

Electronic Supporting Information for:

**Structurally defined nanographene-containing conjugated
polymers for high quality dispersions and optoelectronic
applications**

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350.

Identification data of prepared compounds and polymers were described below

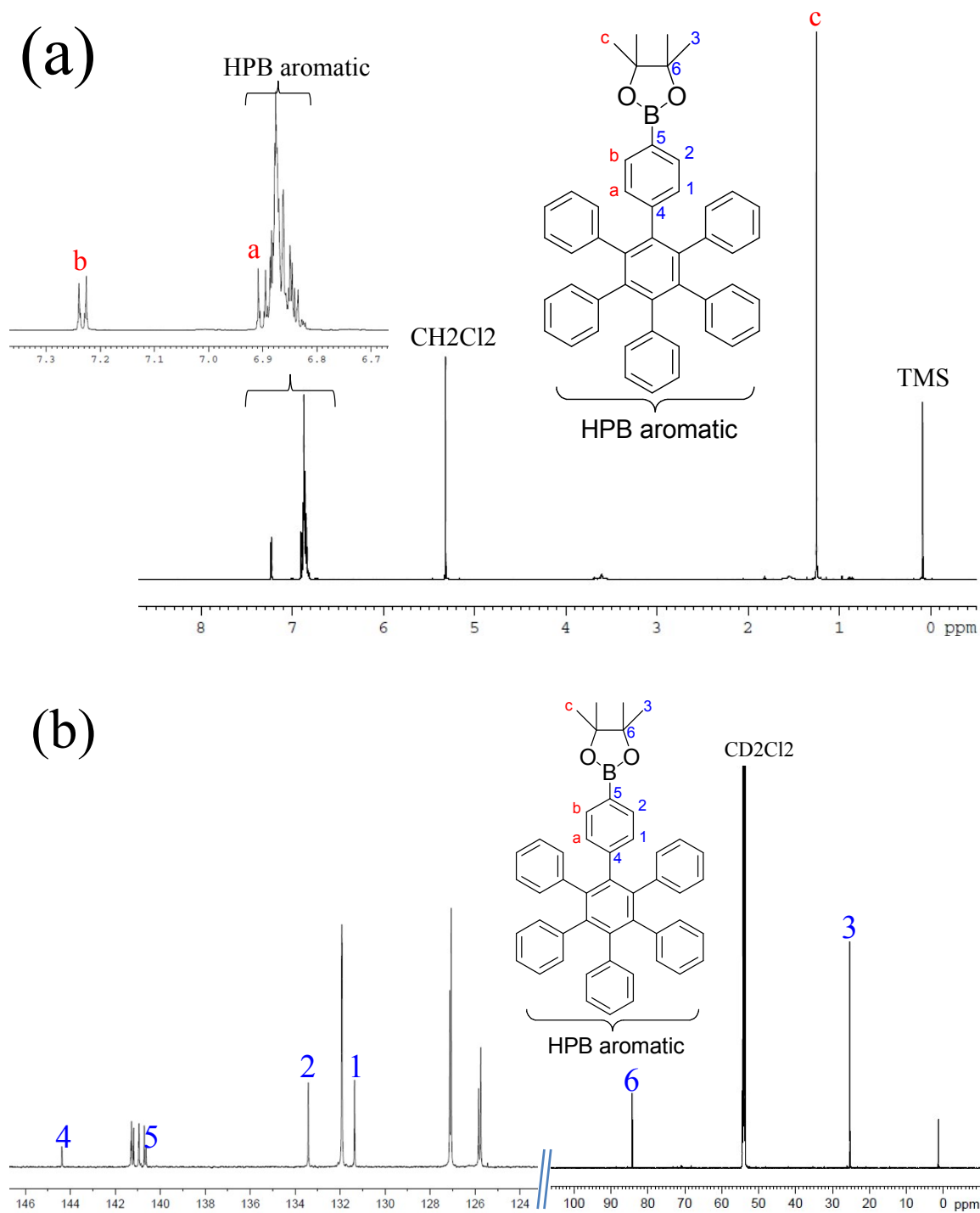


Fig. S1 (a) ^1H NMR and (b) ^{13}C NMR spectra of the compound **2** in CD_2Cl_2 .

