Electronic Supplementary Material (ESI) for RSC Advances.

Thermo-mechanical and surface properties of POSS reinforced structurally different diamines cured epoxy nanocomposites.

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Notes

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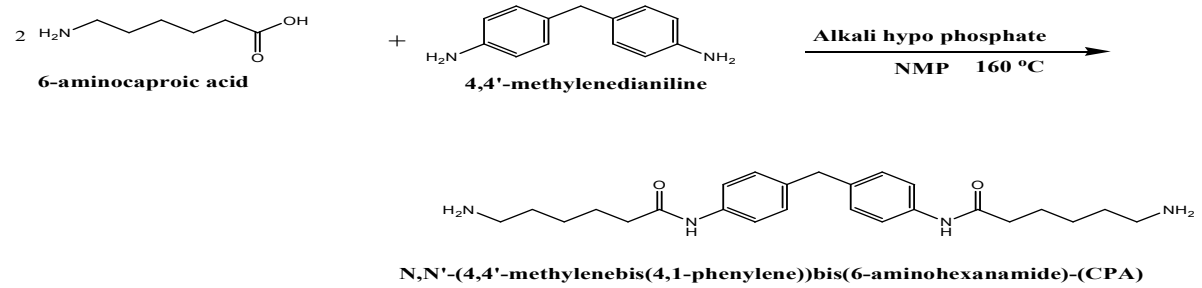
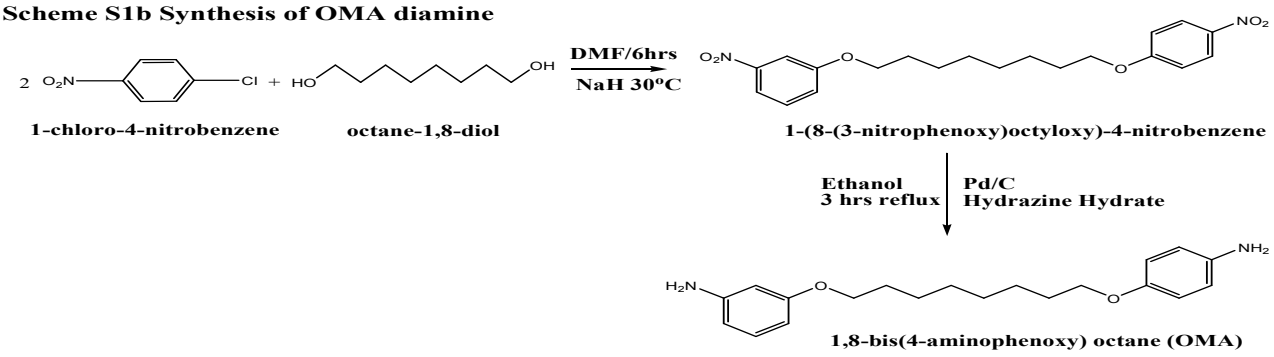
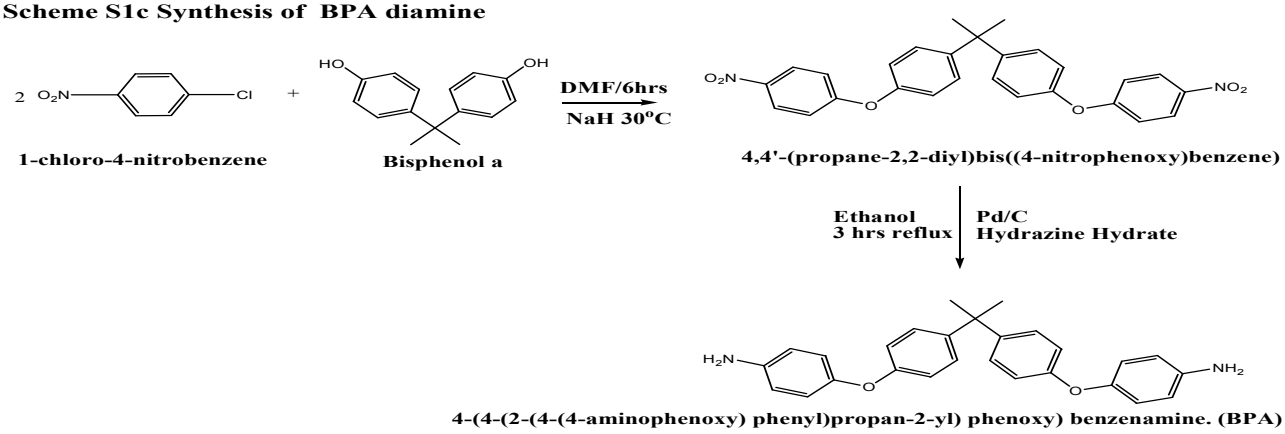
Scheme S1a Synthesis of CPA diamine



