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APPENDIX



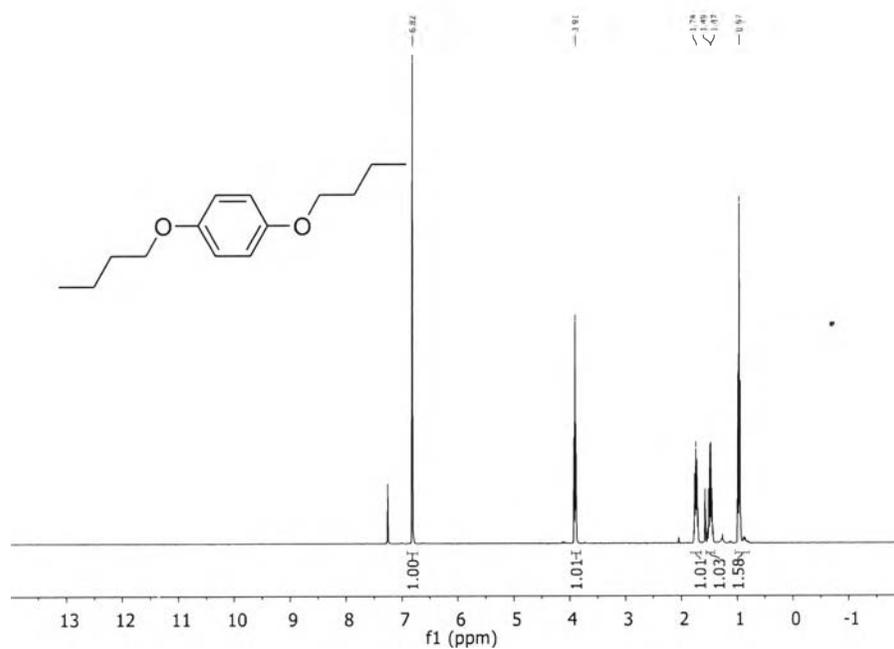


Figure S.1 ¹H-NMR spectrum of 1,4-dibutoxybenzene (2c)

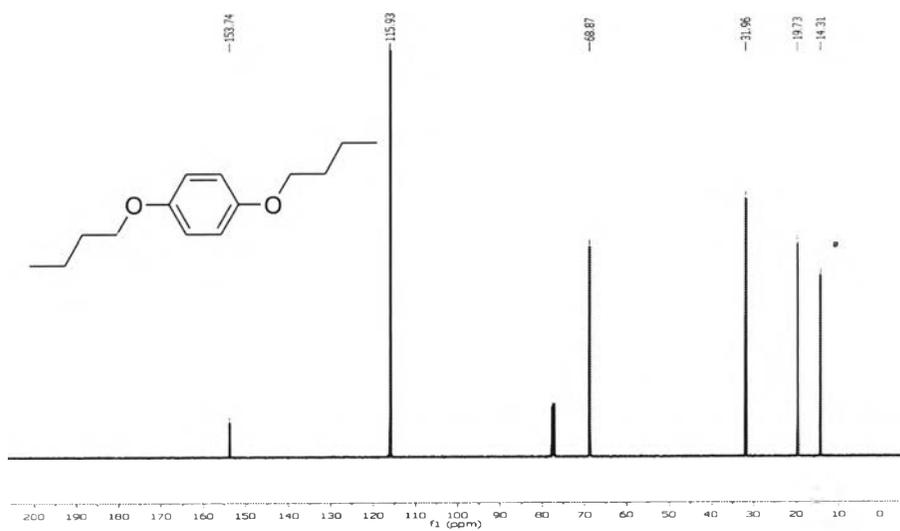


Figure S.2 ¹³C-NMR spectrum of 1,4-dibutoxybenzene (2c)



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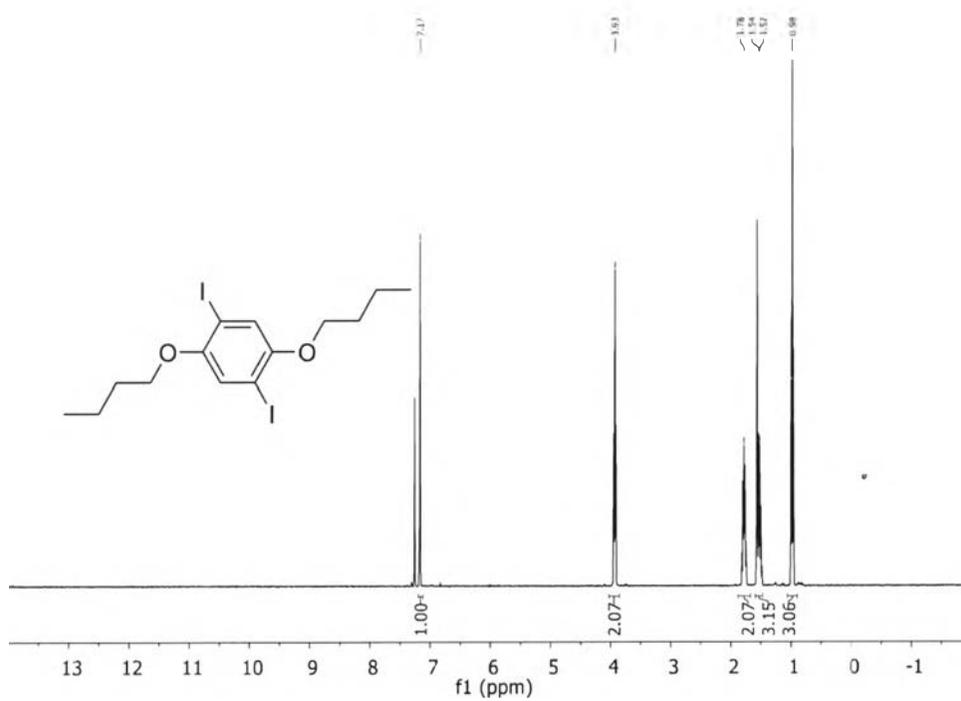