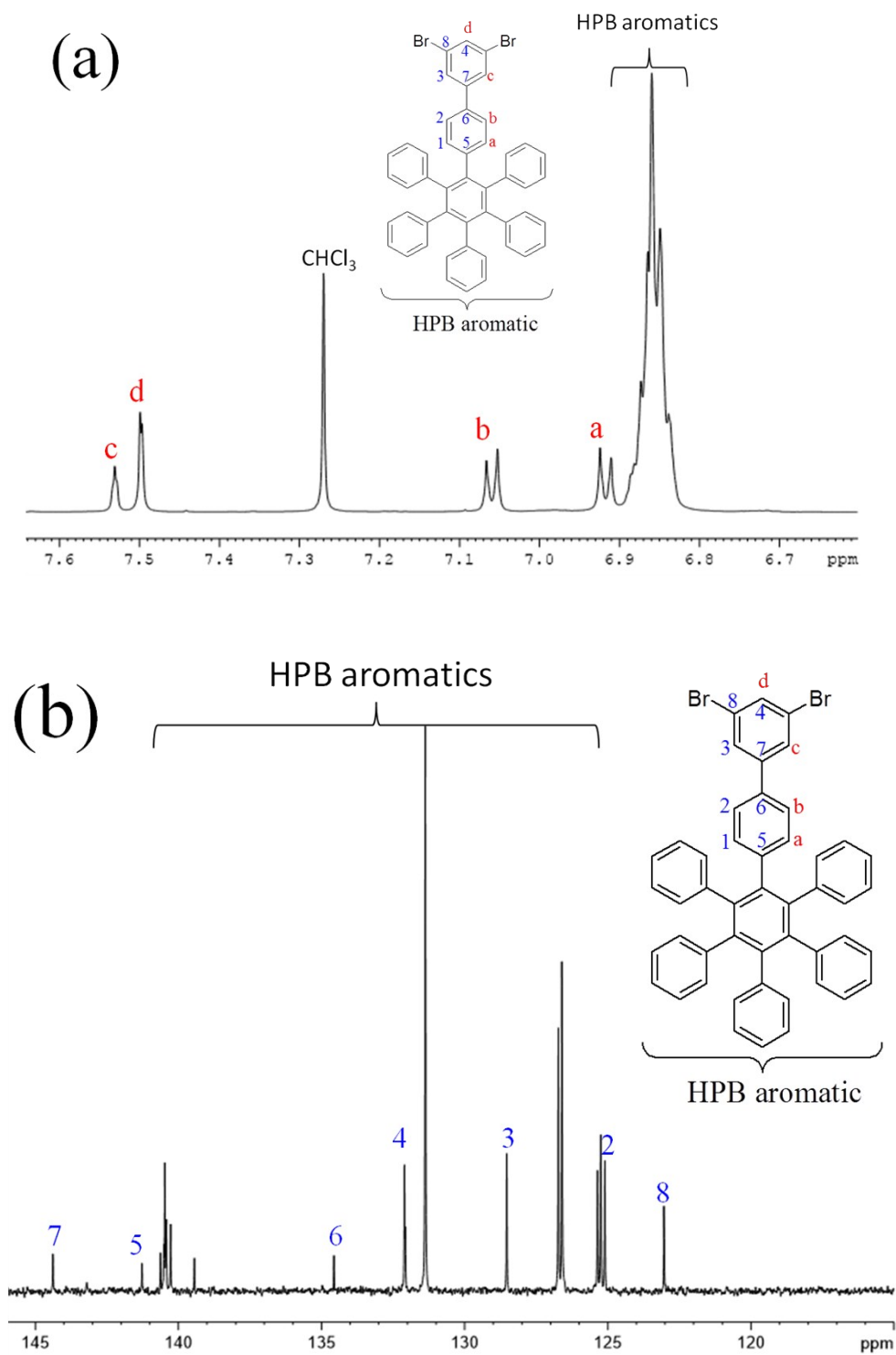


Fig. S2 (a) ^1H NMR and (b) ^{13}C NMR spectra of the dibromo monomer **M1** in CDCl_3 .

