Electronic Supplementary Material (ESI) for Journal of Materials Chemistry C

Supporting Information

White-Light Electrofluorescence Switching from Electrochemically Convertible Yellow and Blue Fluorescent Conjugated Polymers

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Figure S1. Fluorescence intensity changes (λ_{exc}= 360 nm) of the EFD of Blend-1.5 at different applied potentials. Each spectrum was obtained after applying the target potential for 30 s to obtain the fluorescence spectra at saturated state. Inset: Photographs are the image of the fluorescence changes of the EFDs at indicated potentials under UV excitation (365 nm).

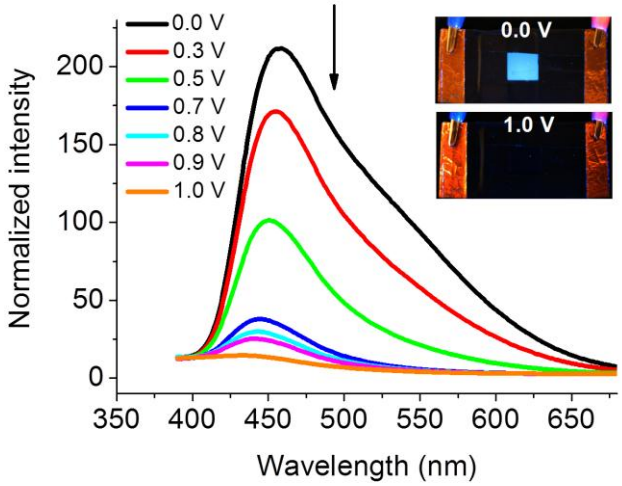


Figure S2. GPC of **P0** and **P1**.

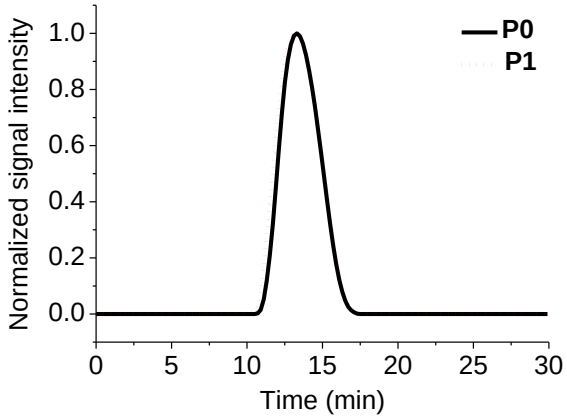


Figure S3. (a) TGA and (b) DSC thermograms of **P0** and **P1**.