Figure S.3 $^1\text{H-NMR}$ spectrum of bis-diiodo1,4-dibutoxybenzene

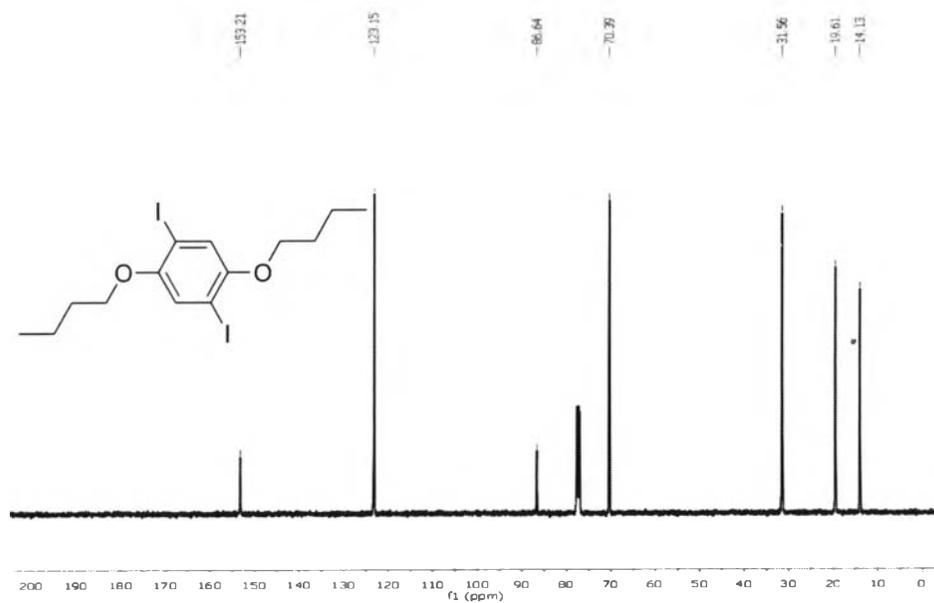


Figure S.4 $^{13}\text{C-NMR}$ spectrum of bis-diiodo1,4-dibutoxybenzene (3c)

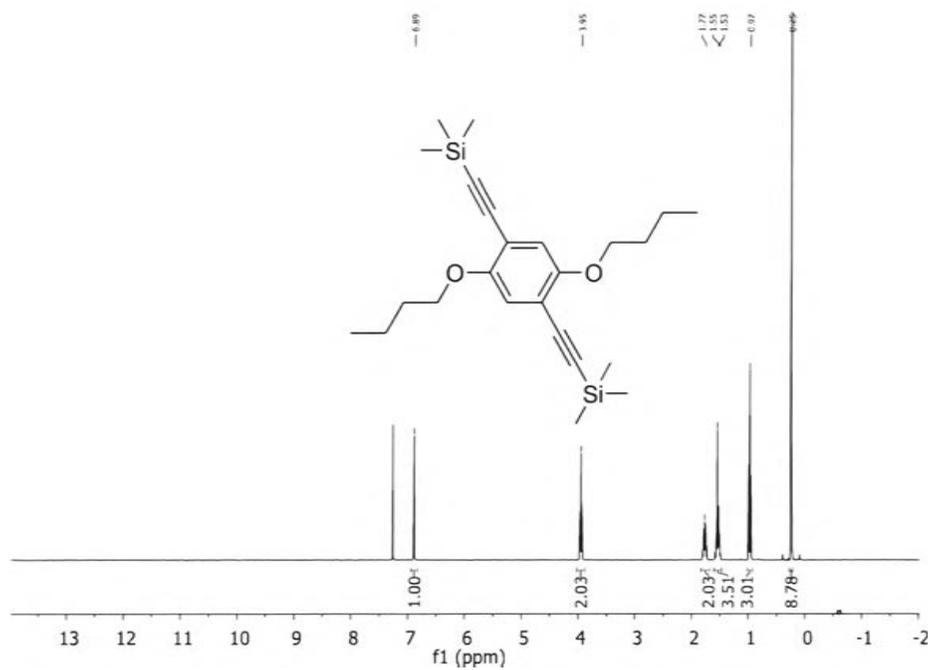


Figure S.5 $^1\text{H-NMR}$ spectrum of 1,4-dibutoxy-2,5-bis(2(trimethylsilyl)ethynyl)benzene

