

Supporting Information (SI)

for

Polynaphthylimide-Azomethines containing Triphenylamine or Carbazole Moieties with Tuned Optoelectronic Properties through Molecular Design

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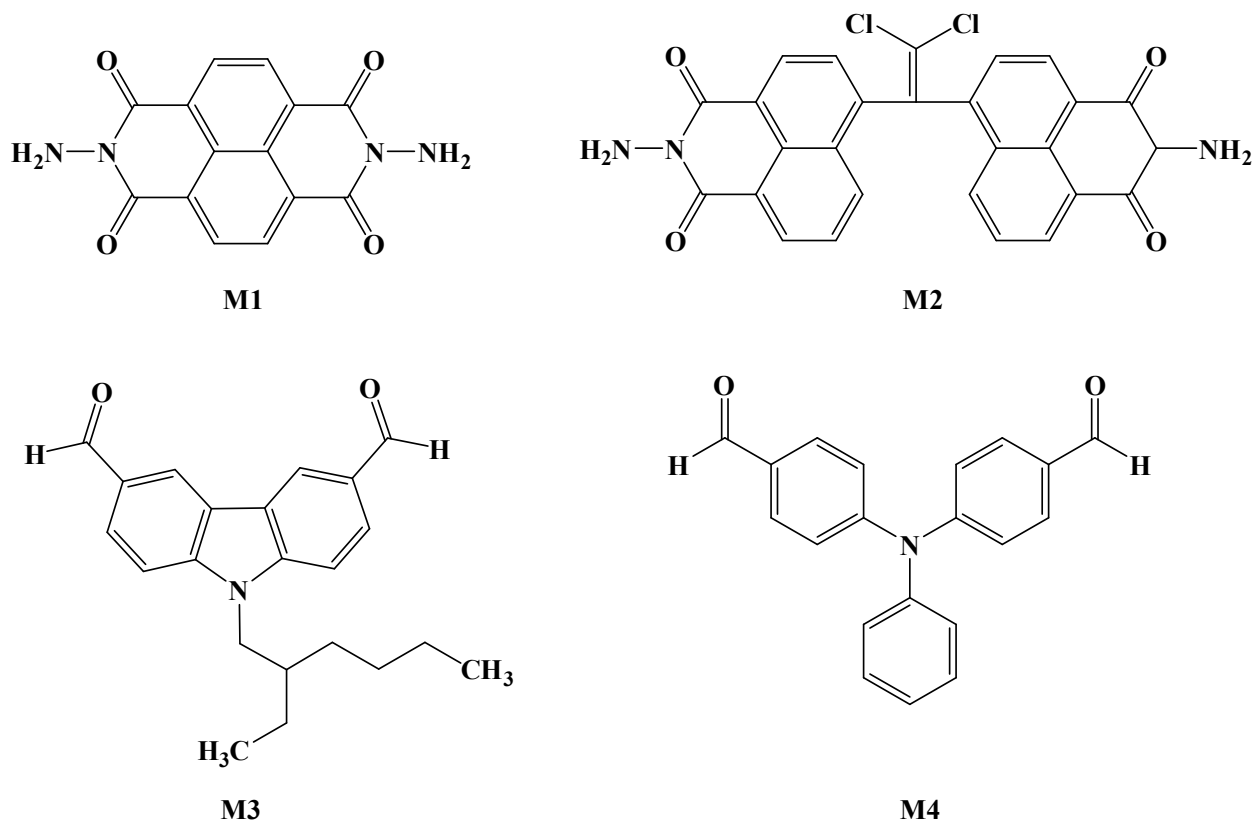