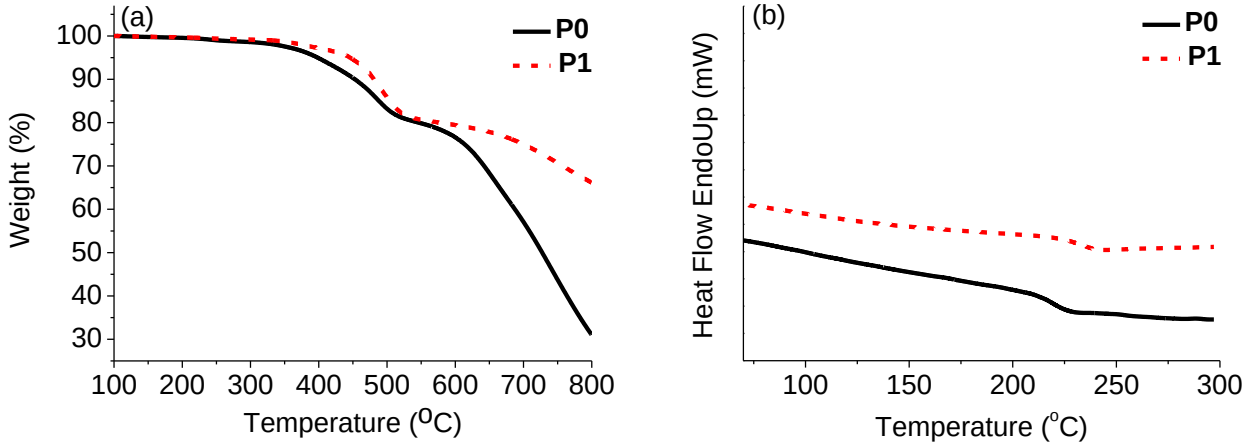
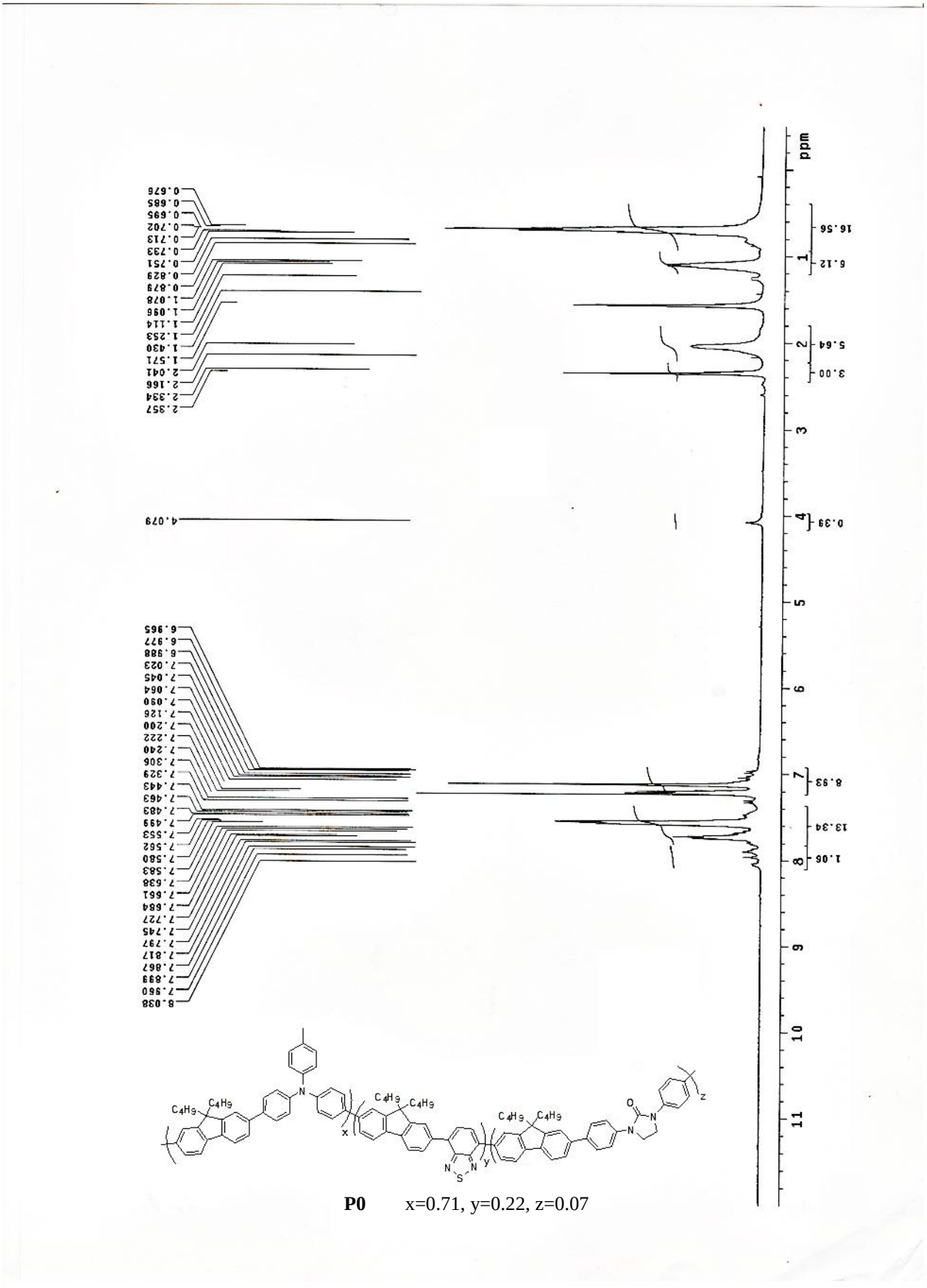