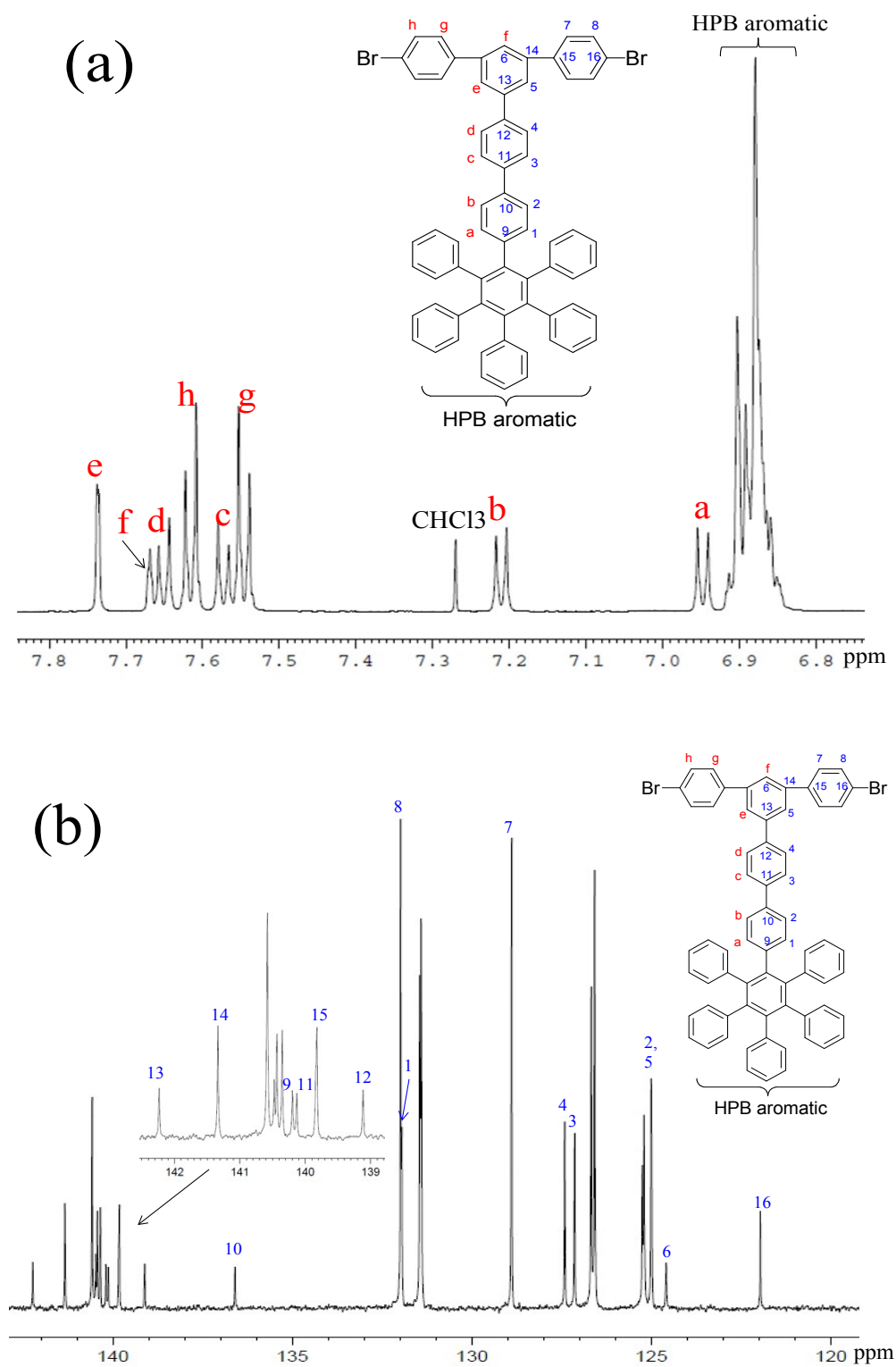


Fig. S3 (a) ^1H NMR and (b) ^{13}C NMR spectra of the dibromo monomer **M2** in CDCl_3 .

