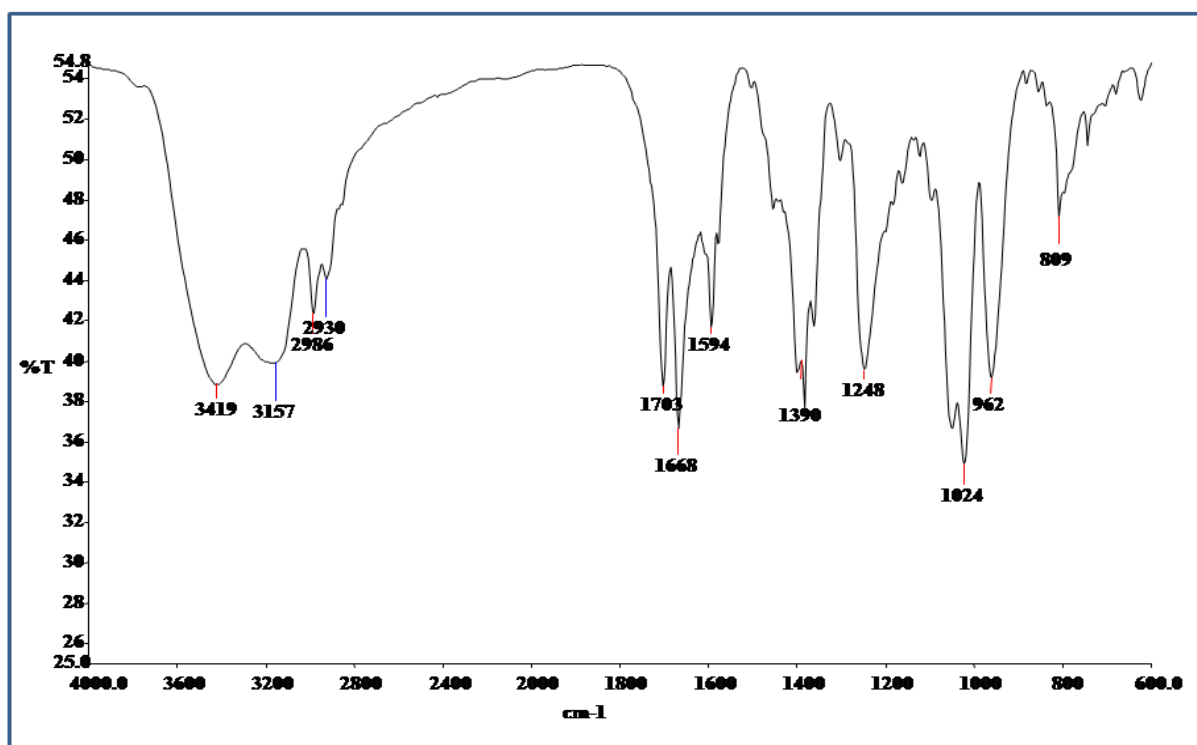


Figure S6- FT-IR spectra of compound 3.