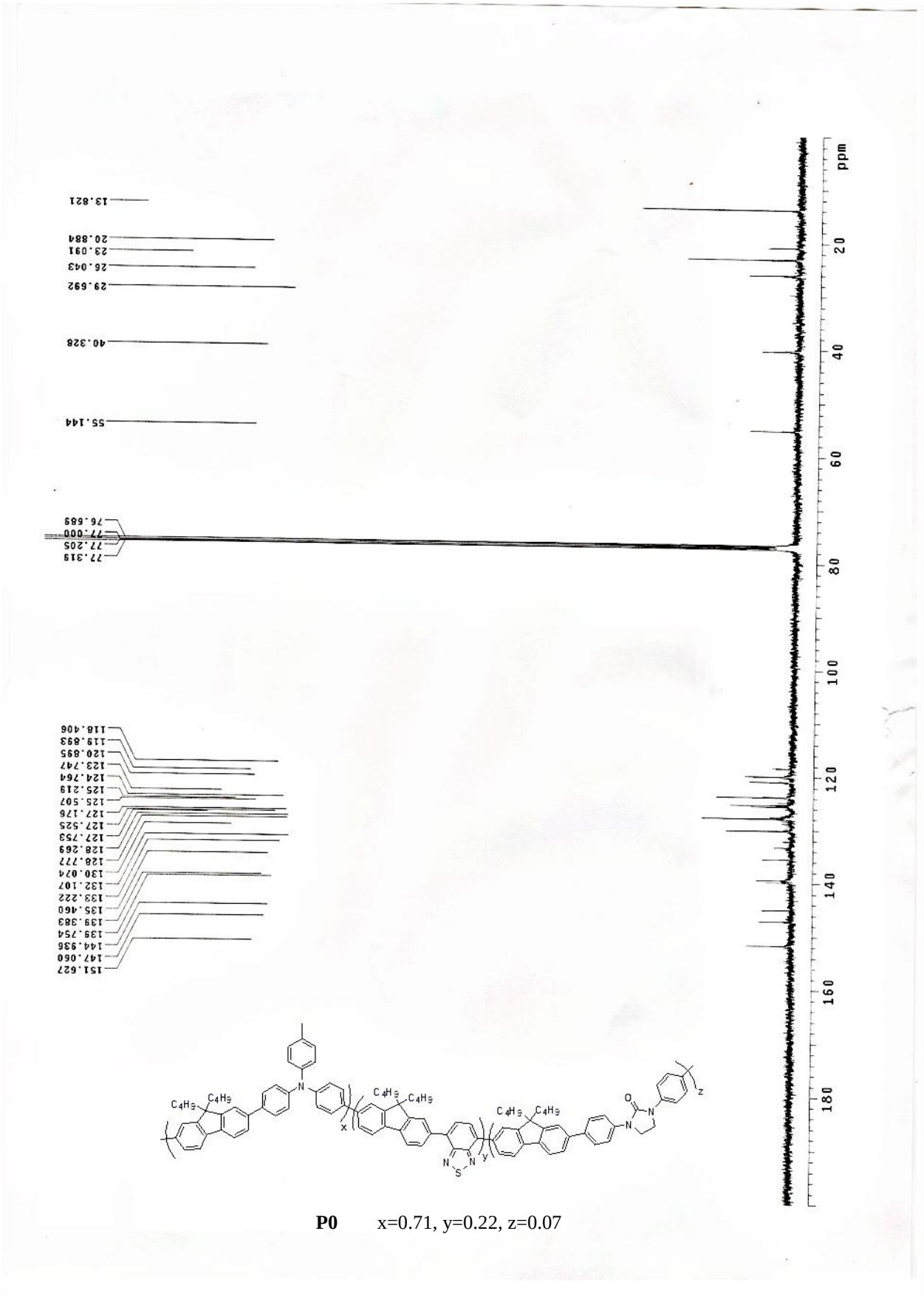


