

Supporting Information for
“A New Procedure for the Synthesis of π -Conjugated Polymers via
Ligand-Free Iron(III)-Catalyzed Oxidative Homocoupling Reaction of
Grignard Reagents”

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1. GPC results for the polymers.

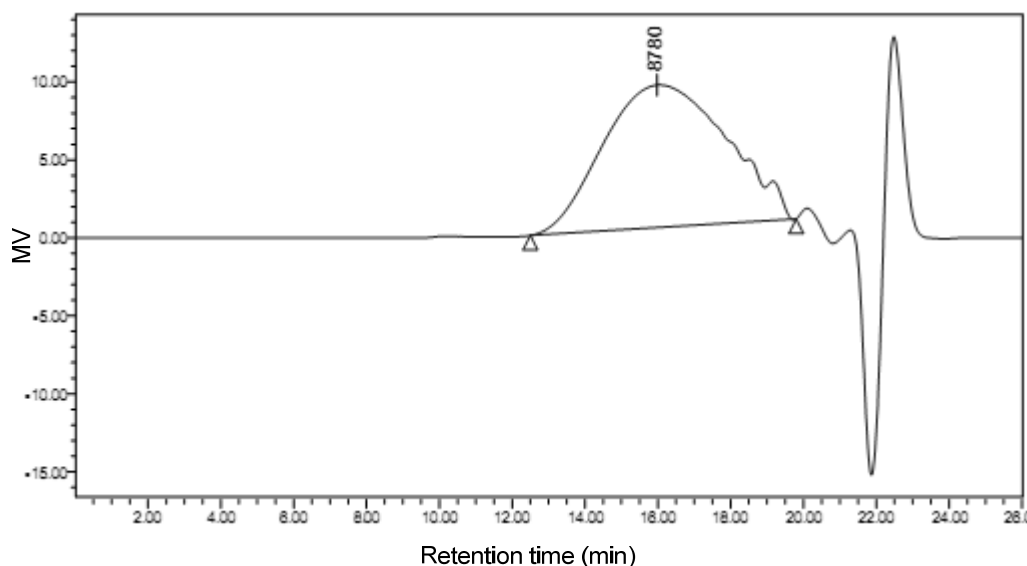


Fig. S-1 GPC curve of PFO, obtained by precipitating in methanol.

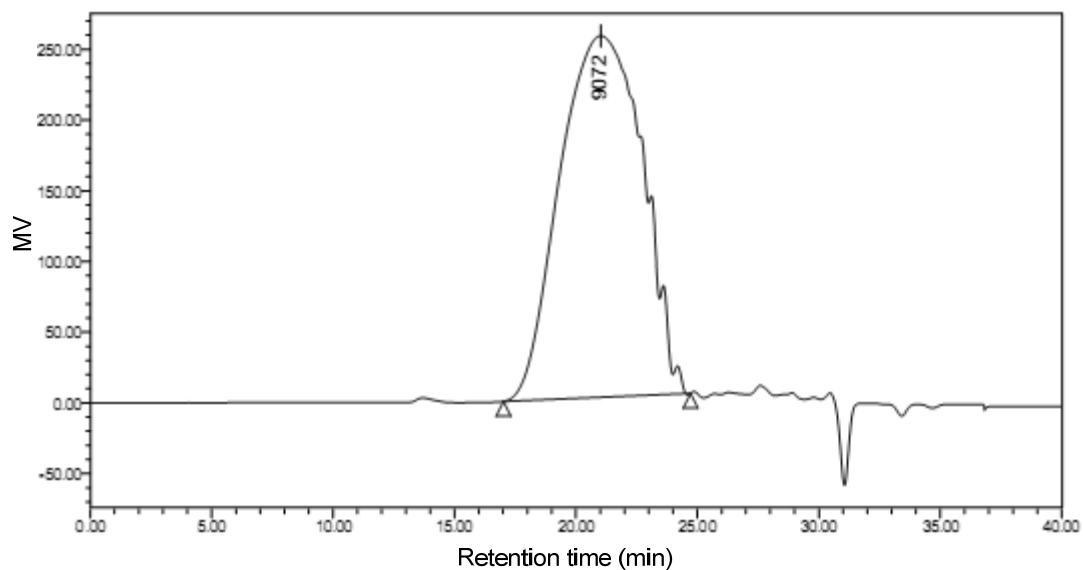


Fig. S-2 GPC curve of PFO, obtained by extracting with acetone for 24 hr in a Soxhlet extractor.