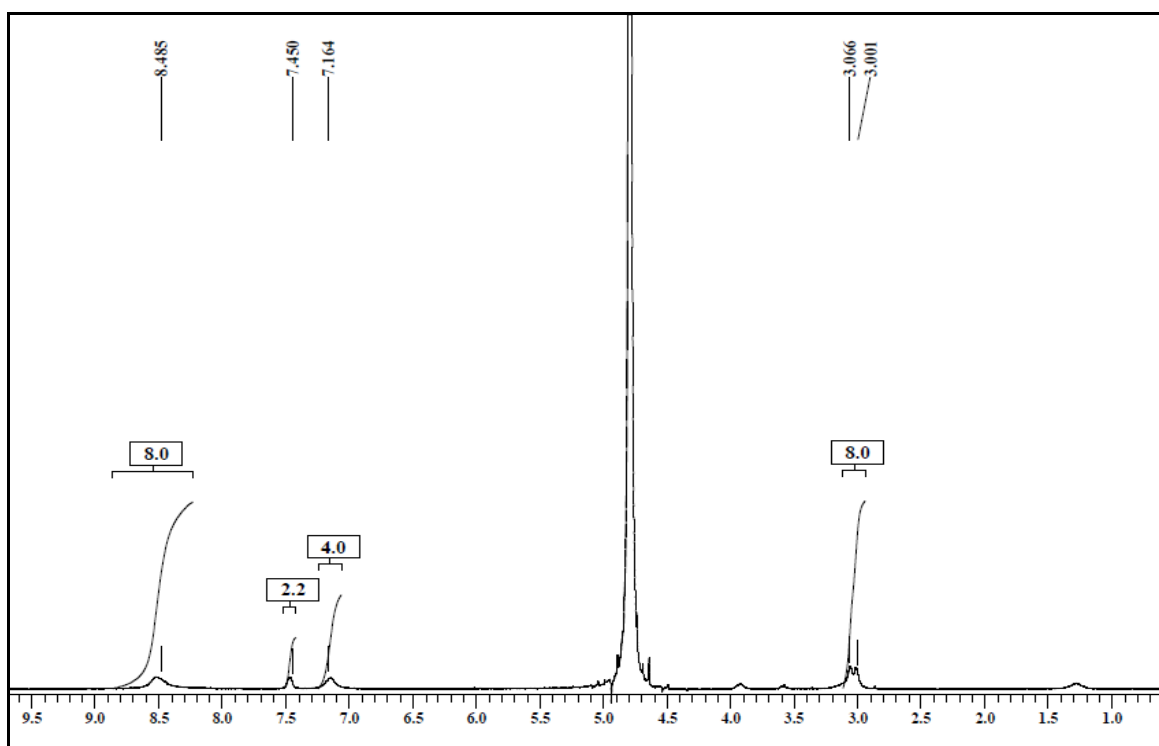


Figure S7 -¹H NMR spectra of compound PDI-TPA.