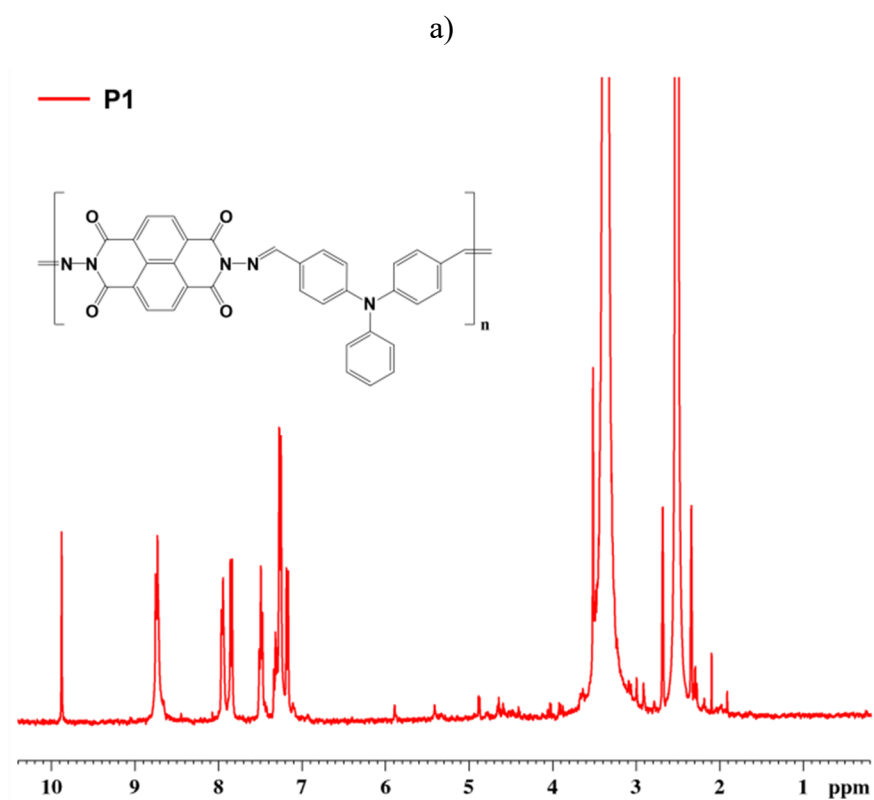
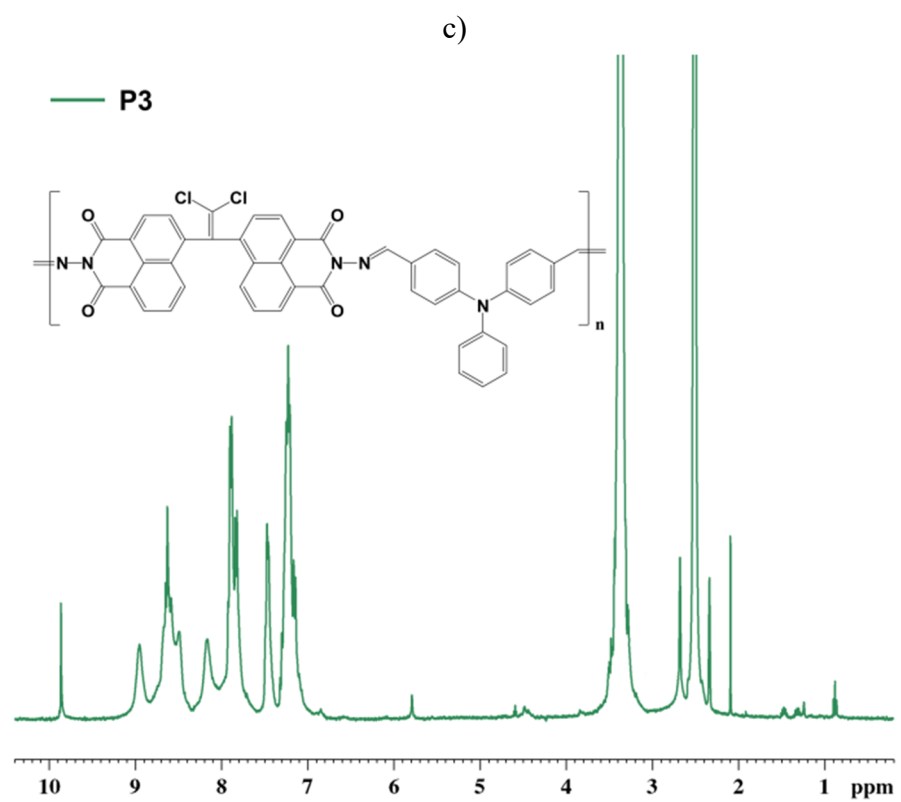
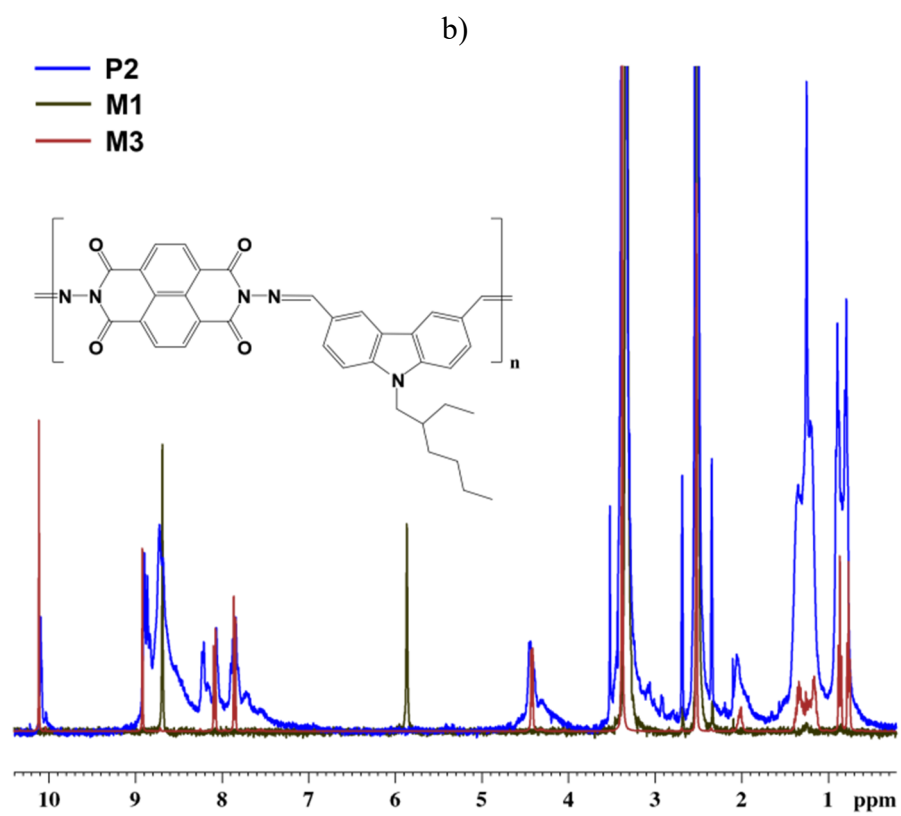