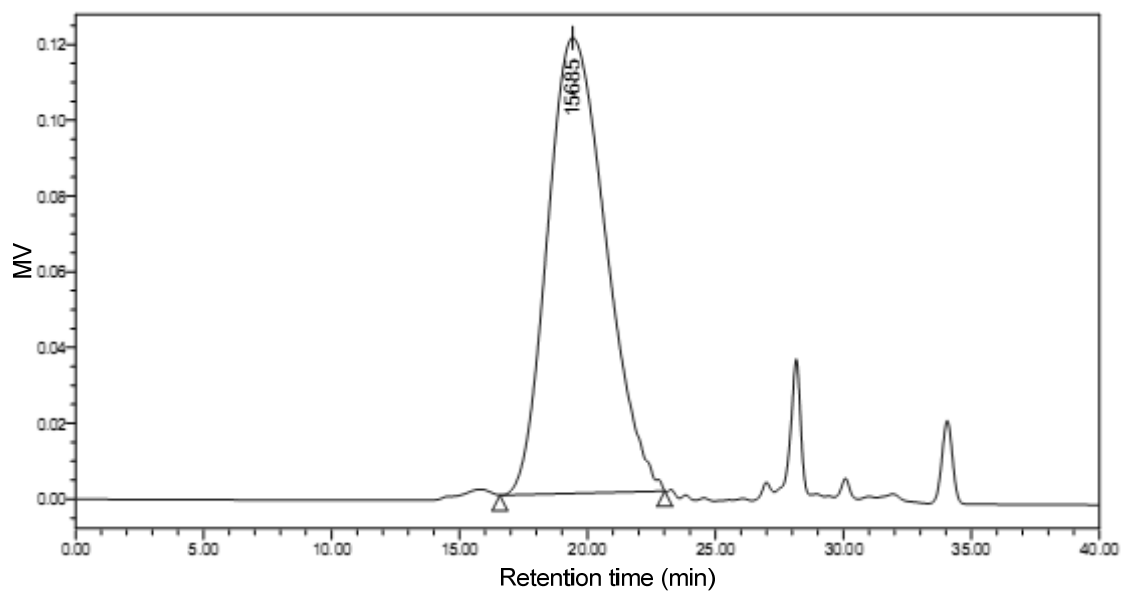


Fig. S-3 GPC curve of PFO, obtained by precipitating in a mixture of methanol and THF (1:2, v/v).