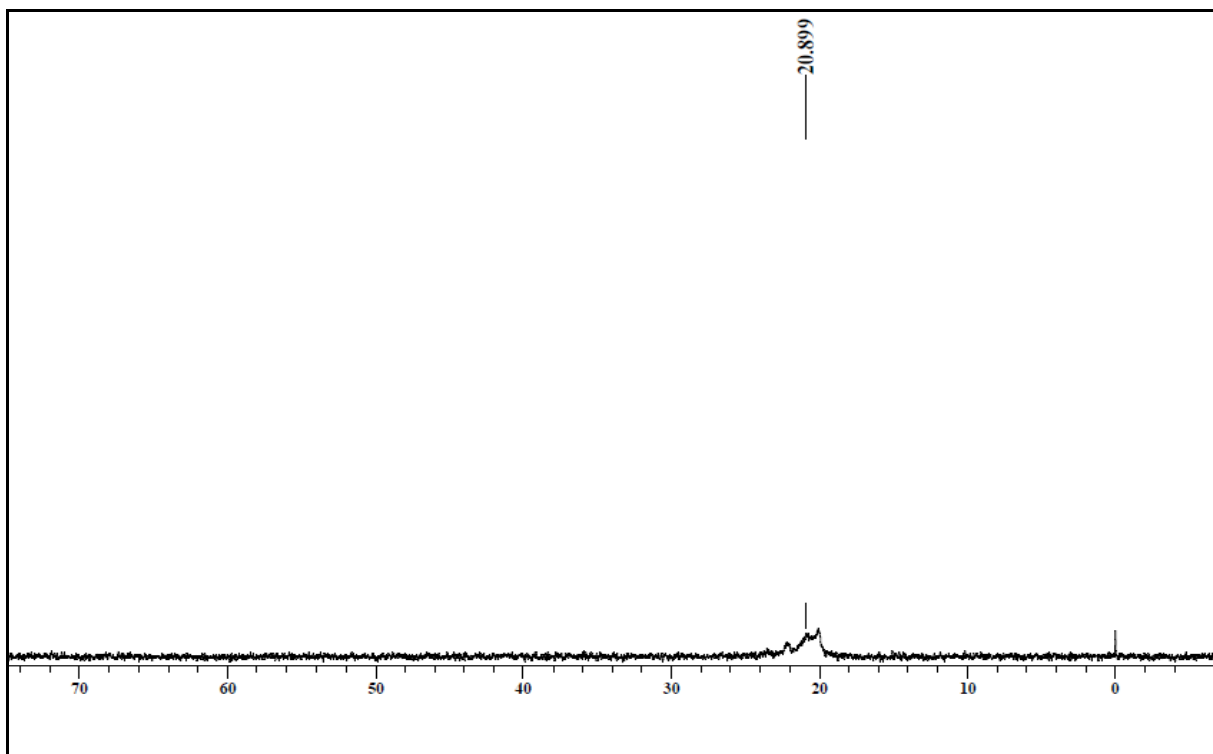


Figure S8 -³¹P NMR spectra of compound **PDI-TPA**.

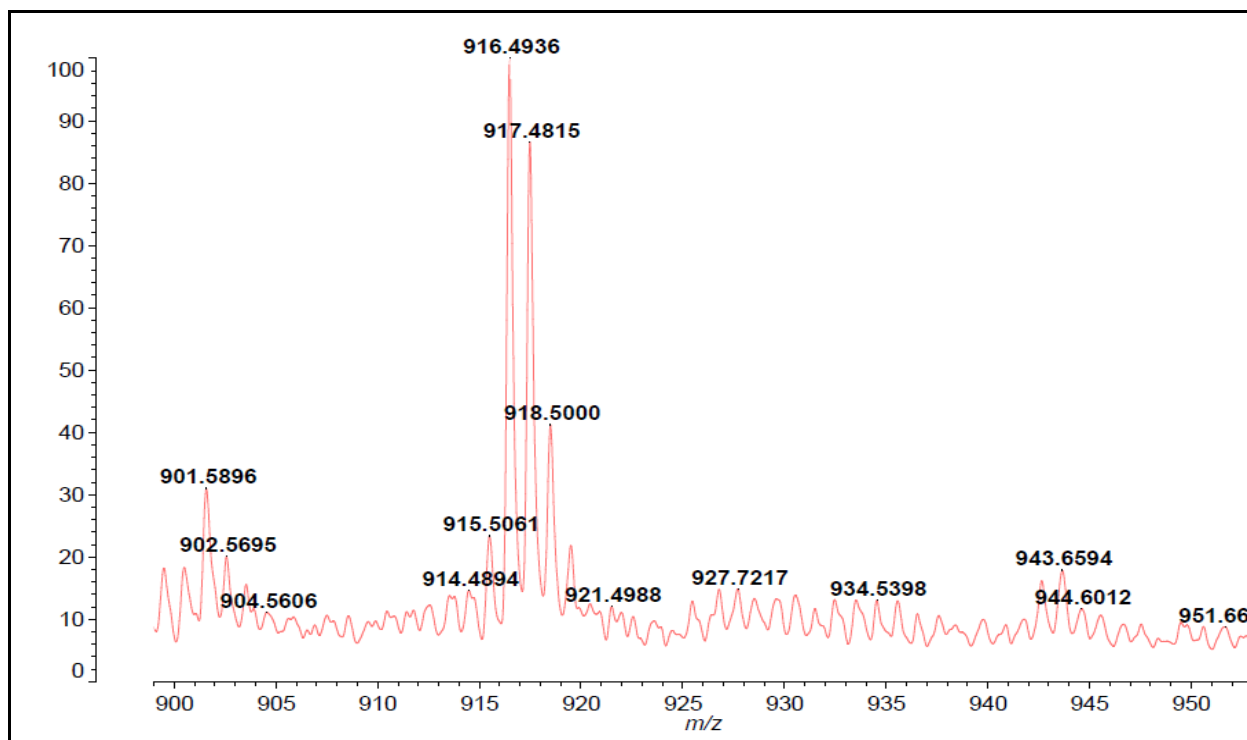


Figure S9 -MALDI-TOF spectrum of compound **PDI-TPA**.