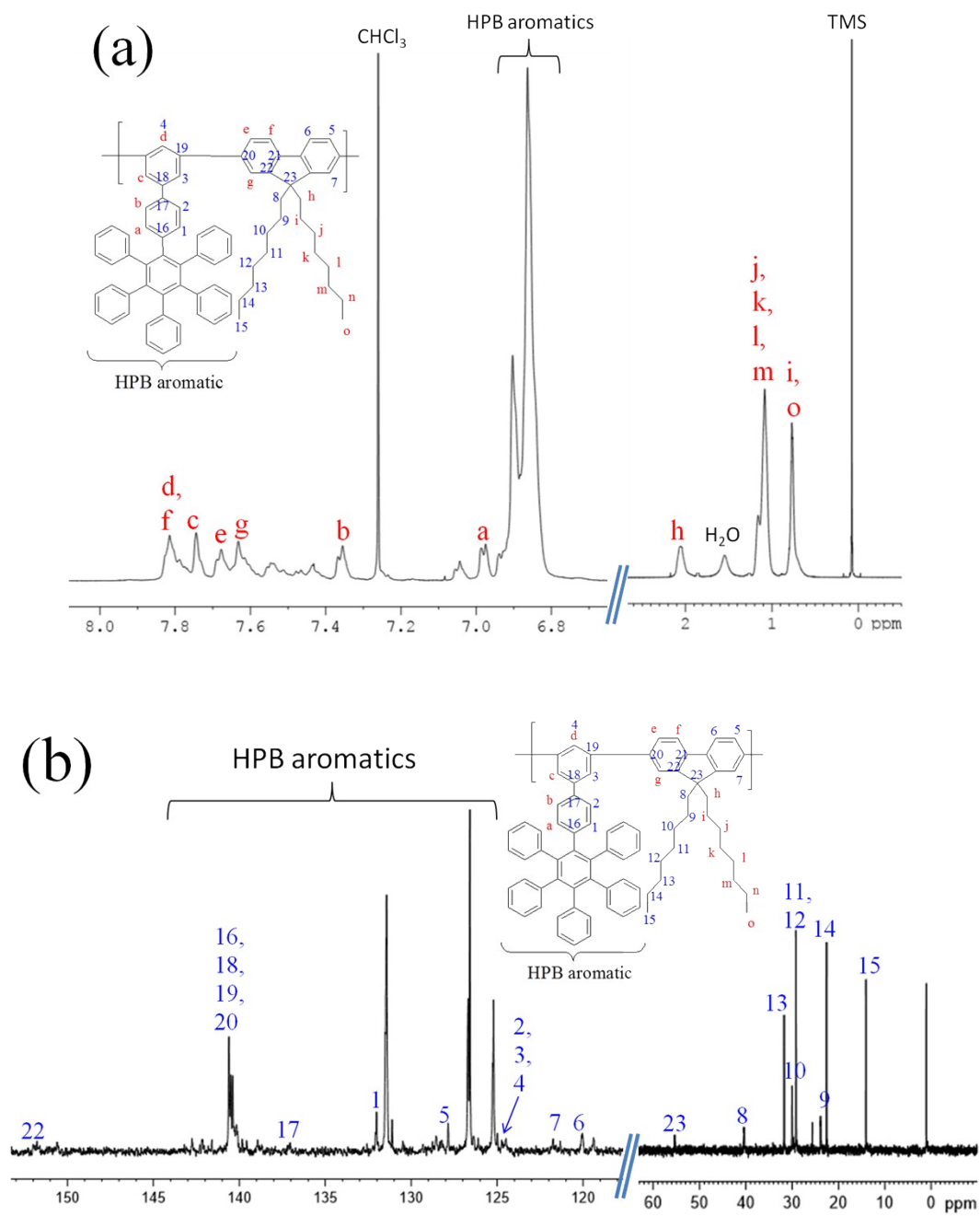


Fig. S4 (a) ¹H NMR and (b) ¹³C NMR spectra of the conjugated polymer **P1** in CDCl₃.