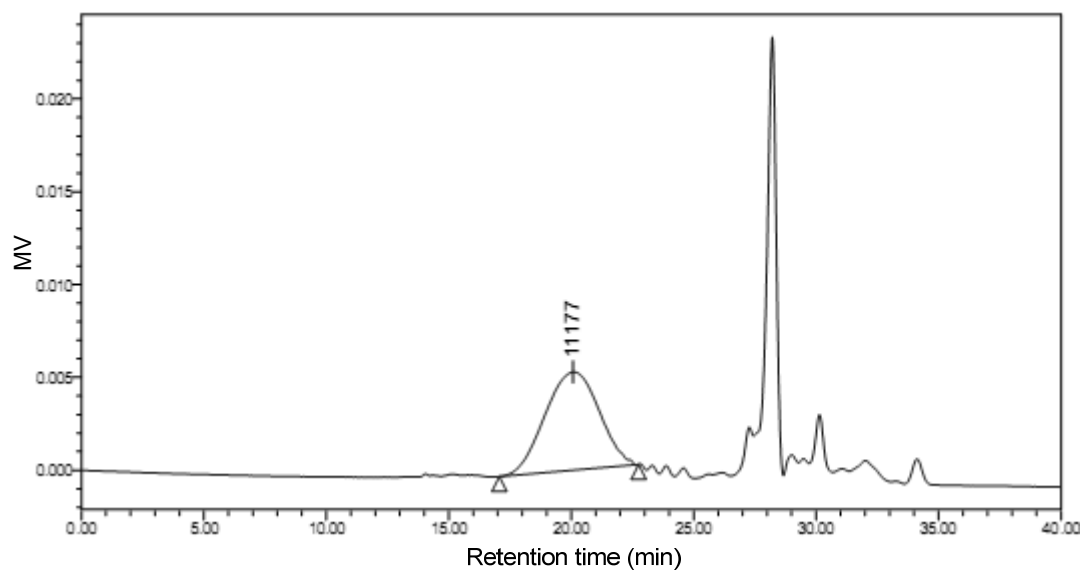


Fig. S-4 GPC curve of PFO after the polymerization was run for 1 min.

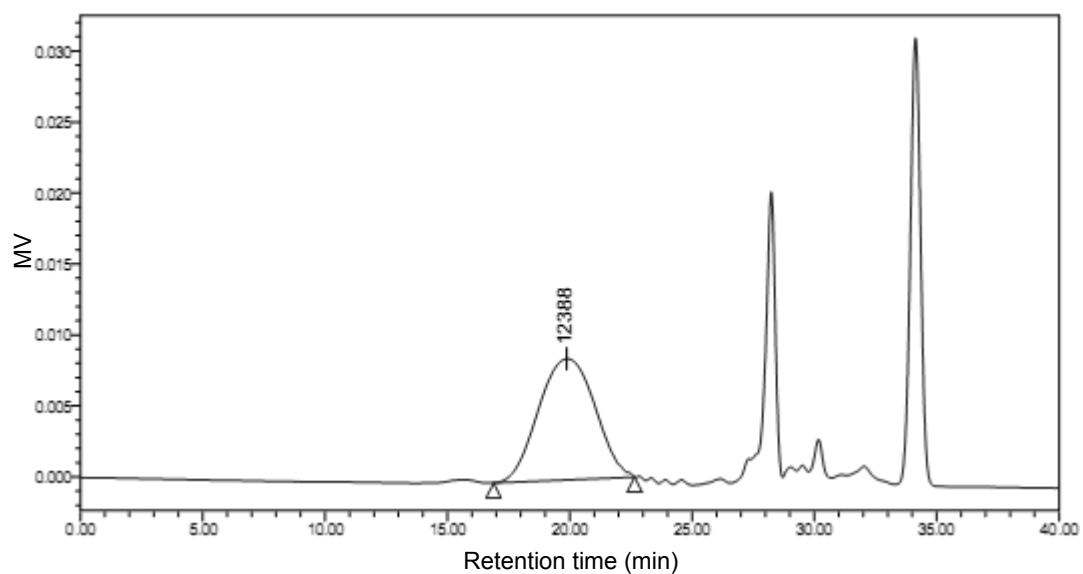


Fig. S-5 GPC curve of PFO after the polymerization was run for 2 min.