Scheme S1b Synthesis of OMA diamine



Scheme S1c Synthesis of BPA diamine



Scheme S1 (a-c). Schematic representation for synthesis of CPA, OMA and BPA diamines

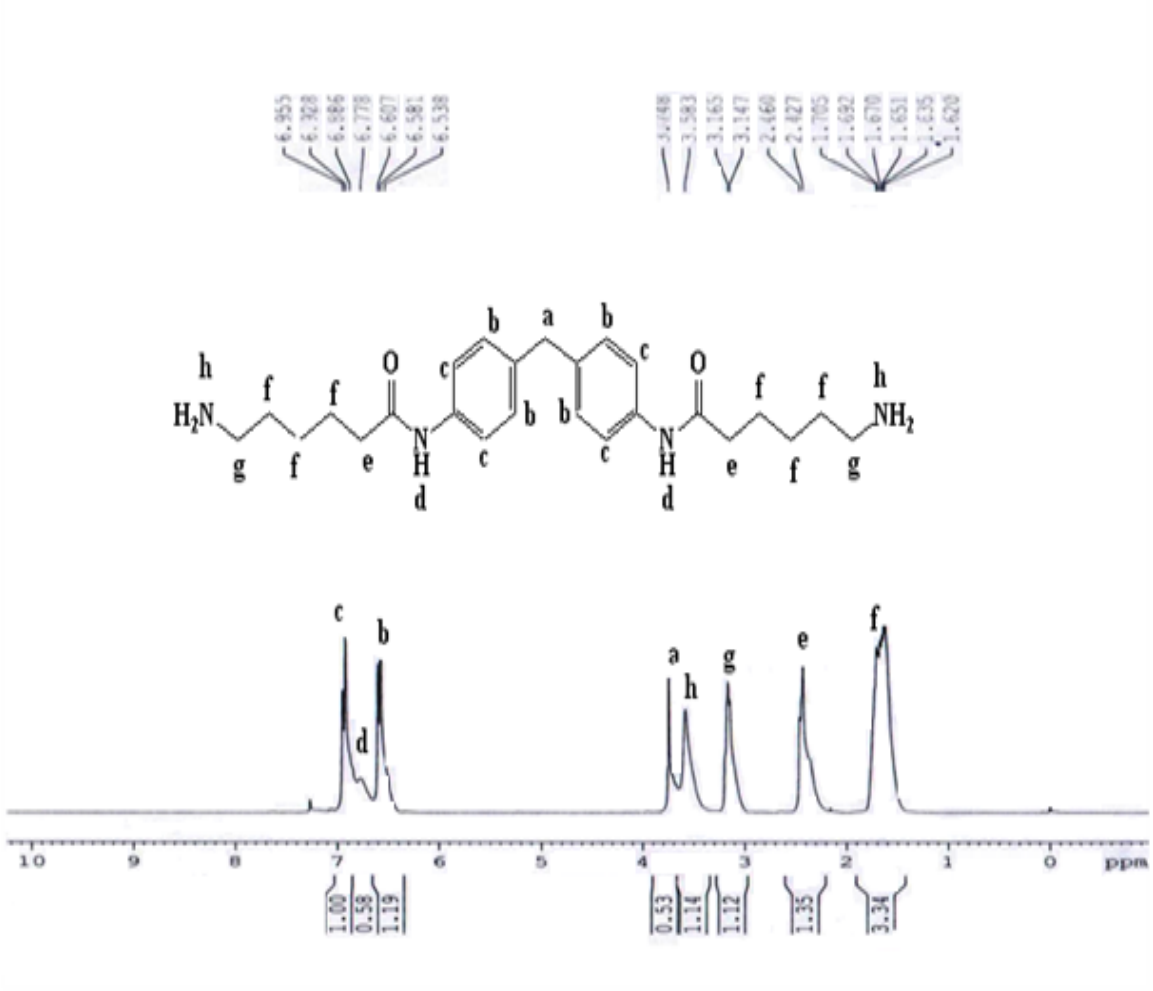


Figure S2a: ^{1}H NMR spectra of N, N'-(4,4'-methylenebis(4,1-phenylene))bis(6-aminohexanamide) (CPA)

