

Naphthodifuran alternating quinoxaline copolymers with ~1.2 eV bandgap and their photovoltaic characterization

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1. NMR Spectra of the monomers

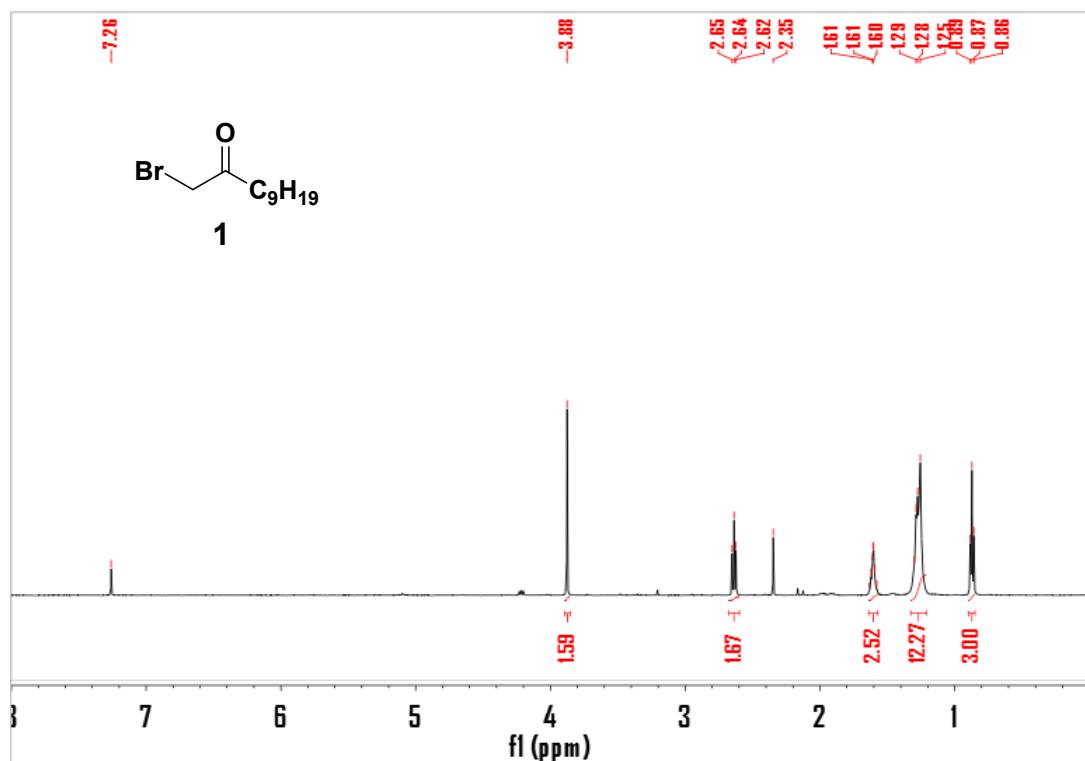


Figure S1. ¹H NMR spectrum of Compound 1

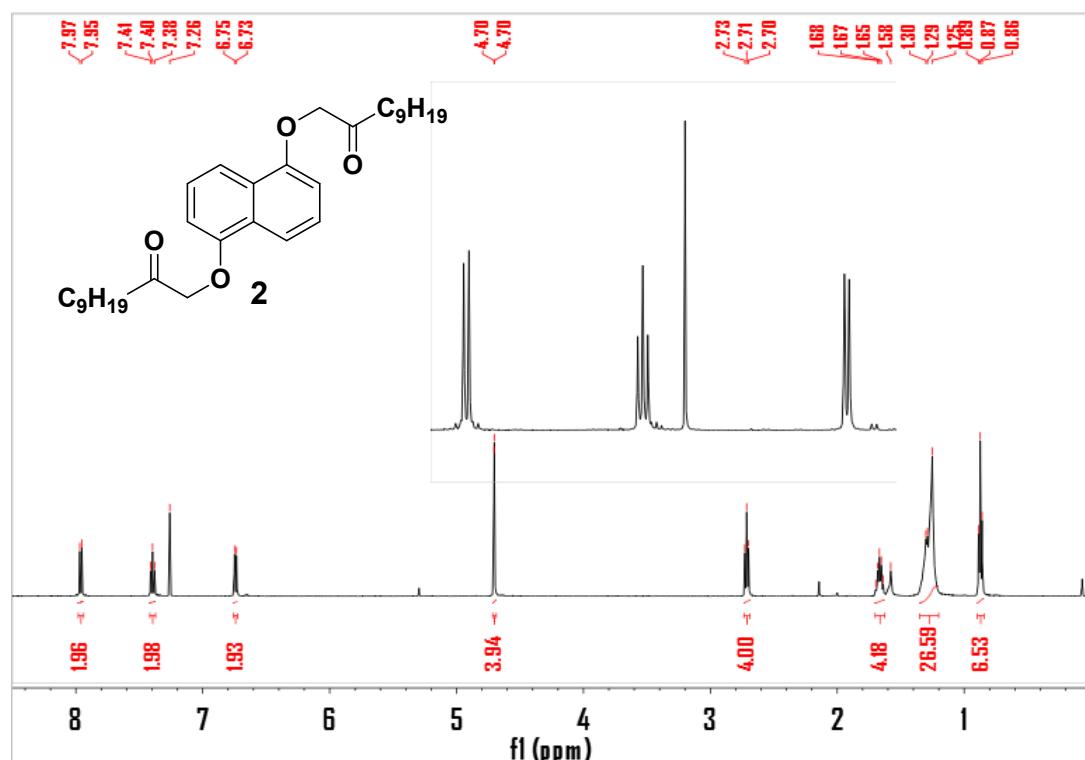


Figure S2. ¹H NMR spectrum of Compound 2