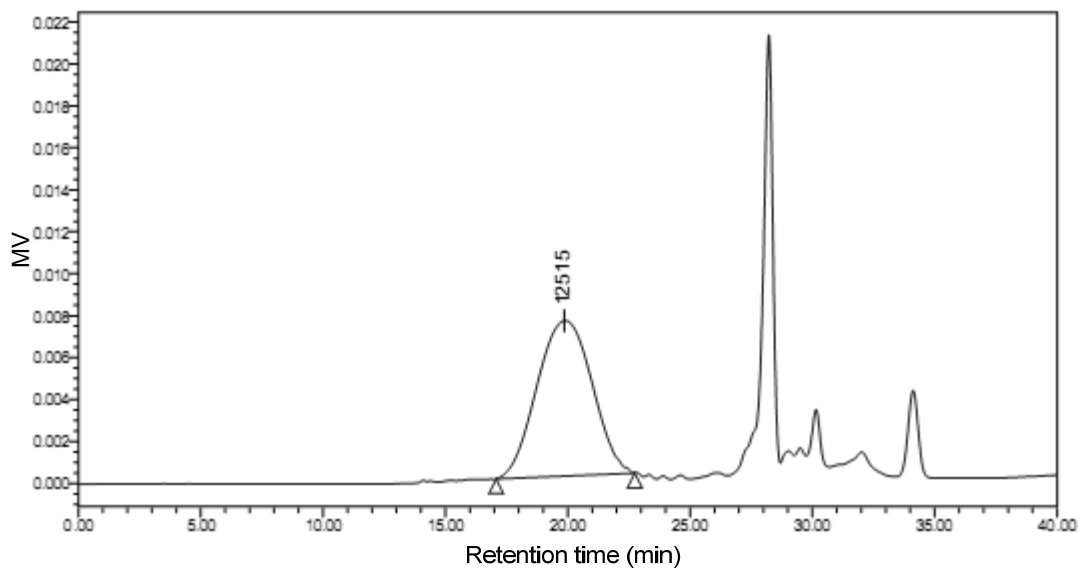


Fig. S-6 GPC curve of PFO after the polymerization was run for 3 min.

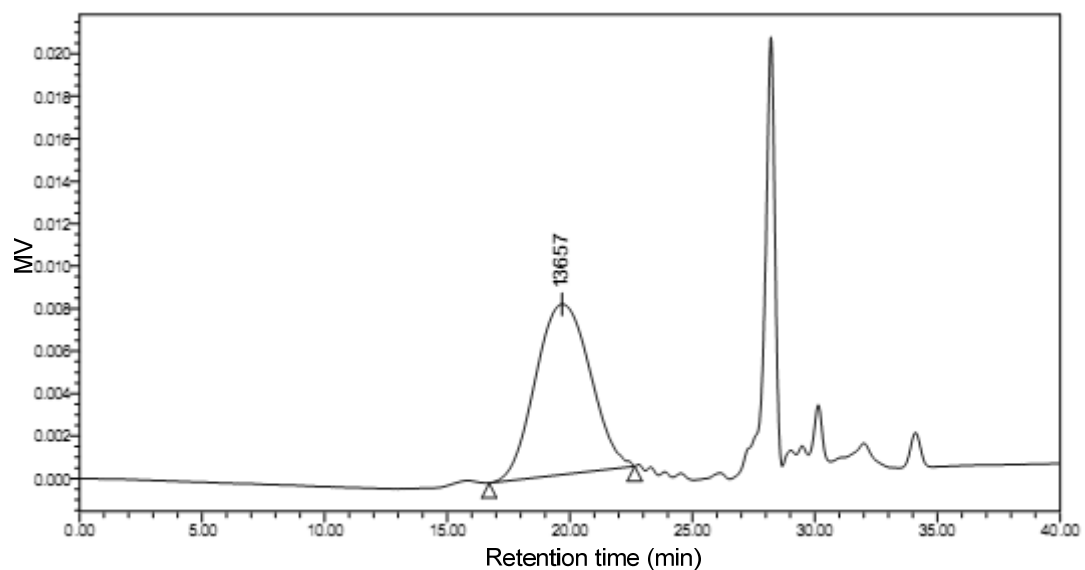


Fig. S-7 GPC curve of PFO after the polymerization was run for 5 min.