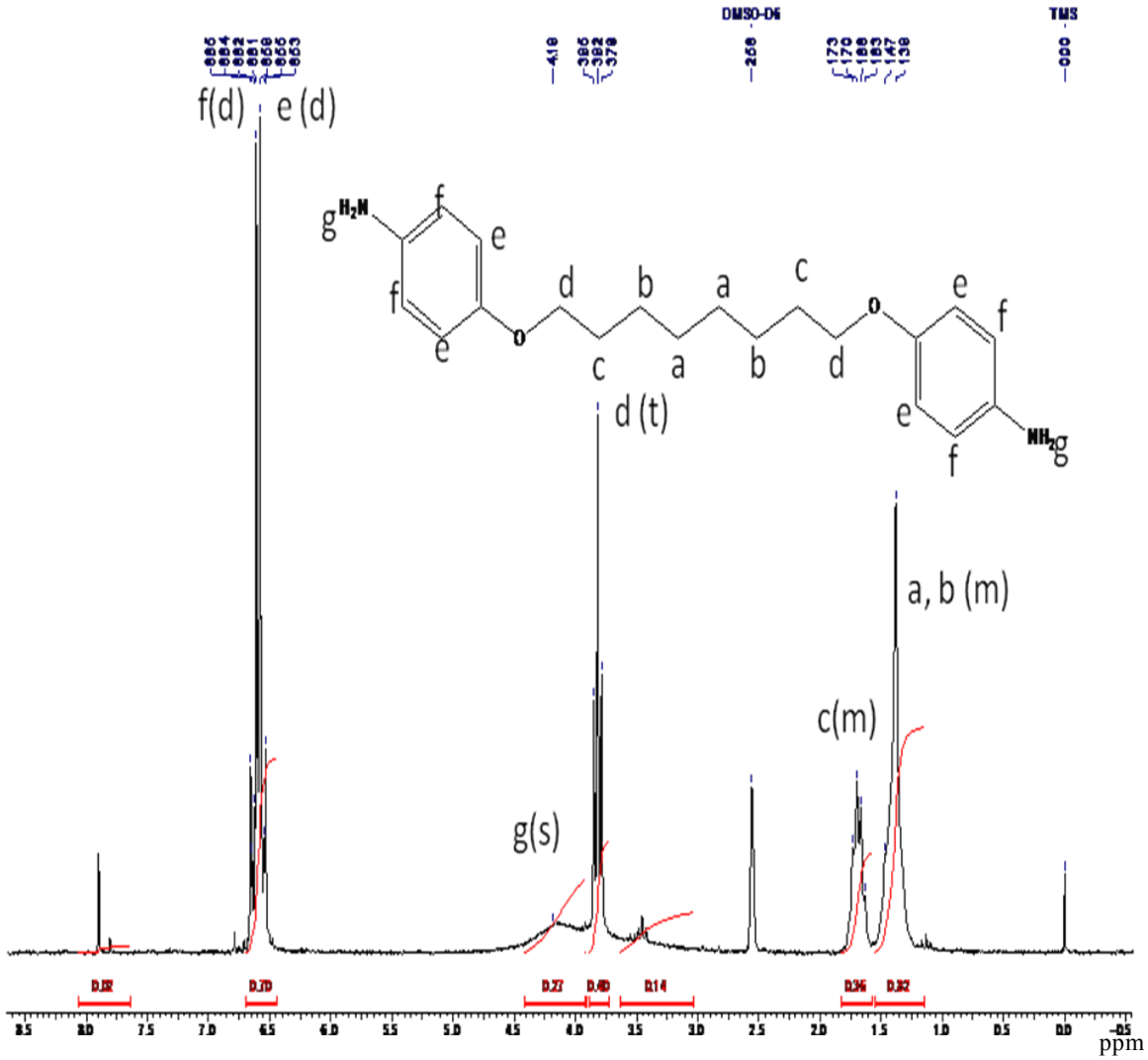


Figure S2b: ^{1}H NMR spectra of 1, 8-bis (4-aminophenoxy) octane (OMA)