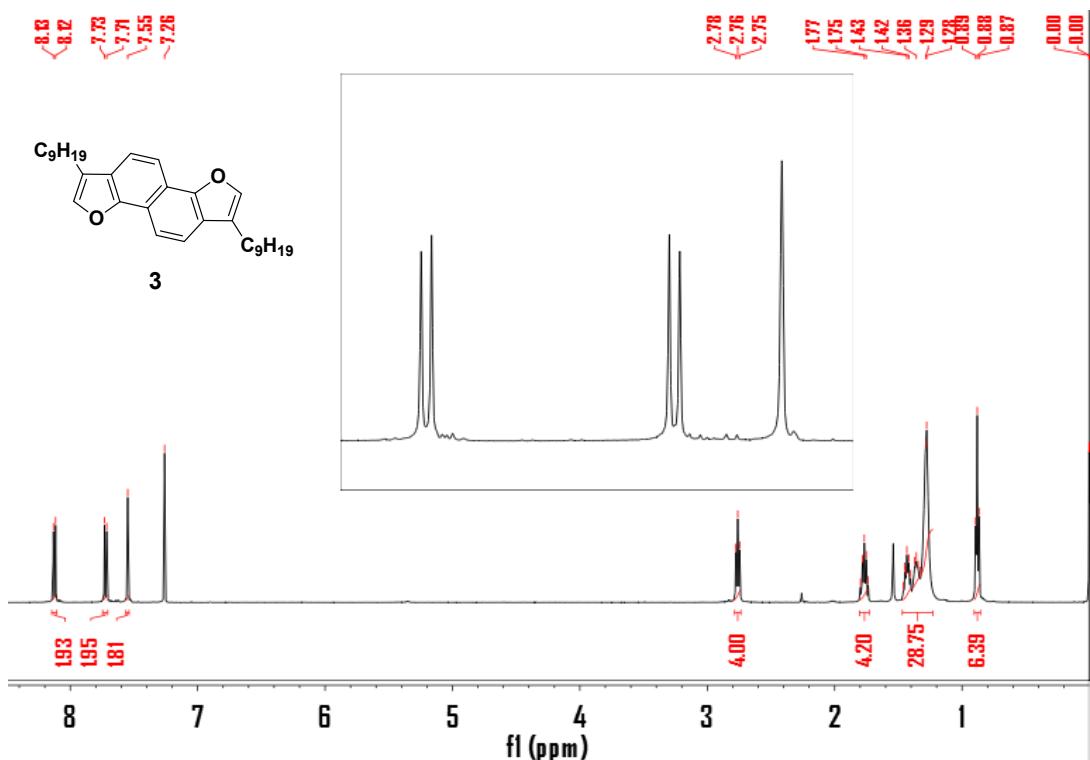


Figure S3. ¹H NMR spectrum of Compound 3

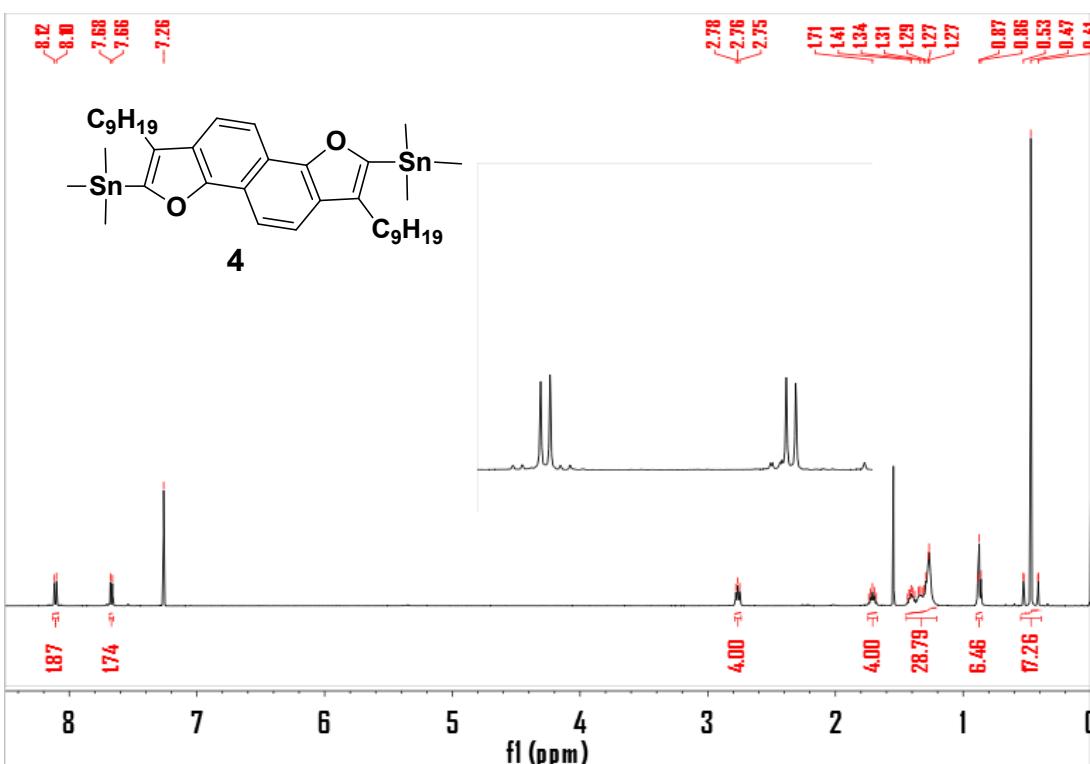


Figure S4. ¹H NMR spectrum of Compound 4

2. NMR Spectra of polymers