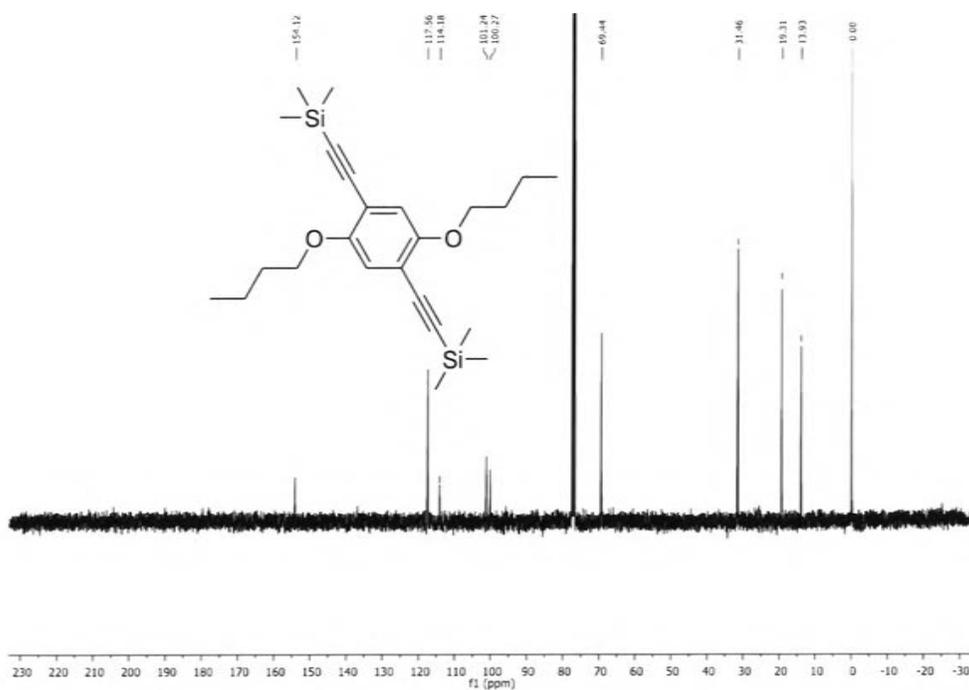


Figure S.6 $^{13}\text{C-NMR}$ spectrum of 1,4-dibutoxy-2,5-bis(2(trimethylsilyl)ethynyl)benzene