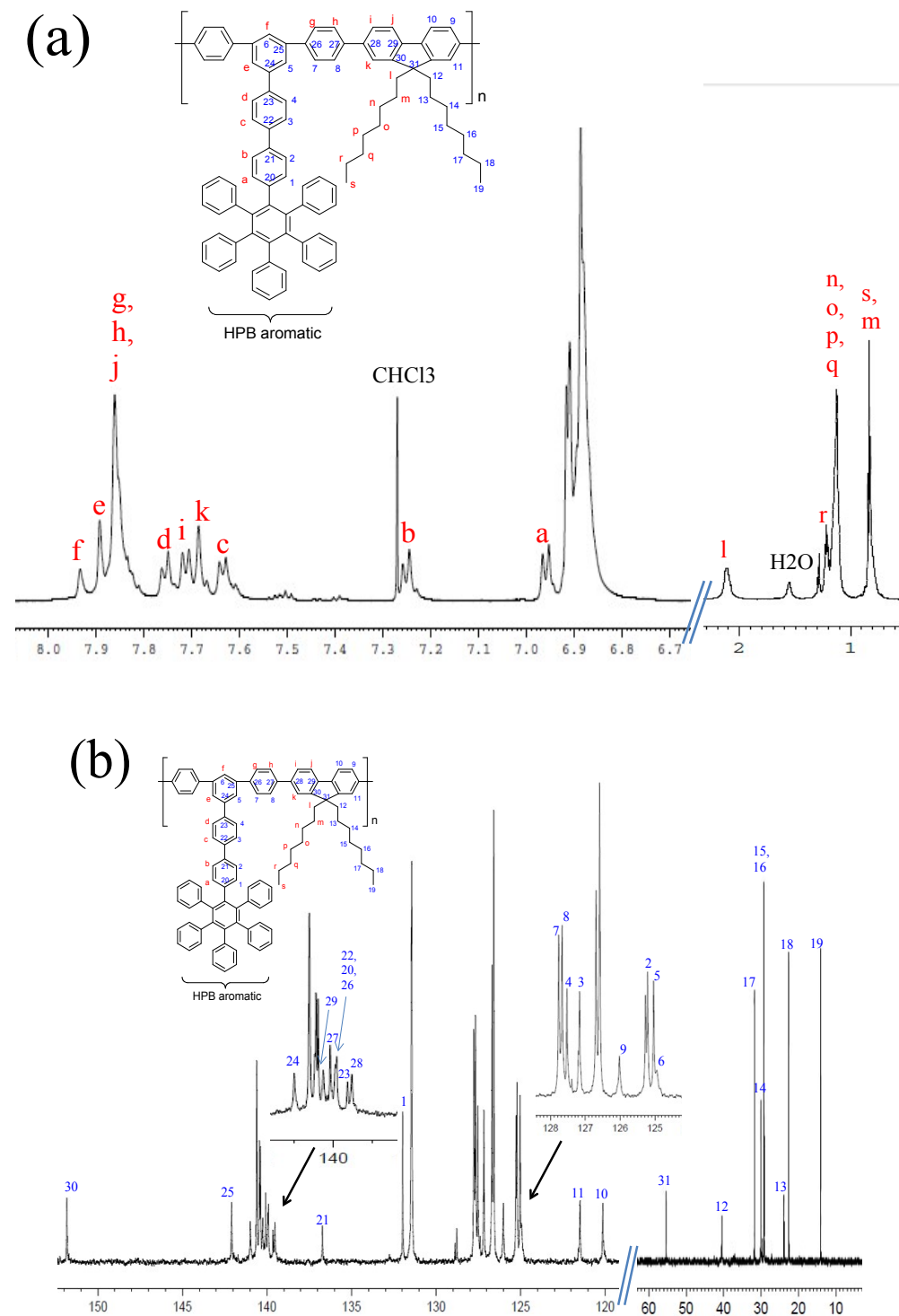


Fig. S5 (a) ^1H NMR and (b) ^{13}C NMR spectra of the conjugated polymer **P2** in CDCl_3 .