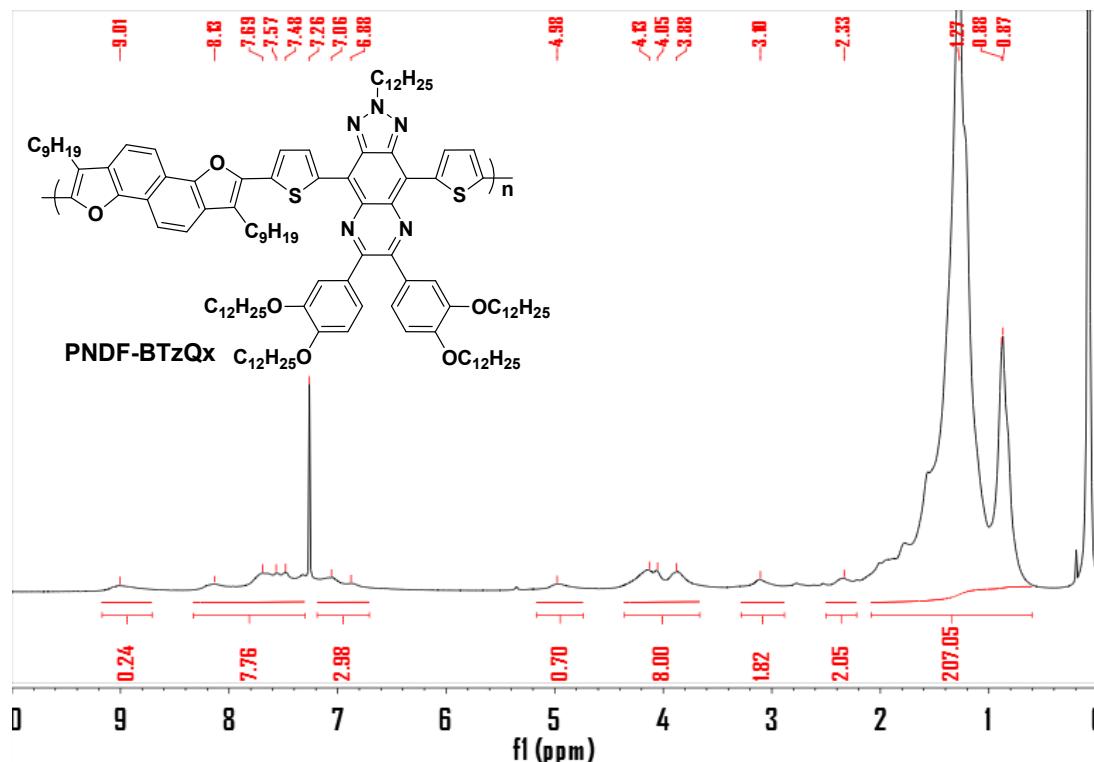


Figure S5. ¹H NMR spectrum of PNDF-BTzQx (P1)

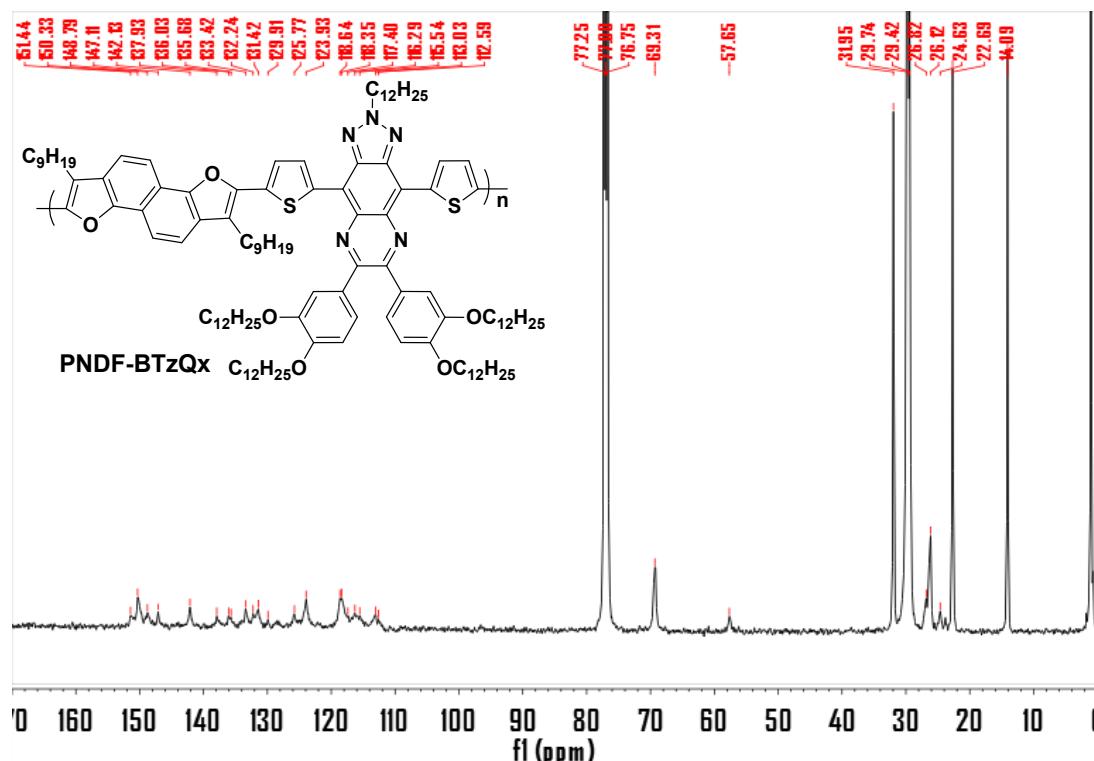


Figure S6. ¹³C NMR spectrum of PNDF-BTzQx (P1)