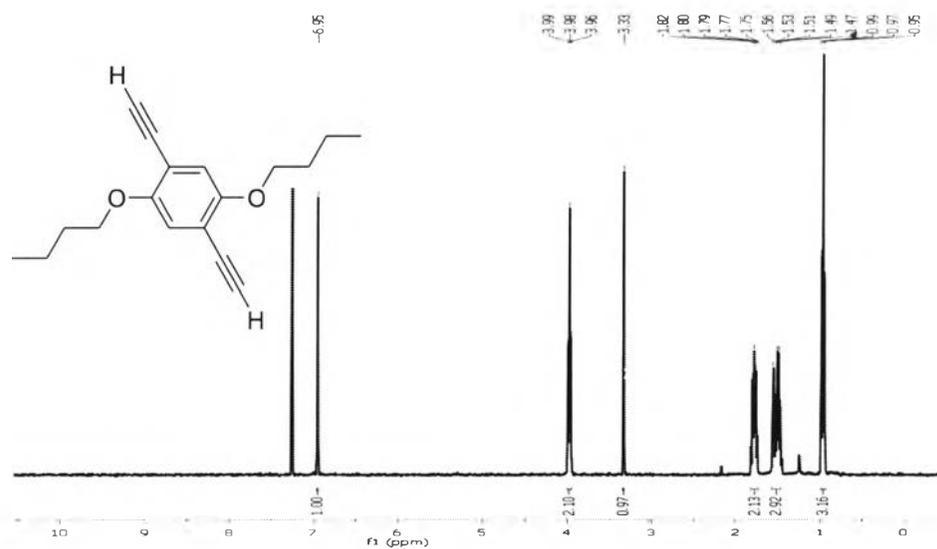


Figure S. 7 ¹H-NMR spectrum of 1,4-dibutoxy-2,5diethynylbenzene

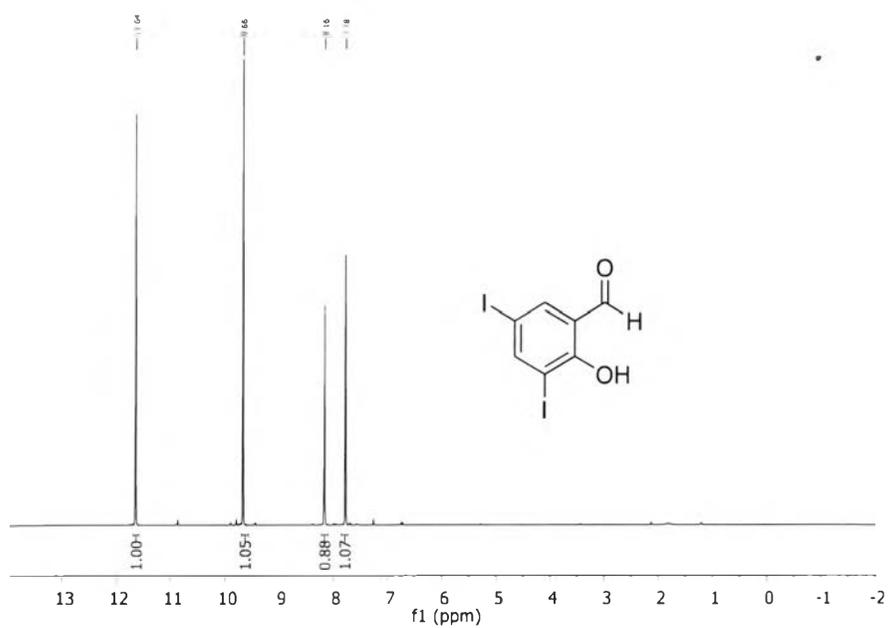


Figure S. 8 ¹H-NMR spectrum of 3,5-diiodosalicylaldehyde