Figure S1. Structures of the monomers (diamines and dialdehyde)





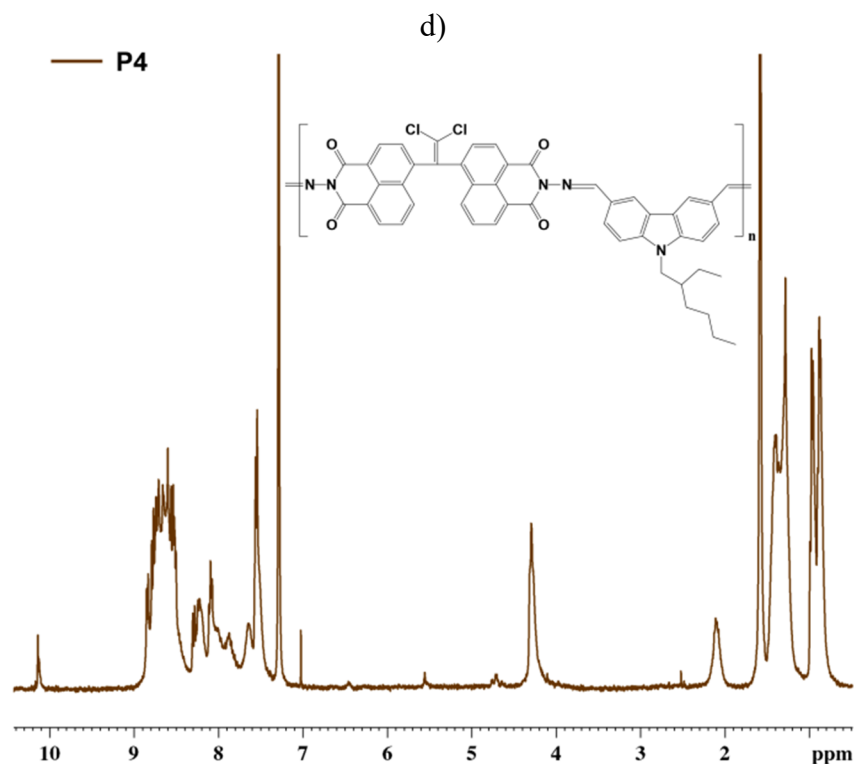


Figure S2. ^1H -NMR spectra of **P1–P3** in $\text{DMSO}-d_6$ and **P4** in CDCl_3

Table S1. Optical data of polyazomethines **P1–P4**

Polymer	Solution				Film	
	λ_{abs} (nm)		λ_{em} (nm)		λ_{abs} (nm)	λ_{em} (nm)
	CHCl_3	DMF	CHCl_3	DMF		
P1	321 ^s , 344 ^s , 363 ^s , 394	291, 321 ^s , 346 ^s , 366 ^s , 389	453	445, 476	320 ^s , 348 ^s , 373 ^s , 399	-
P2	275, 300, 347 ^s , 364, 382	277, 297, 348, 363, 381	415 ^w	409 ^w	273, 301, 351, 366, 387 ^s	-
P3	314 ^s , 334 ^s , 352, 381	292s, 334s, 348s, 375	456, 626 ^w	428 ^s , 480	335s, 354s, 379, 400 ^s	448, 486 ^s , 617
P4	278, 306, 352, 368, 407 ^s , 604 ^w	277, 299, 350, 365	415 ^w , 555	411 ^w , 464	315, 361, 378	561

λ_{abs} - maximum absorption wavelength; λ_{em} - maximum PL emission wavelength; s – wavelength corresponding to the shoulder-like peak; w – weak.

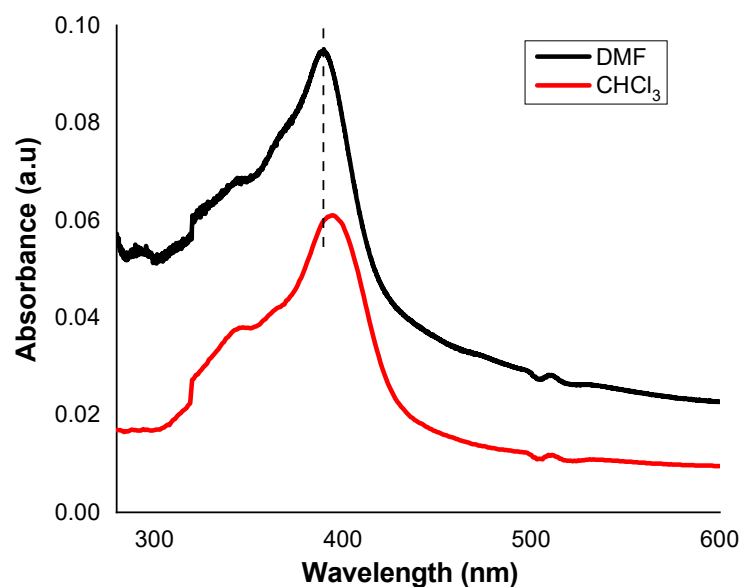


Figure S3. Comparative UV-vis absorption spectra of **P1** in CHCl_3 and DMF solutions