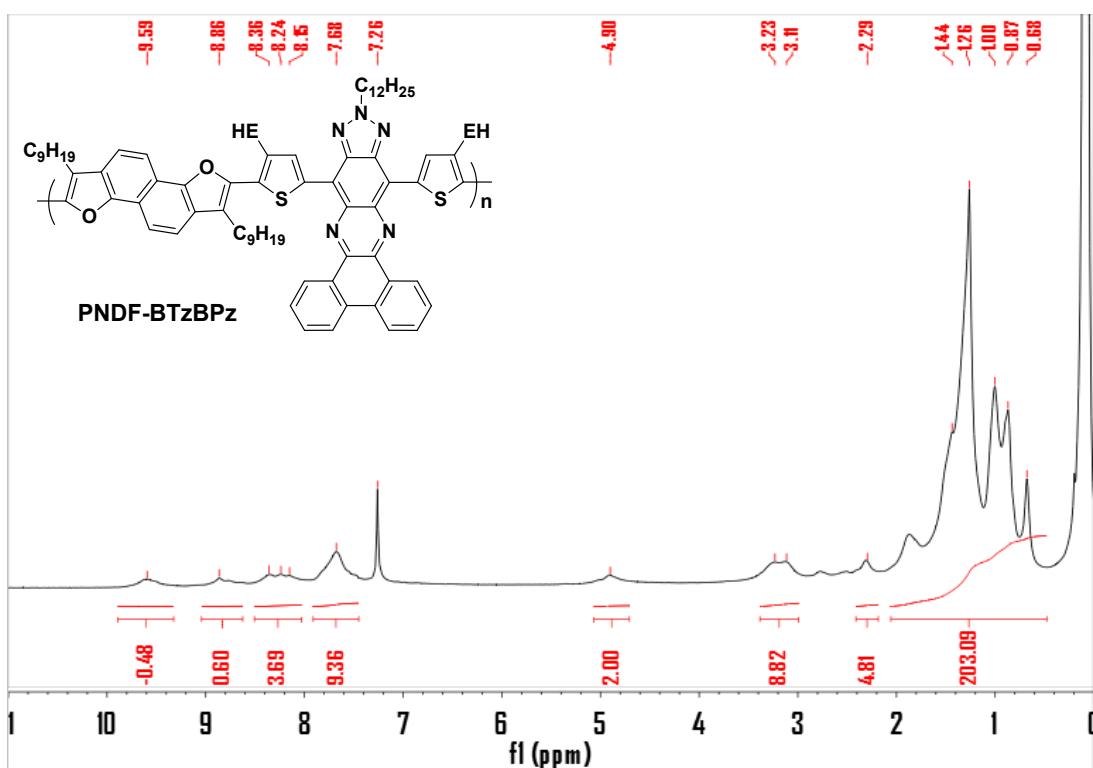


Figure S7. ¹H NMR spectrum of PNDF-BTzBPz (P2)