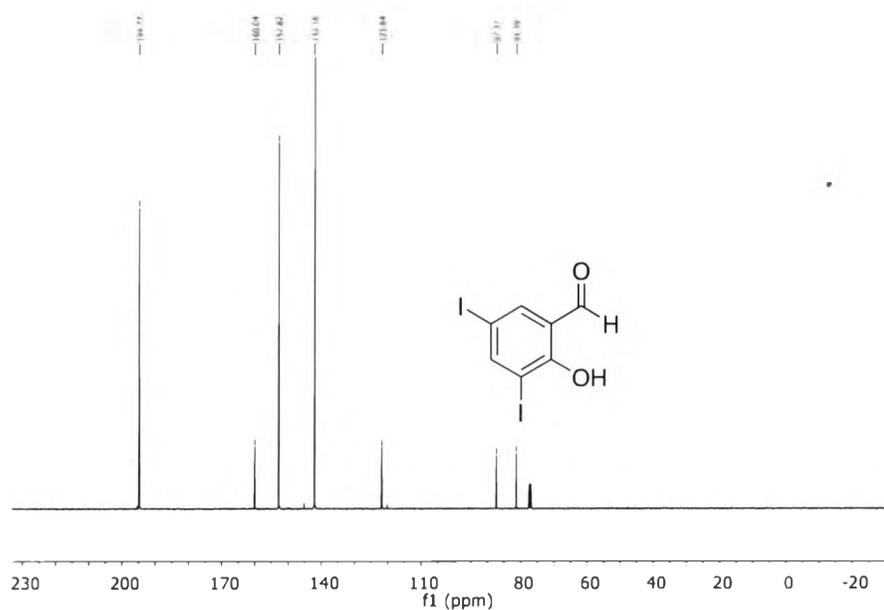


Figure S.9 ^{13}C -NMR spectrum of 3,5-diiodosalicylaldehyde

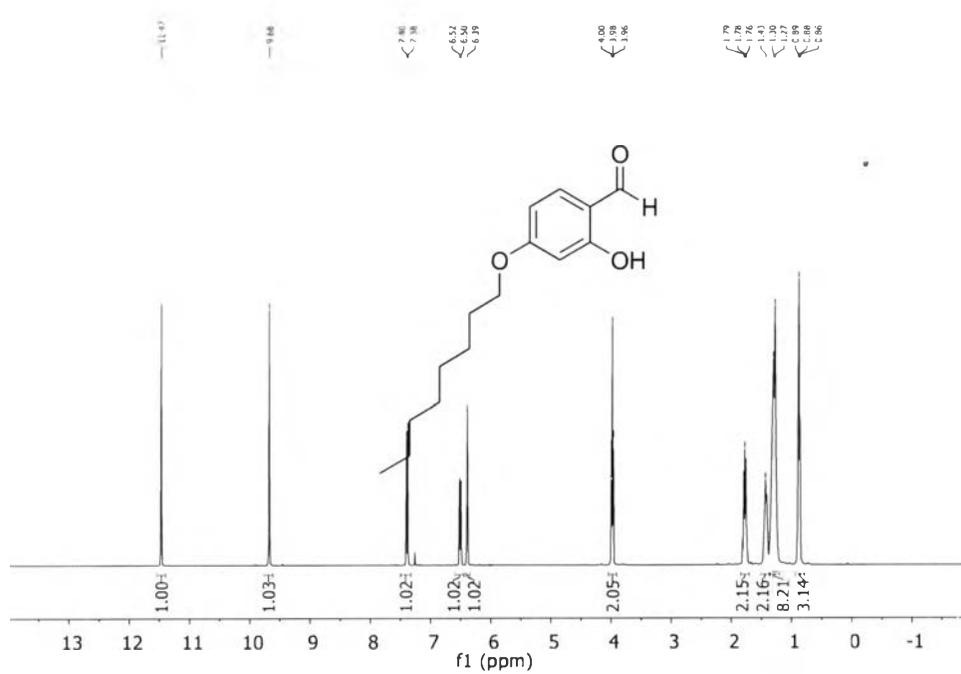
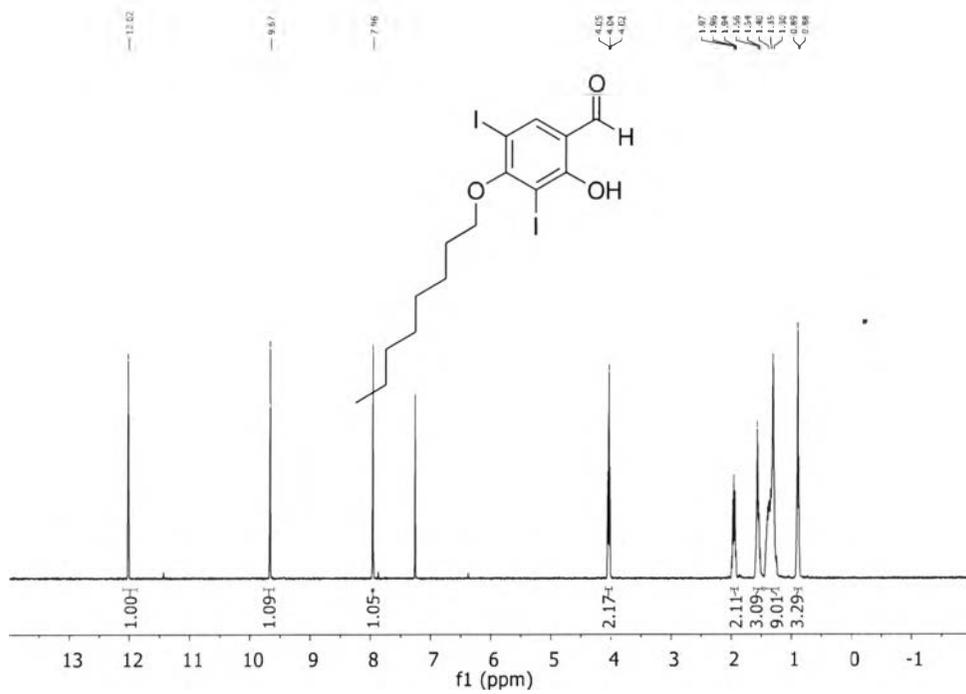
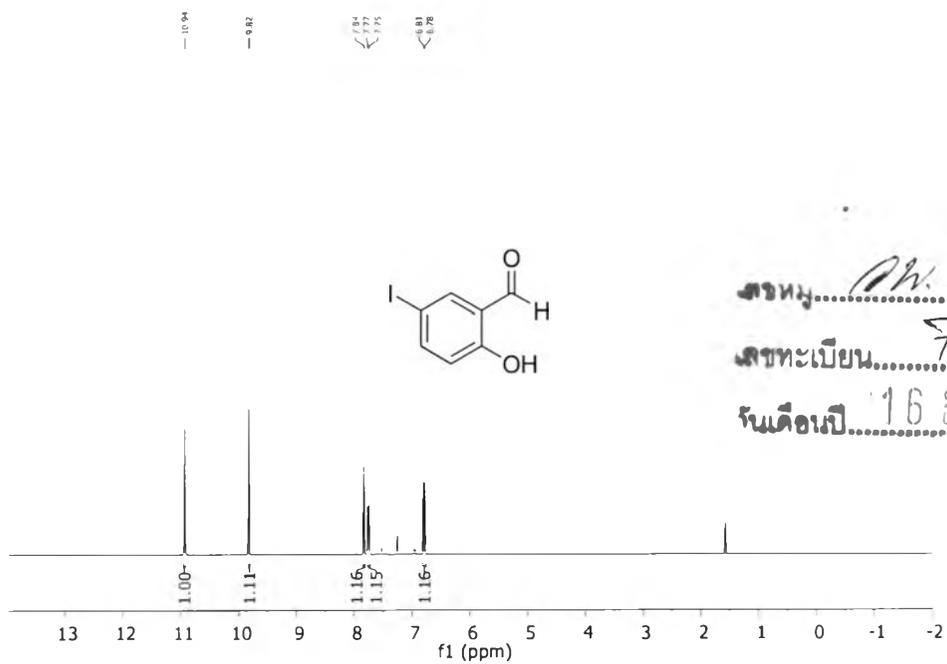