2. NMR spectra of the polymers

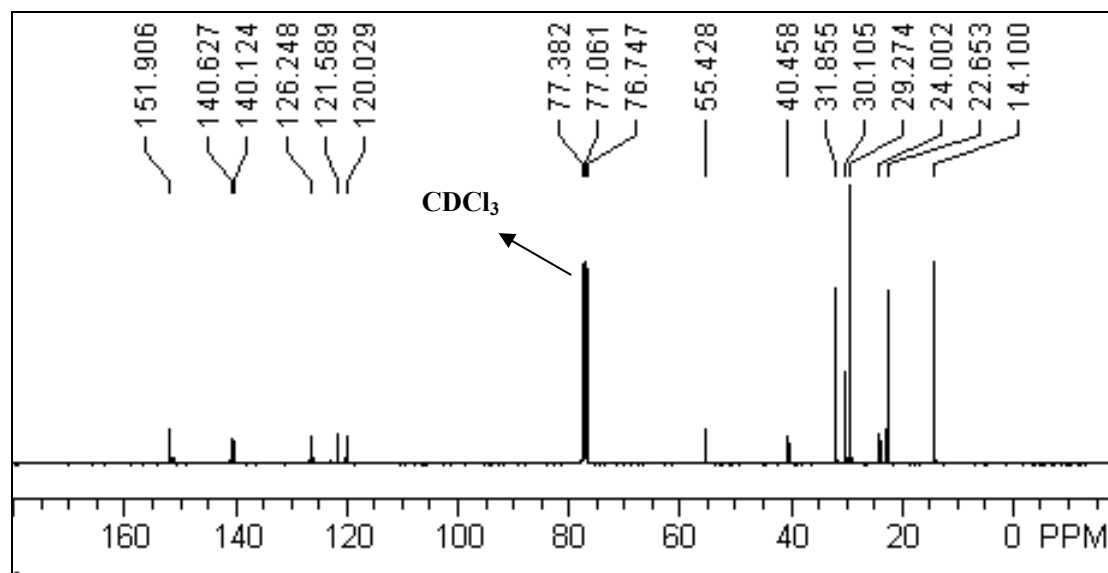


Fig. S-8 ^{13}C NMR spectrum of poly(9,9-dioctyl-2,7-fluorene)(PFO) (125 M Hz, CDCl_3).