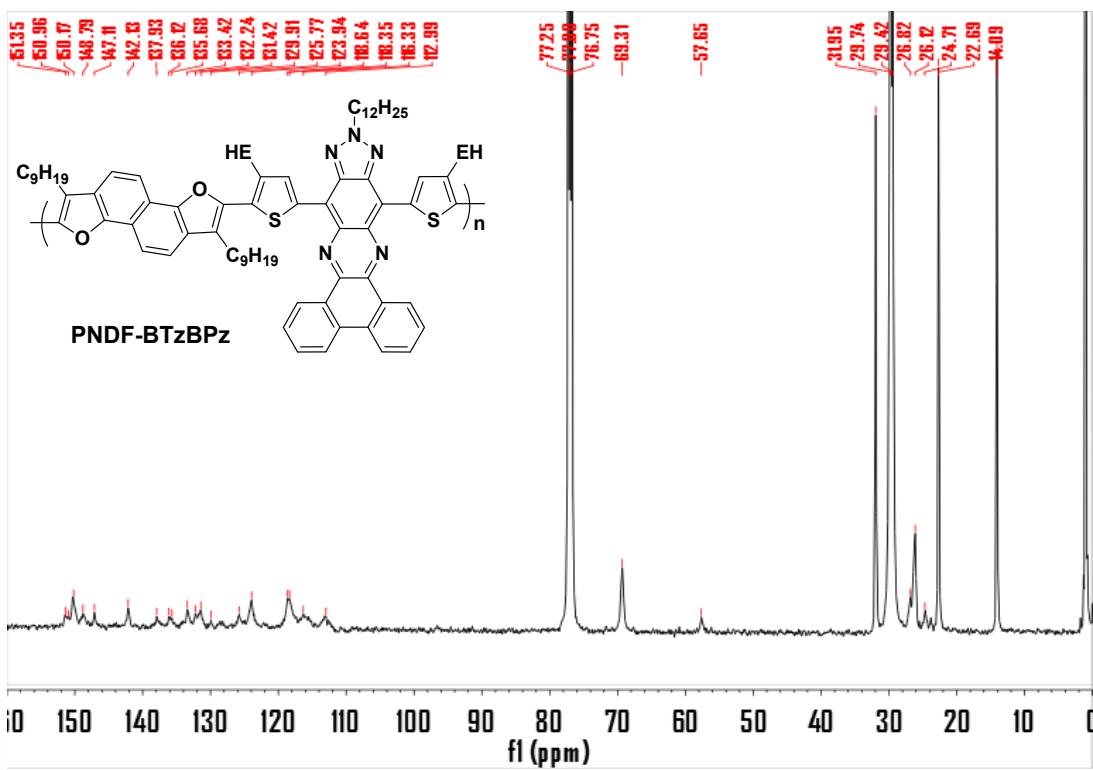


Figure S8. ¹³C NMR spectrum of PNDF-BTzBPz (P2)

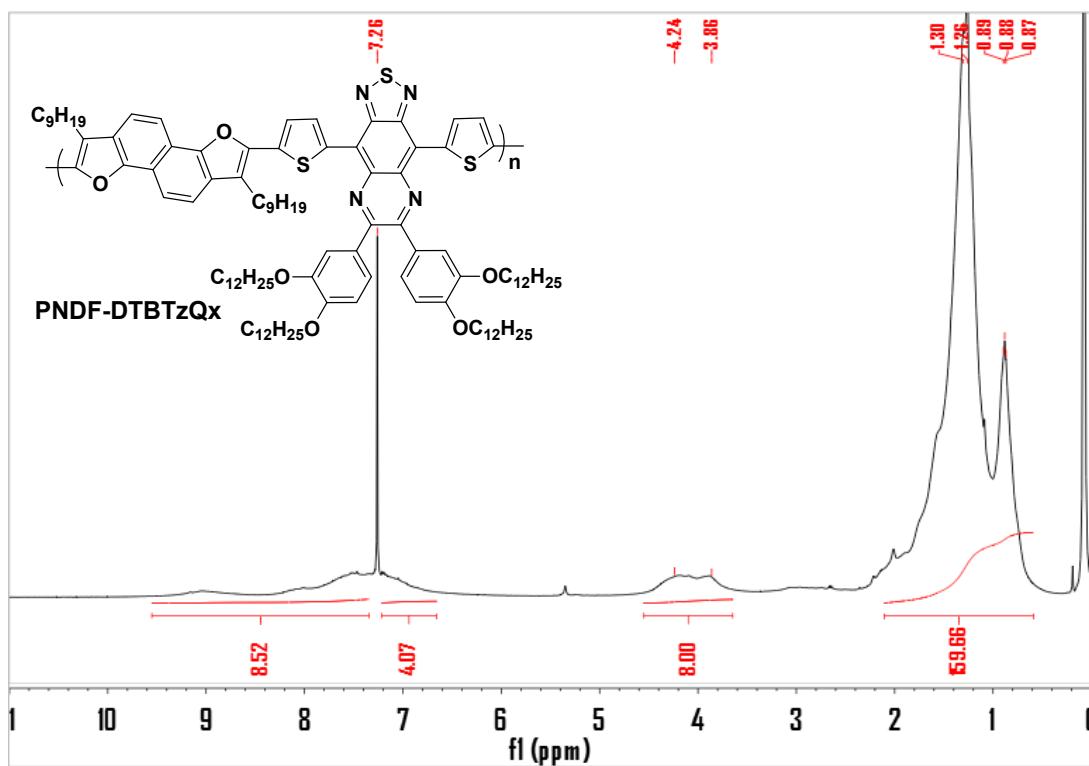


Figure S9. ¹H NMR spectrum of PNDF-DTBTQx (P3)