Figure S. 10 ^1H -NMR spectrum of 4-octylsalicylaldehyde



Figure S.11 $^1\text{H-NMR}$ spectrum of 3, 5-diiodo-4-octylsalicylaldehydeFigure S.12 $^1\text{H-NMR}$ spectrum of 5-iodosalicylaldehyde

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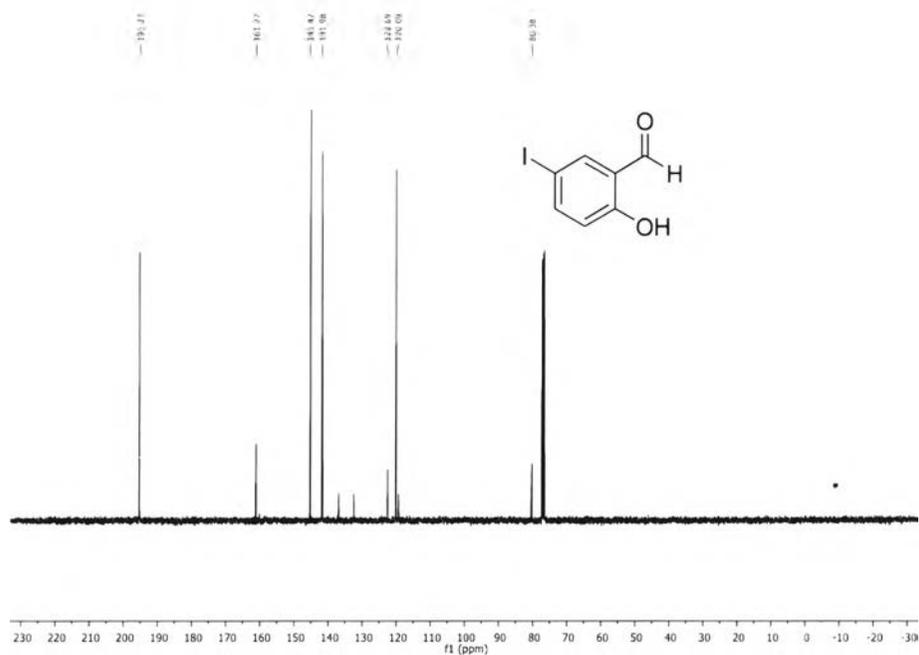