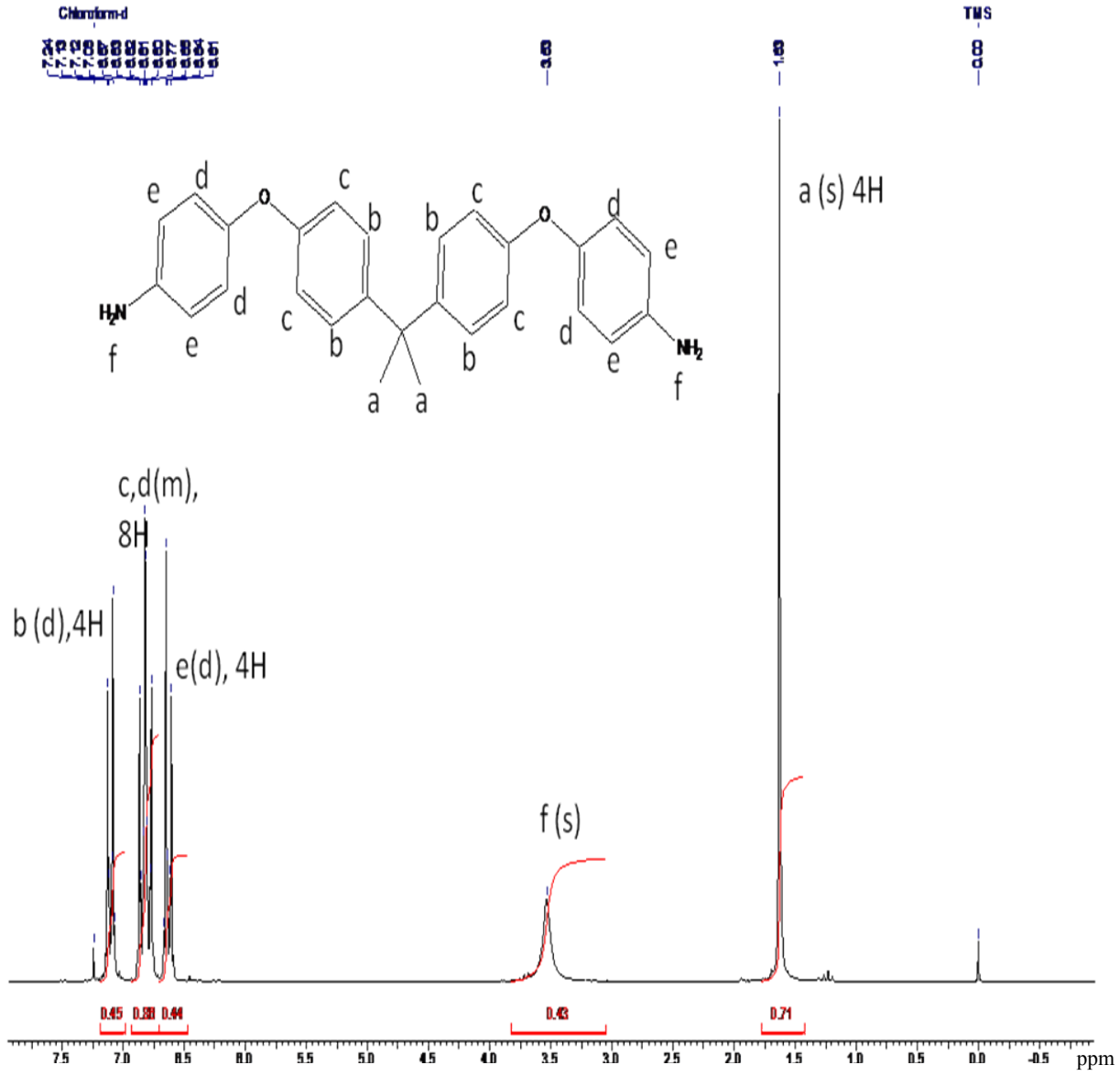


Figure S2c: ^{1}H NMR spectra of 4-(4-(2-(4-(4-aminophenoxy) phenyl) propan-2-yl) phenoxy) benzenamine (BPA)