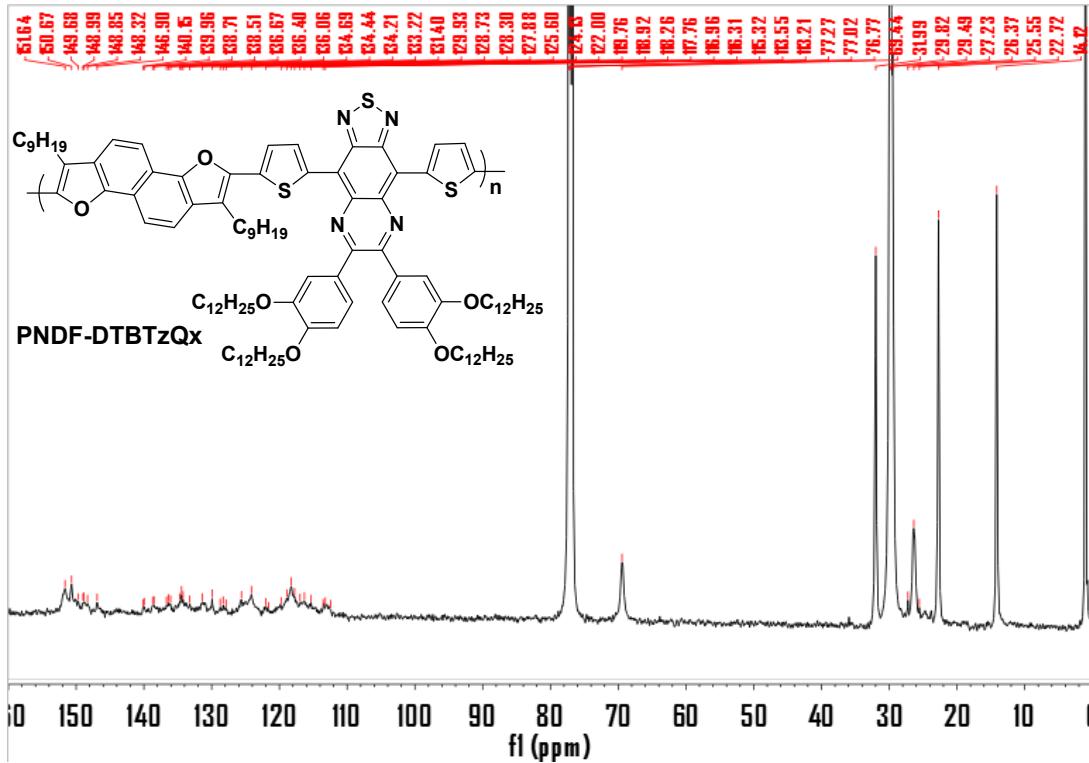


Figure S10. ¹³C NMR spectrum of PNDF-DTBTQx (P3)