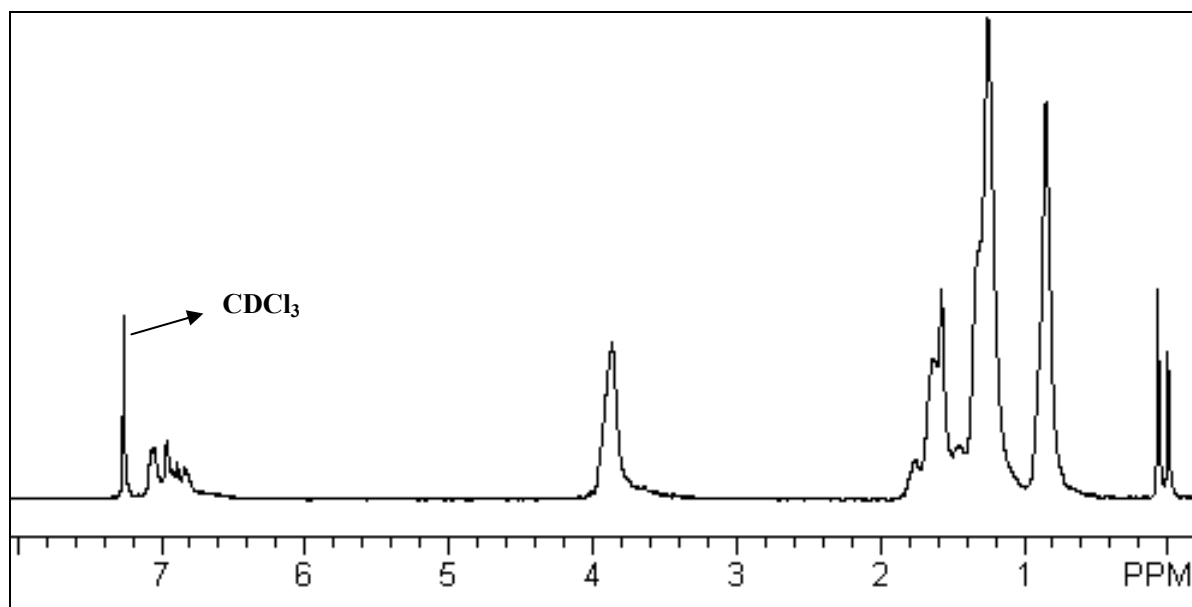


Fig. S-8 ^1H NMR spectrum of poly(2,5-dihexyloxyphenylene-1,4-diyl) (PHP) (300 M Hz, CDCl_3).

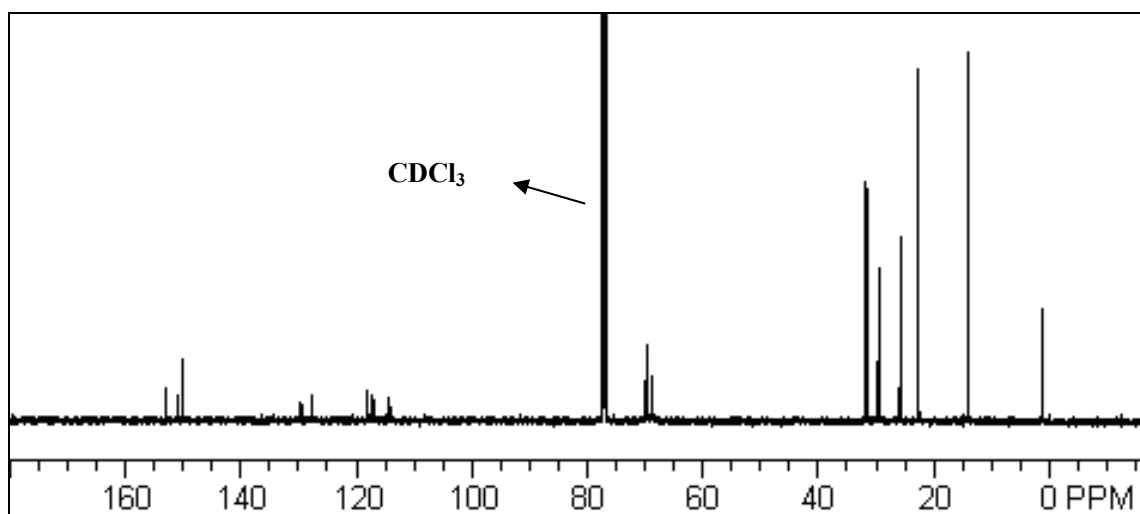


Fig. S-9 ^{13}C NMR spectrum of poly(2,5-dihexyloxyphenylene-1,4-diyl) (PHP) (125 M Hz, CDCl_3).