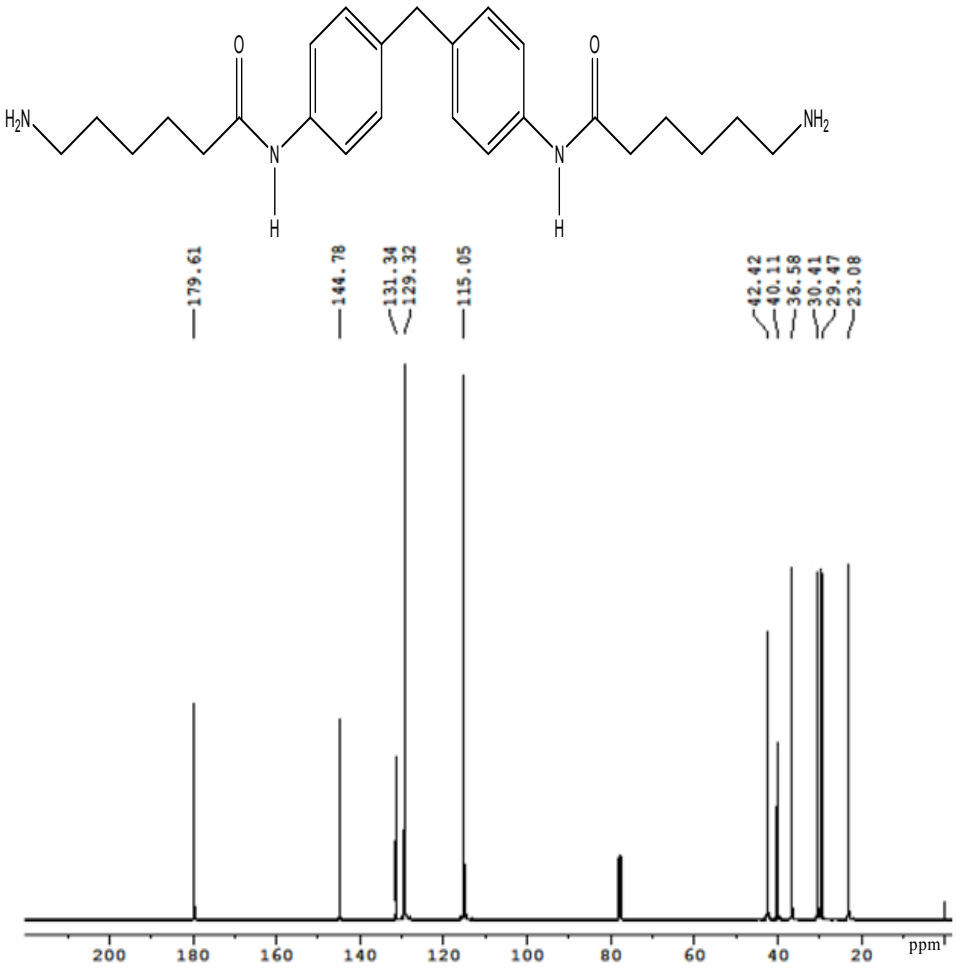


Figure S3a: ^{13}C NMR spectra of N, N'-(4,4'-methylenebis(4,1-phenylene))bis(6-aminohexanamide) (CPA)