Figure S.13 ^{13}C -NMR spectrum of 5-iodosalicylaldehyde

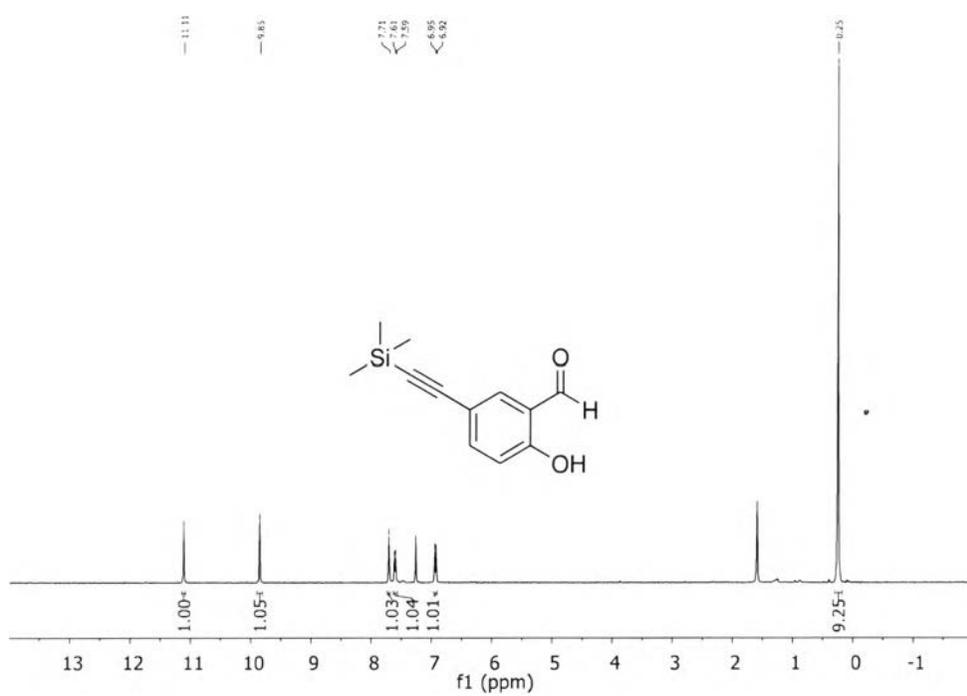
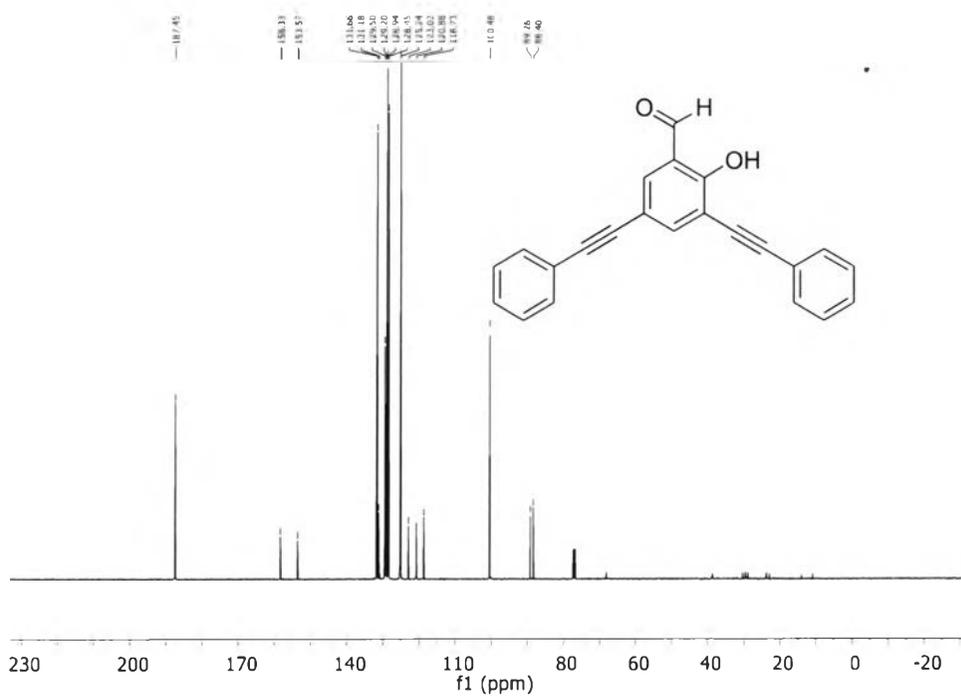
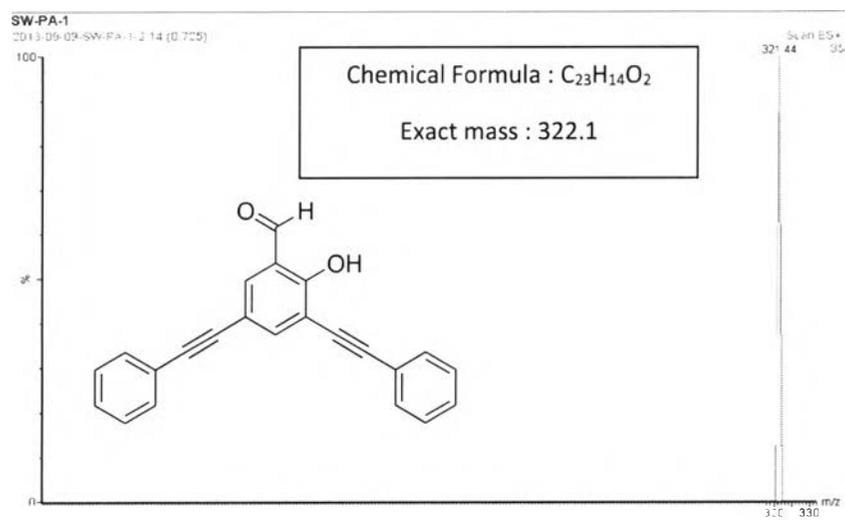
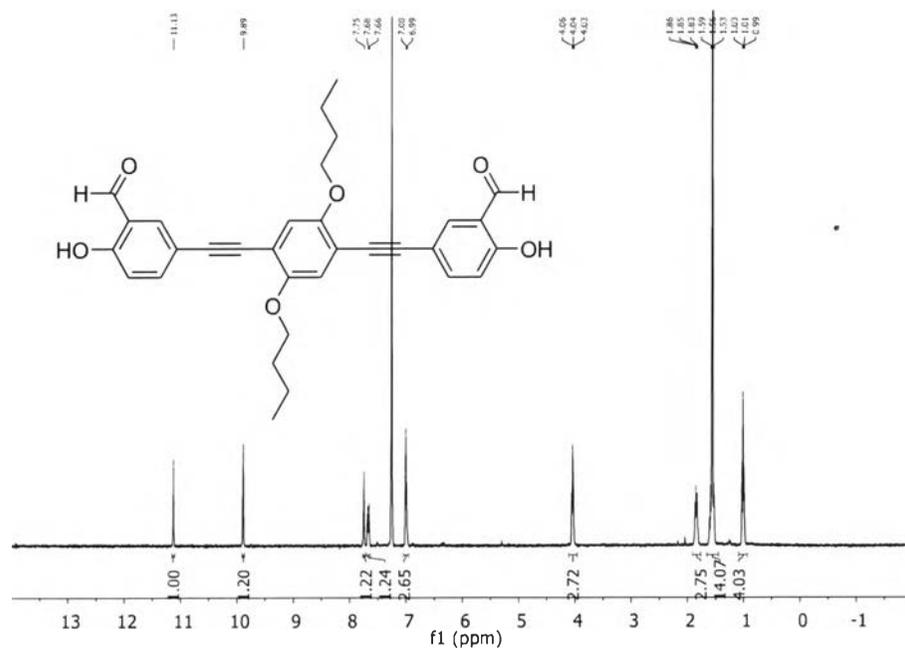
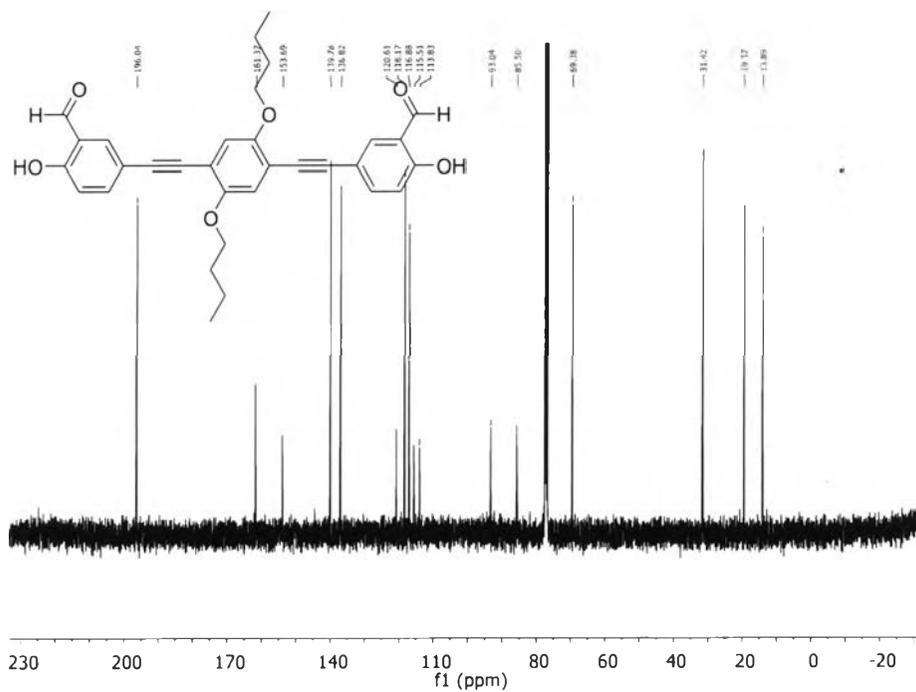