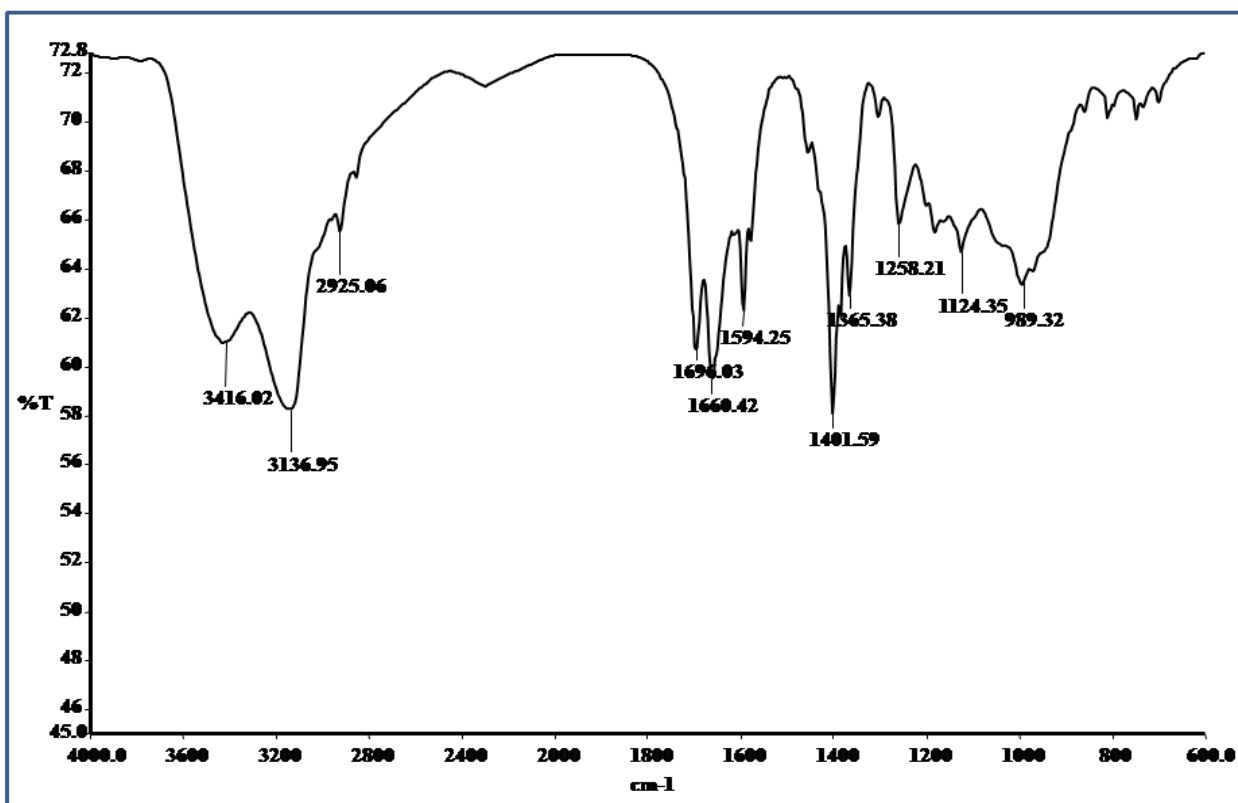


Figure S 10 -FT-IR spectra of compound PDI-TPA.