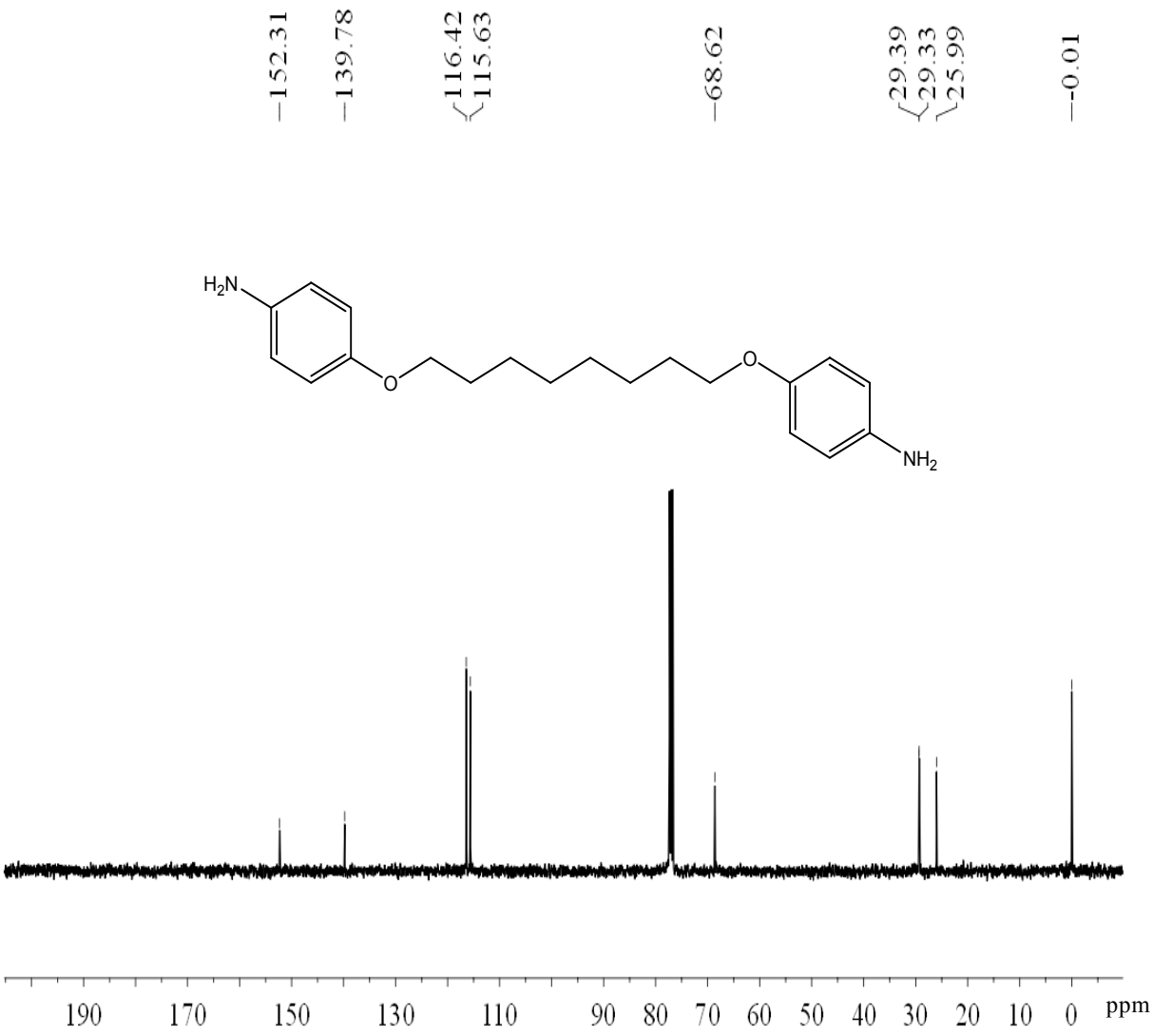


Figure S3b: ^{13}C NMR spectra of of 1, 8-bis (4-aminophenoxy) octane (OMA)