Figure S4. ^{1}H NMR Spectrum of **P0**



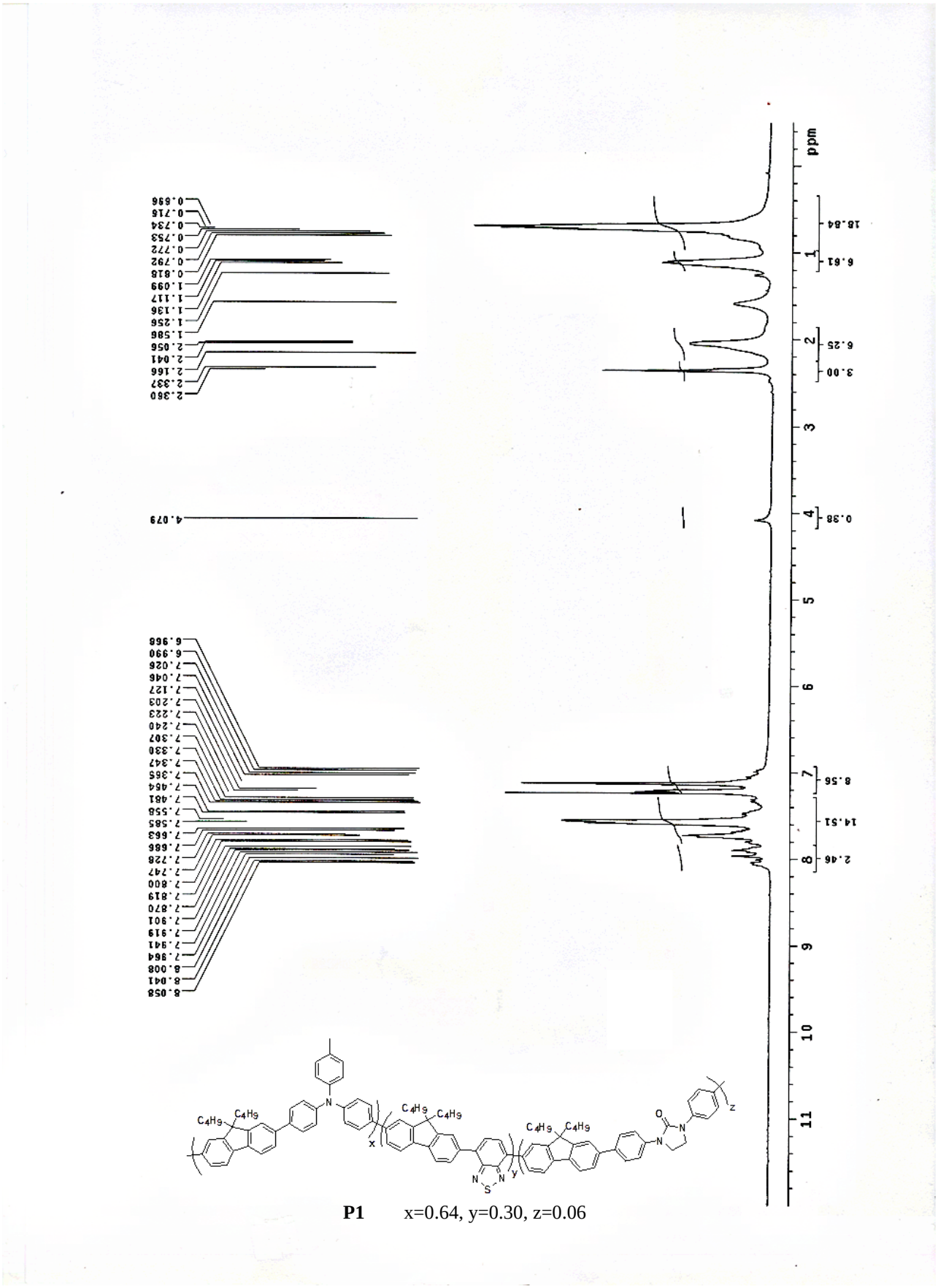
P0 x=0.71, y=0.22, z=0.07

Figure S5. ^{13}C NMR Spectrum of **P0**



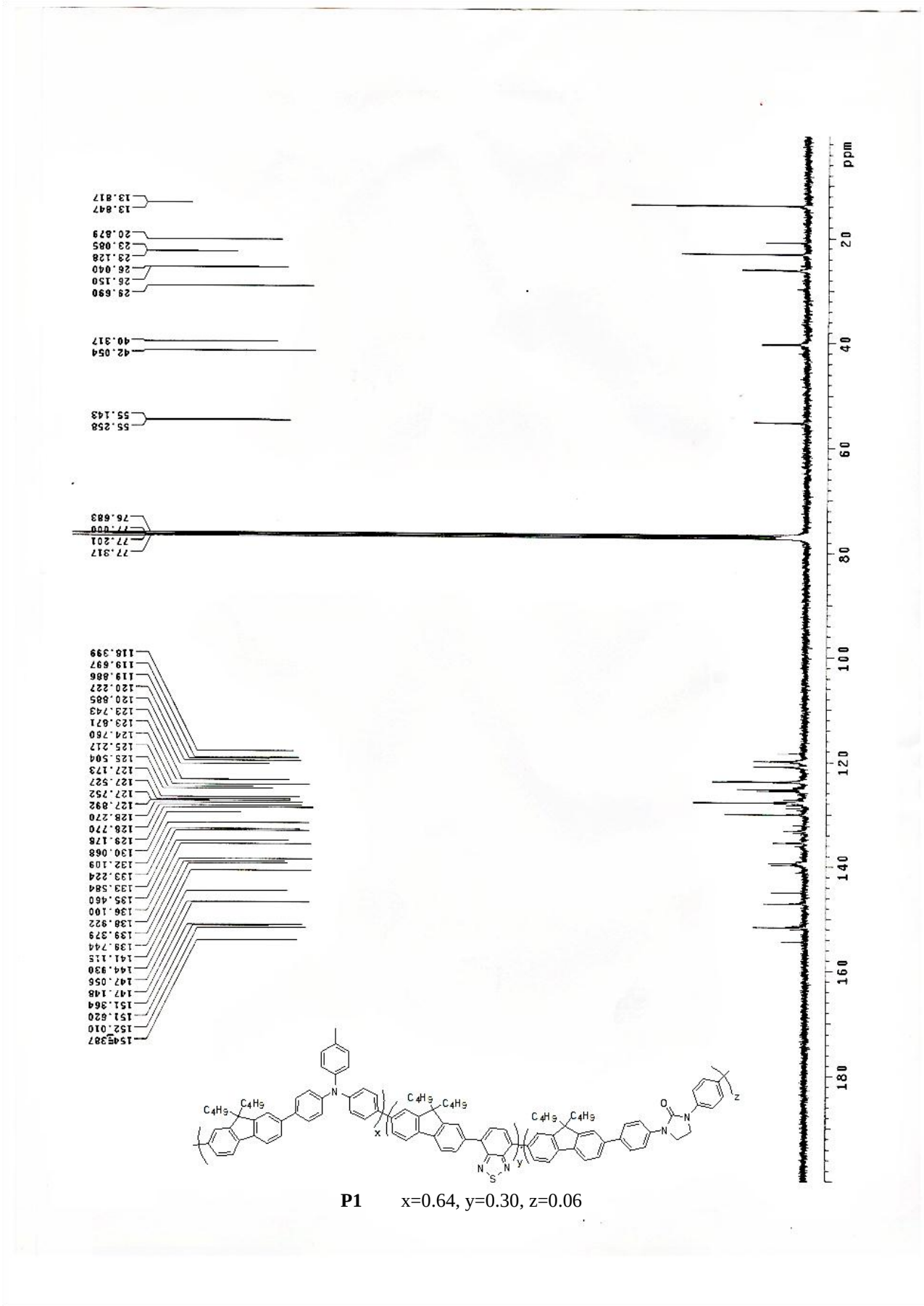