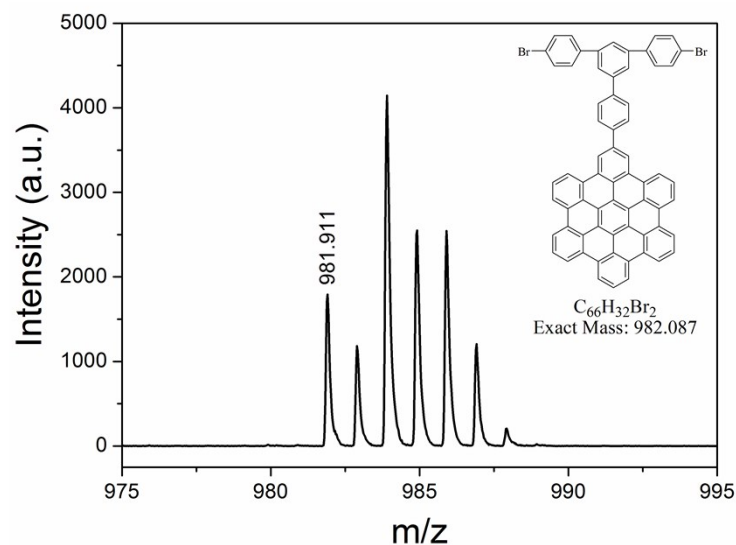


Fig. S6 Isotope resolved MALDI-TOF MS spectrum of the monomer **M2** (using TCNQ as matrix).

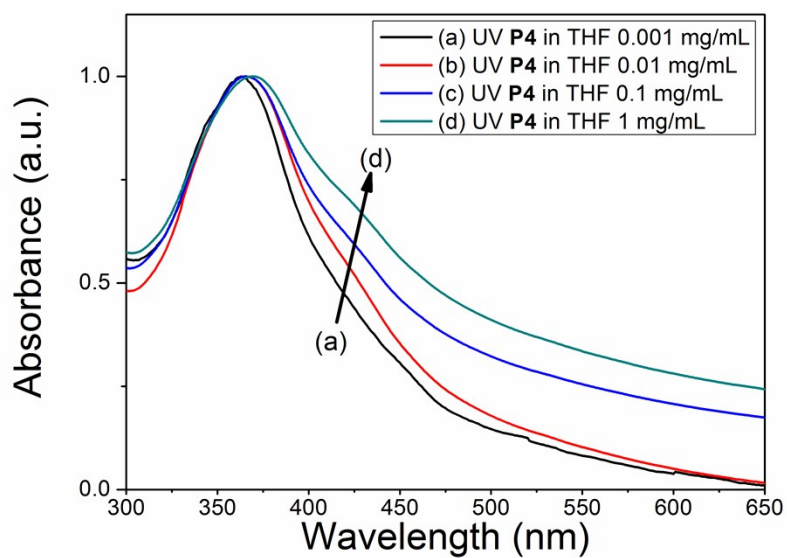
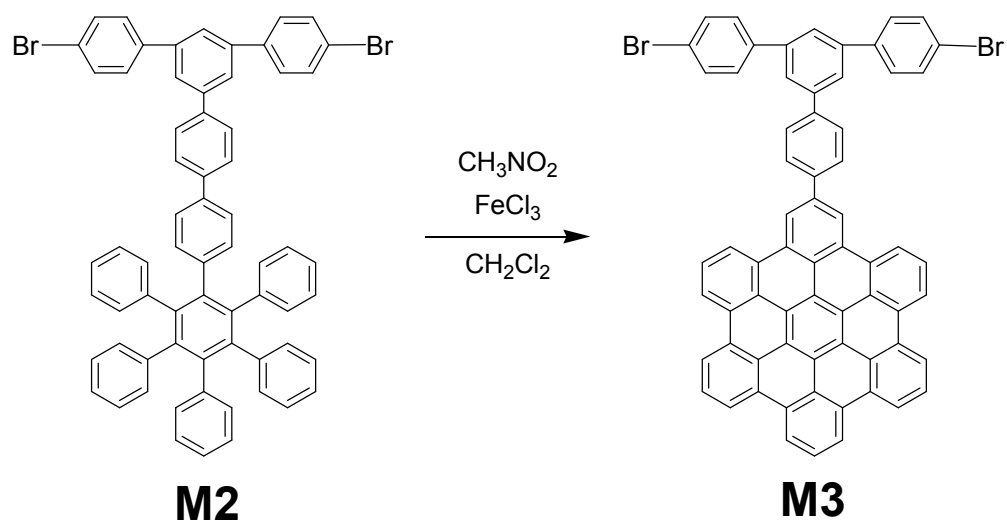


Fig. S7 UV/vis spectra of the **P4** in THF with various concentrations (from 0.001 mg/mL to 1 mg/mL) for aggregation absorbance at 427 nm.



Scheme S1 Synthesis of HBC-containing model compound **M3** *via* oxidative cyclodehydrogenation.