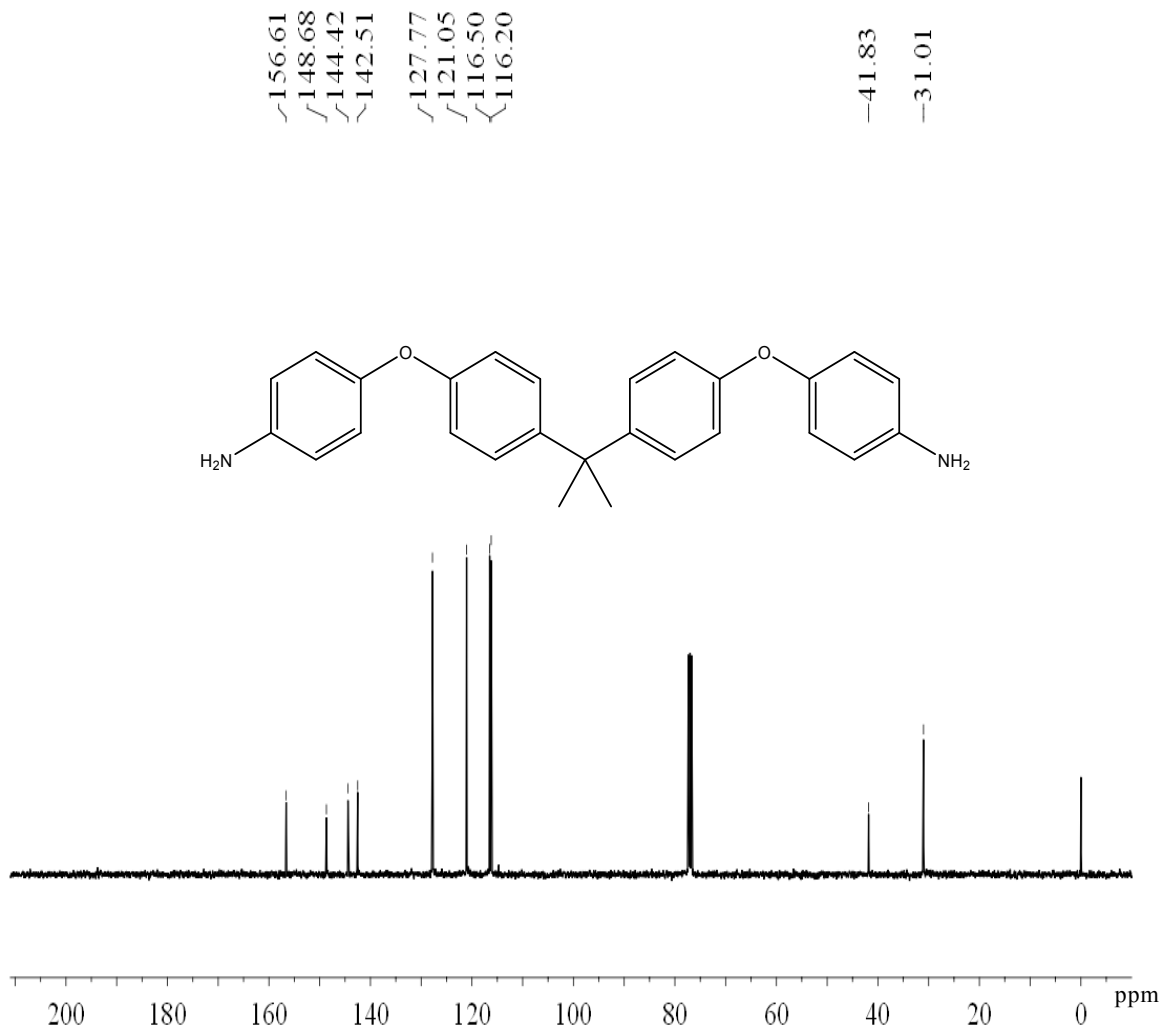


Figure S3c: ^{13}C NMR spectra 4-(4-(2-(4-(4-aminophenoxy) phenyl) propan-2-yl) phenoxy) benzenamine (BPA)