P0 x=0.71, y=0.22, z=0.07

Figure S6. ^{1}H NMR Spectrum of **P1**



P1 x=0.64, y=0.30, z=0.06

Figure S7. ^{13}C NMR Spectrum of **P1**



P1 x=0.64, y=0.30, z=0.06

Figure S8. ^{1}H NMR Spectrum of **P2**

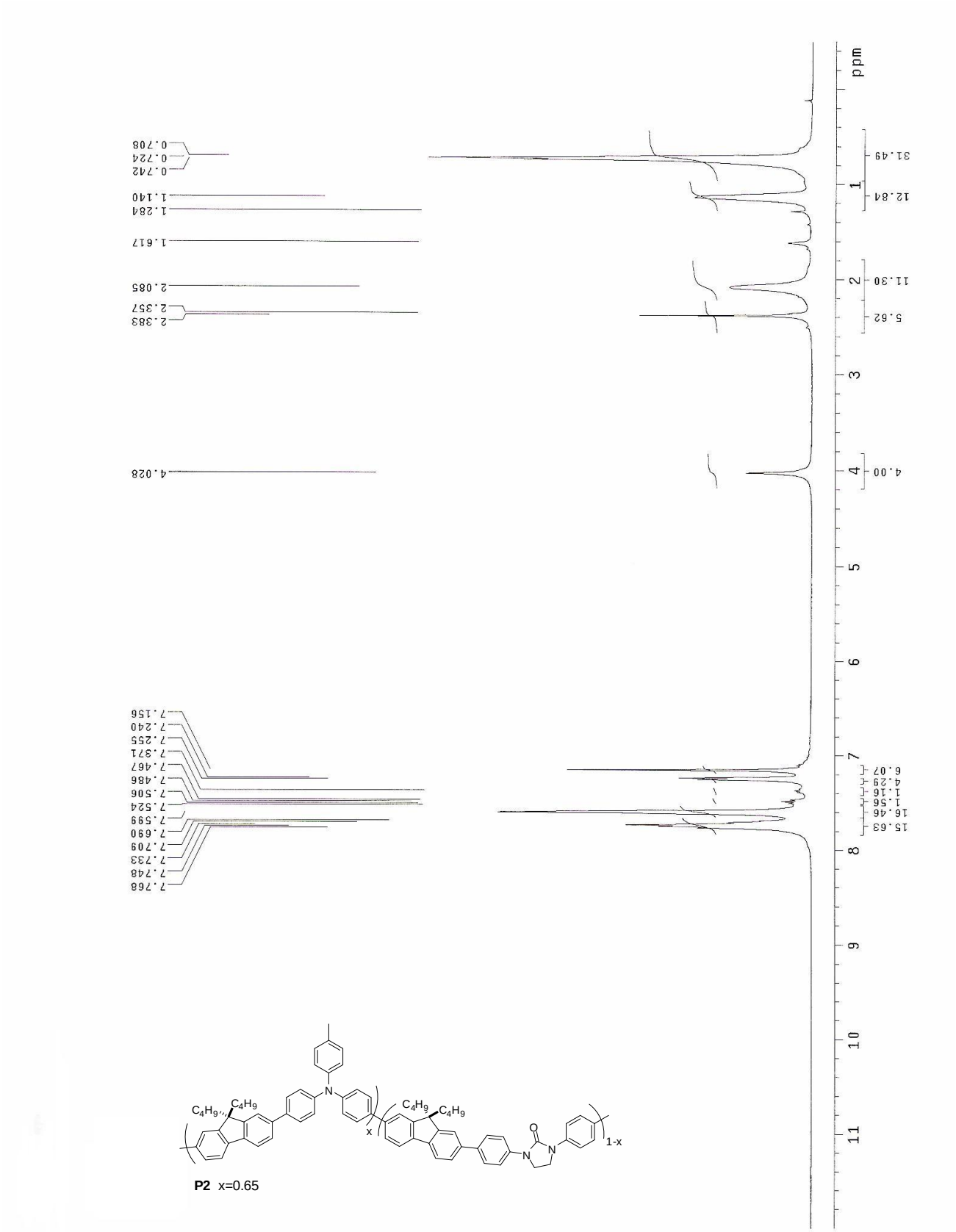


Figure S9. ^{13}C NMR Spectrum of **P2**

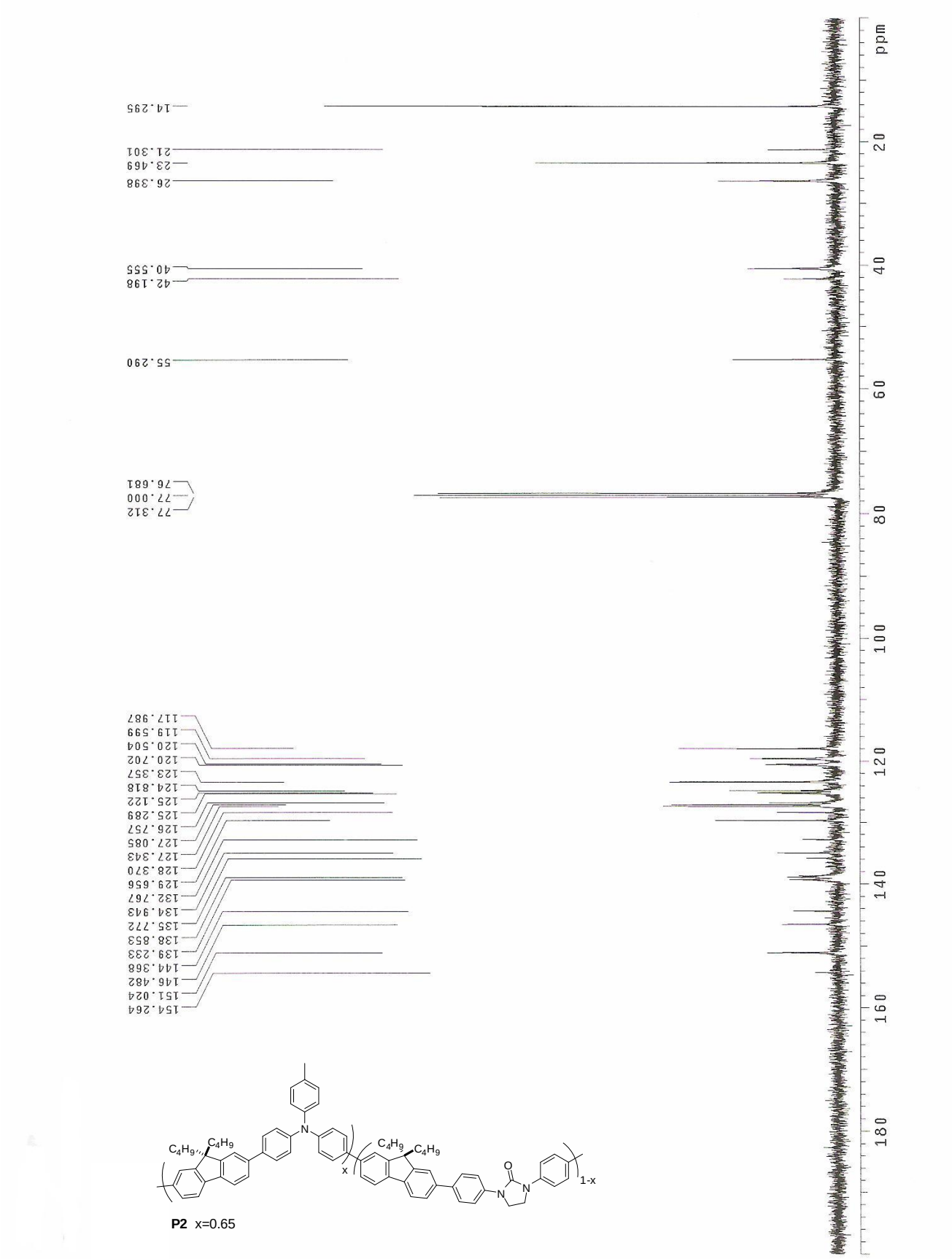
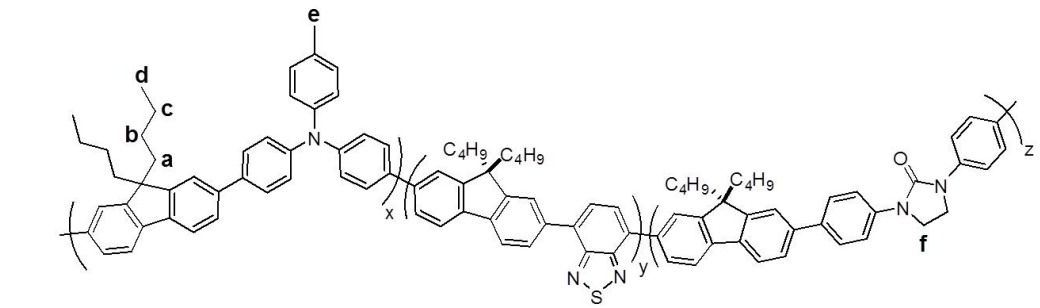
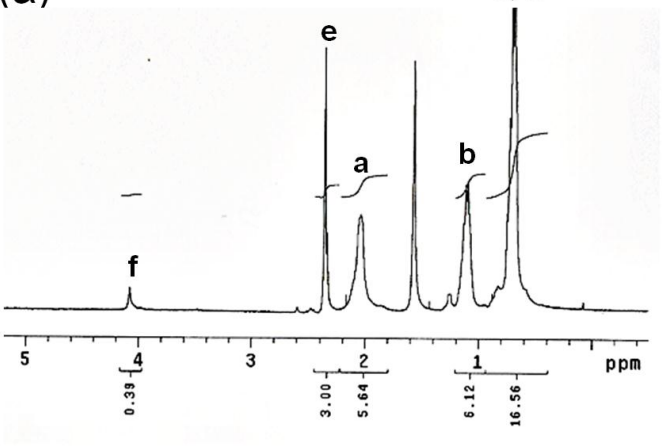