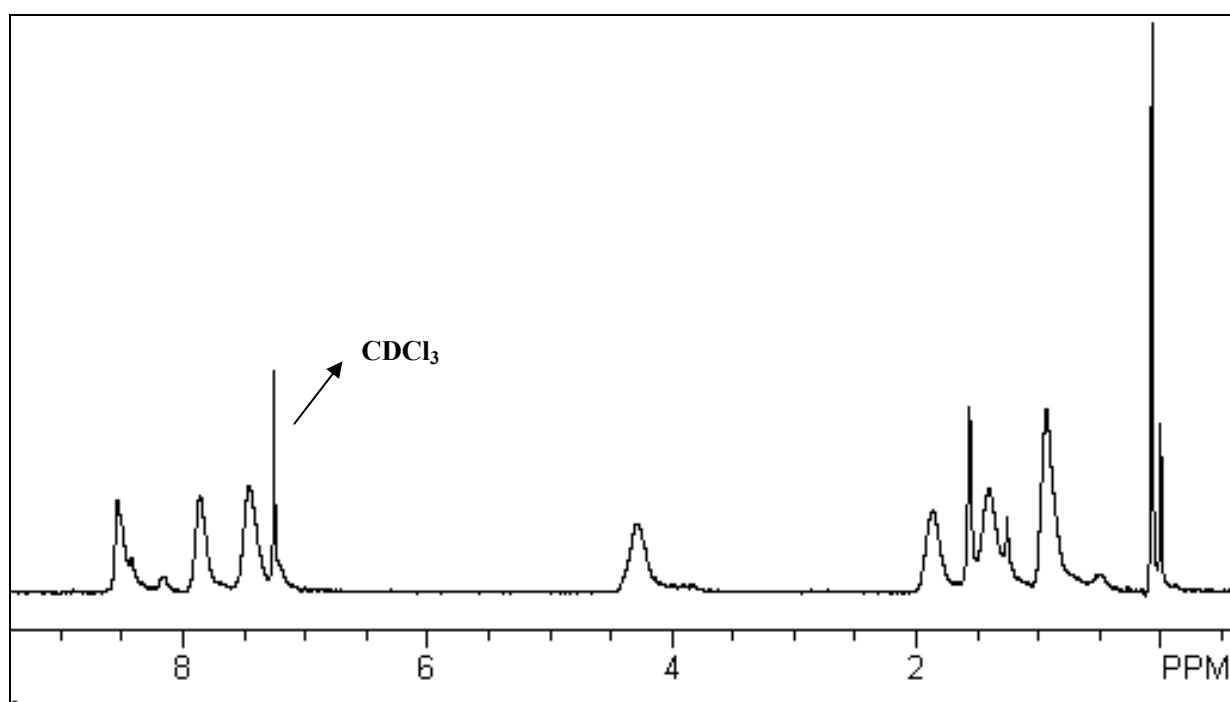


Fig. S-10 ^1H NMR spectrum of poly(N-butyl-carbazol-3,6-diyl) (PBC) (300 M Hz, CDCl_3).

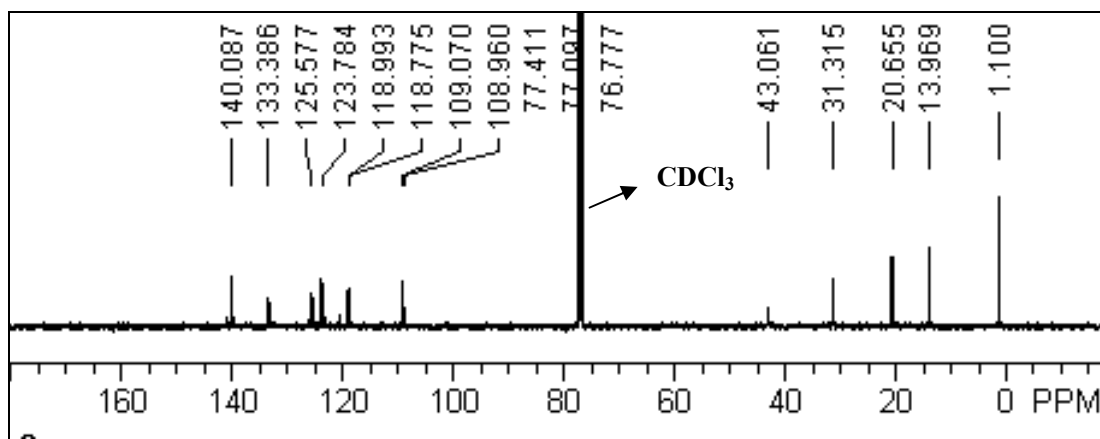


Fig. S-11 ^{13}C NMR spectrum of poly(N-butyl-carbazol-3,6-diyl) (PBC) (125 M Hz, CDCl_3).