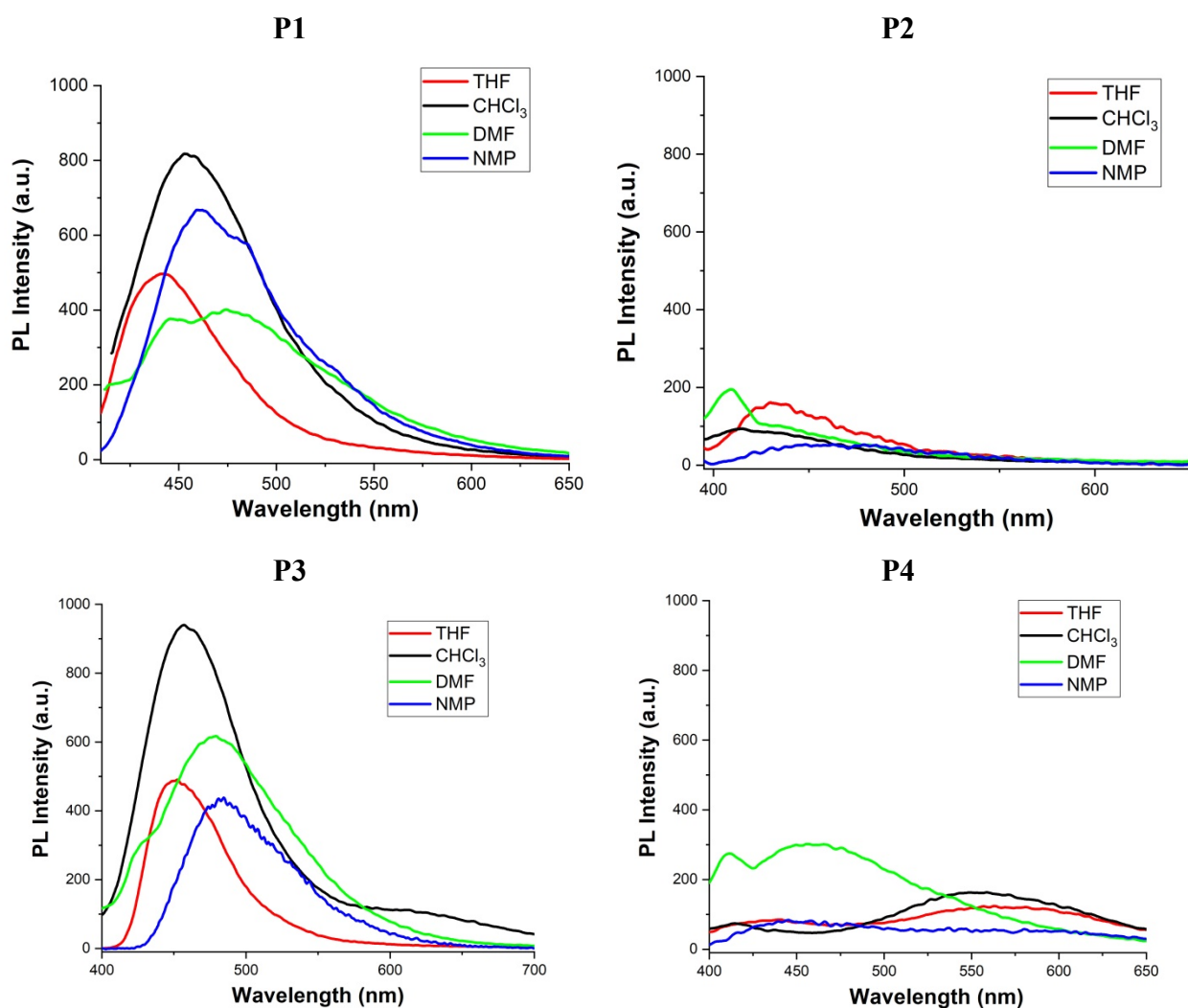


Figure S4. Fluorescence spectra of **P1**—**P4** in solvents of different polarities