Figure S10. ^{1}H NMR spectra of (a) **P0** and (b) **P1**.



(a)



1. x+y+z = 1

2. 4(x+y+z):3x = 5.64:3.00 (a : e)

x= 0.71

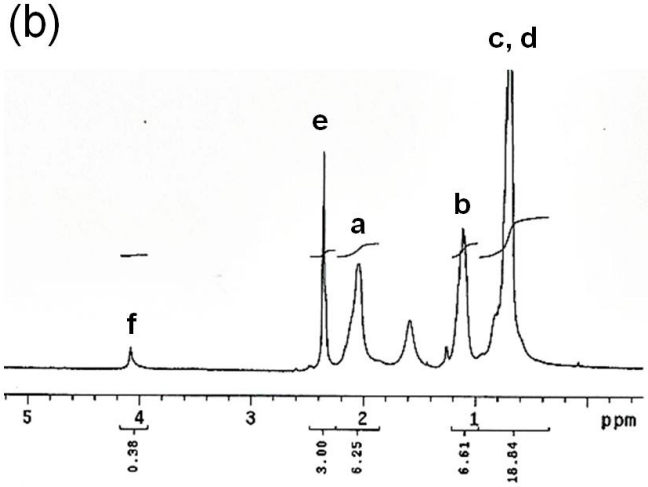
3. 4(x+y+z):4z = 5.64:0.39 (a : f)

z= 0.07

y= 0.22

P0 x= 0.71, y= 0.22, z= 0.07

(b)



1. x+y+z = 1

2. 4(x+y+z):3x = 6.25:3.00 (a : e)

x= 0.64

3. 4(x+y+z):4z = 6.25:0.38 (a : f)

z= 0.06

y= 0.30

P1 x= 0.64, y= 0.30, z= 0.06

Figure S11. ^{1}H NMR spectra of **P2**.