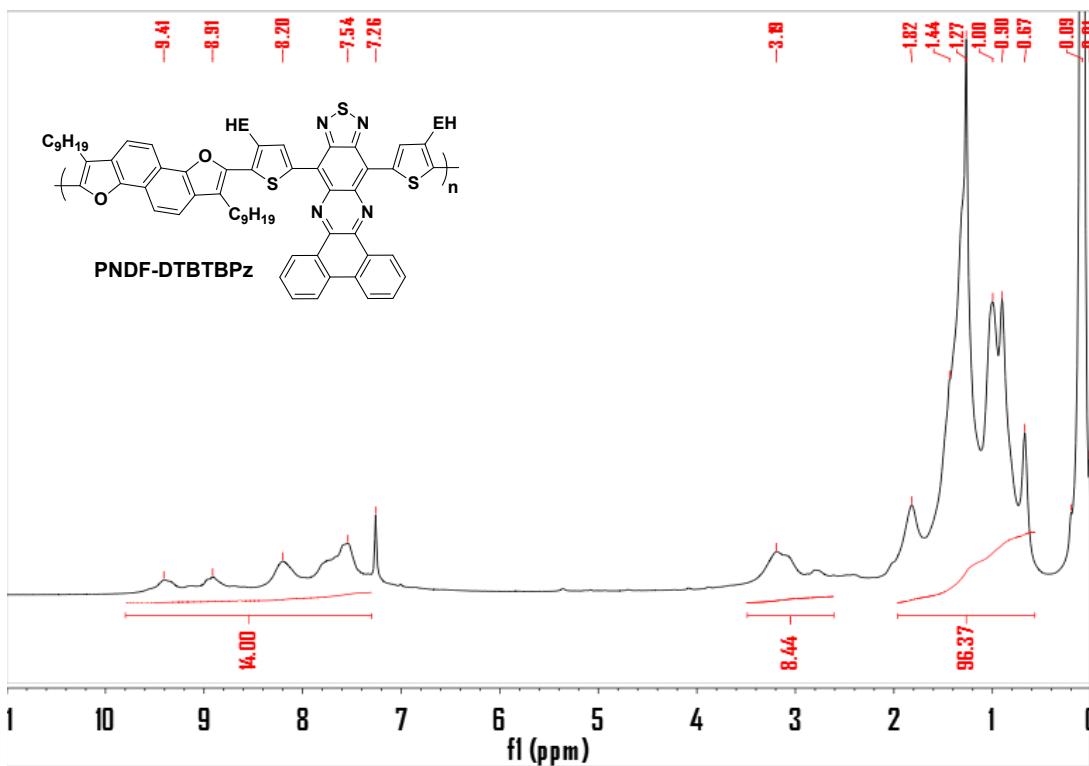


Figure S11. ¹H NMR spectrum of PNDF-DTBTBPz (P4)

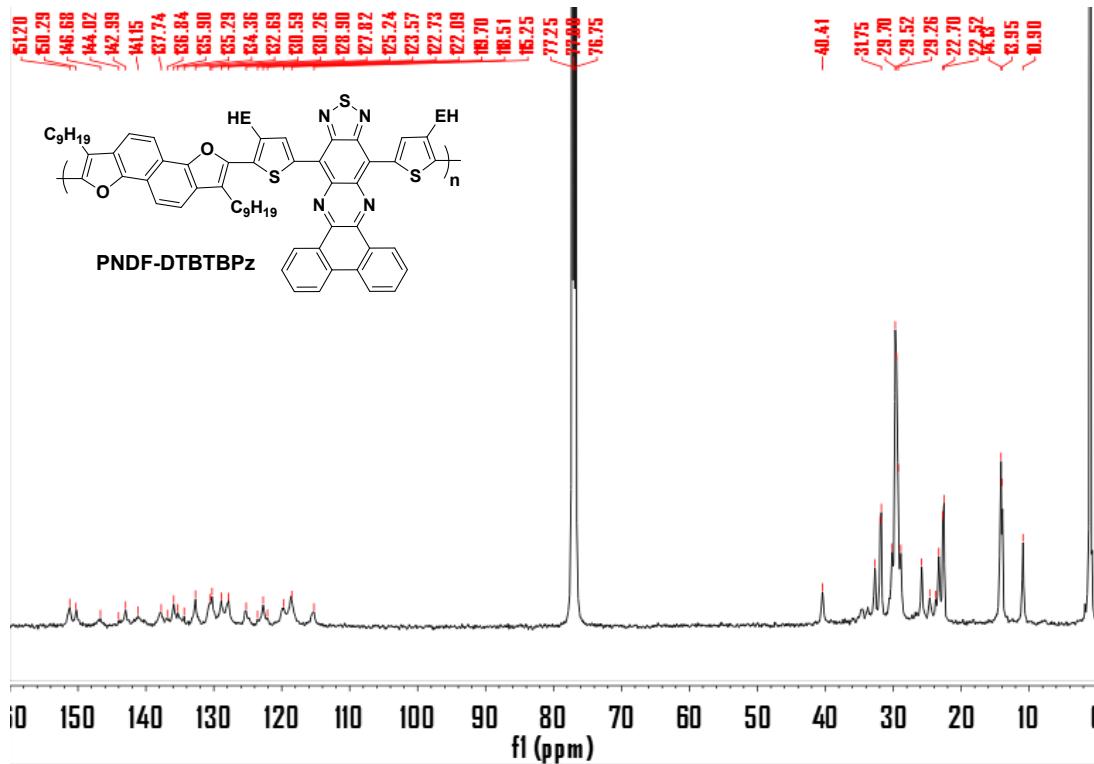


Figure S12. ¹³C NMR spectrum of PNDF-DTBTBPz (P4)