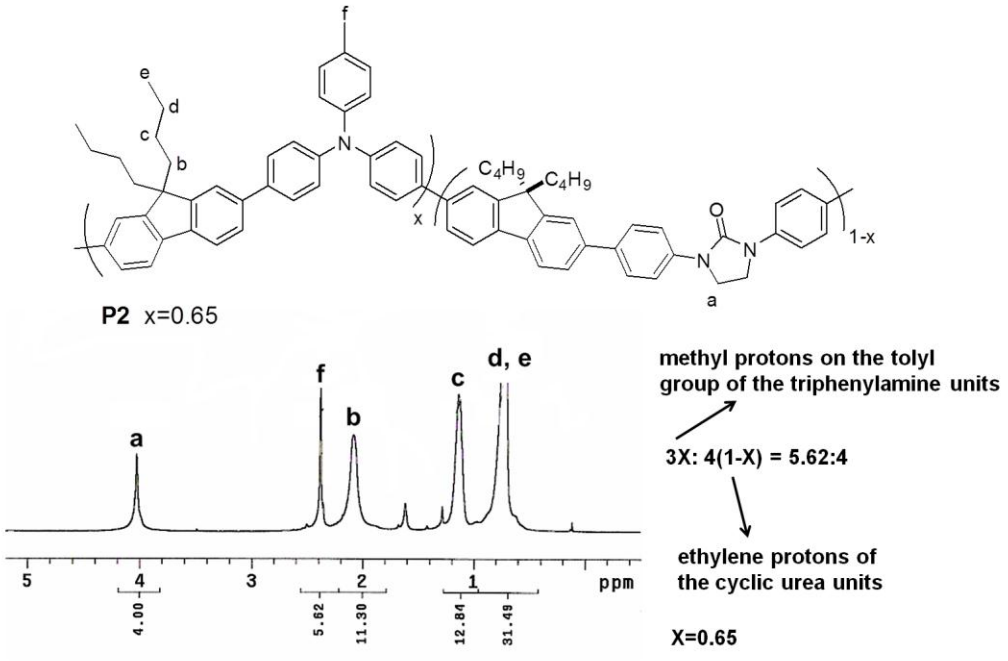


Figure S12. Fluorescence intensity changes (λ_{exc}= 360 nm) of the EFD of **P2** at different applied potentials. Each spectrum was obtained after applying the target potential for 30 s to obtain the fluorescence spectra at saturated state.

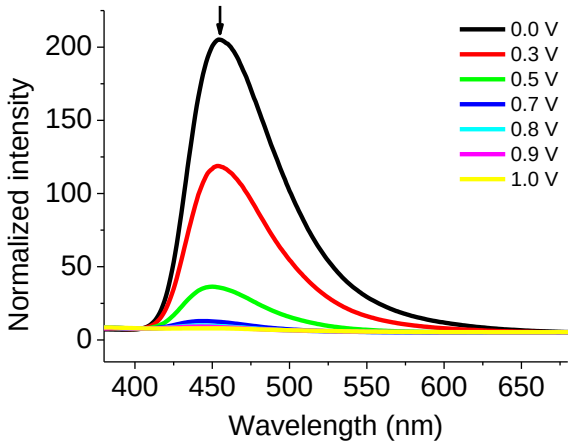


Figure S13. DSC of **P1** and Blend.

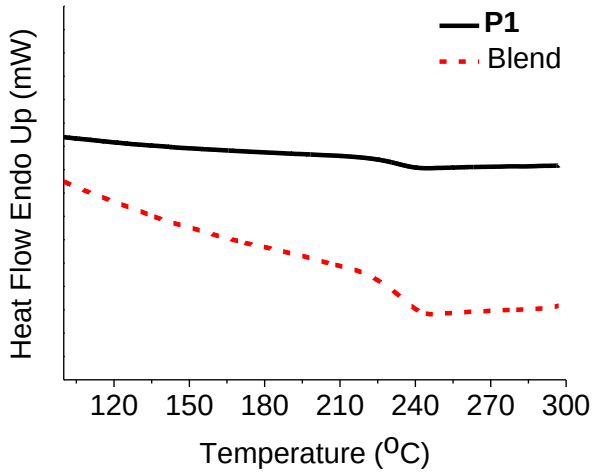


Figure S14. Fluorescence switching responses of the EFD of (a) **P1** monitored at 560 nm (λ_{exc}= 370 nm) and (b) Blend-2 monitored at 445 nm (λ_{exc}= 360 nm). Fixed potentials at 1.0 V (for oxidation) and -1.0 V (for reduction) were used with a step duration time for 5 second at each potential.