Figure S. 14 ^1H -NMR spectrum of 5-(2-(trimethylsilyl)ethynyl)salicylaldehyde

Figure S.17 ^{13}C -NMR spectrum of PE I

Figure S.18 ¹H-NMR spectrum of PE IIFigure S.19 ¹³C-NMR spectrum of PE II

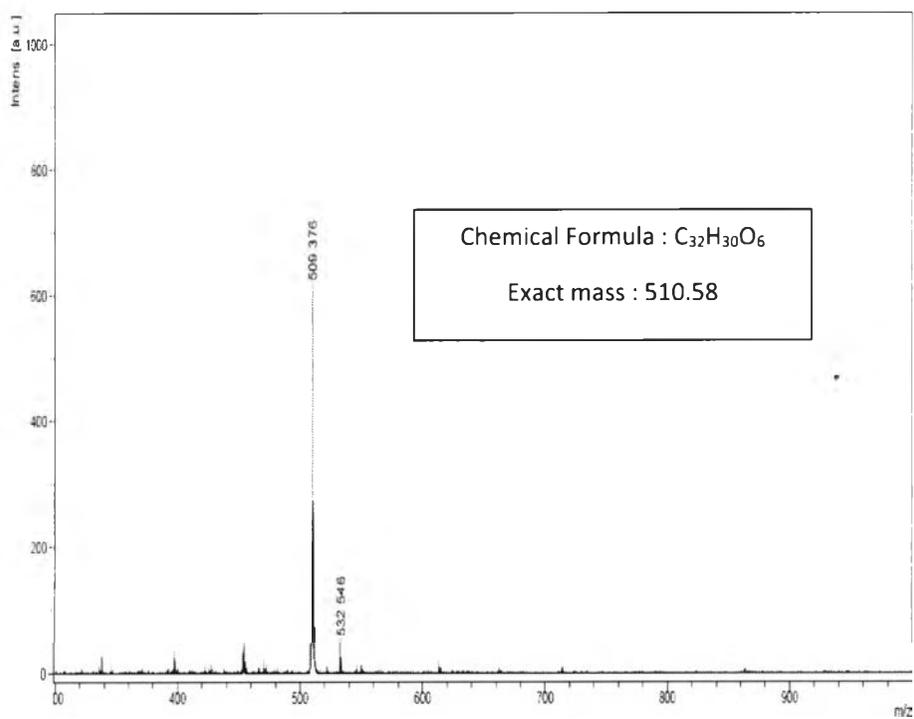


Figure S.20 MALDI-TOF-MS of PE II

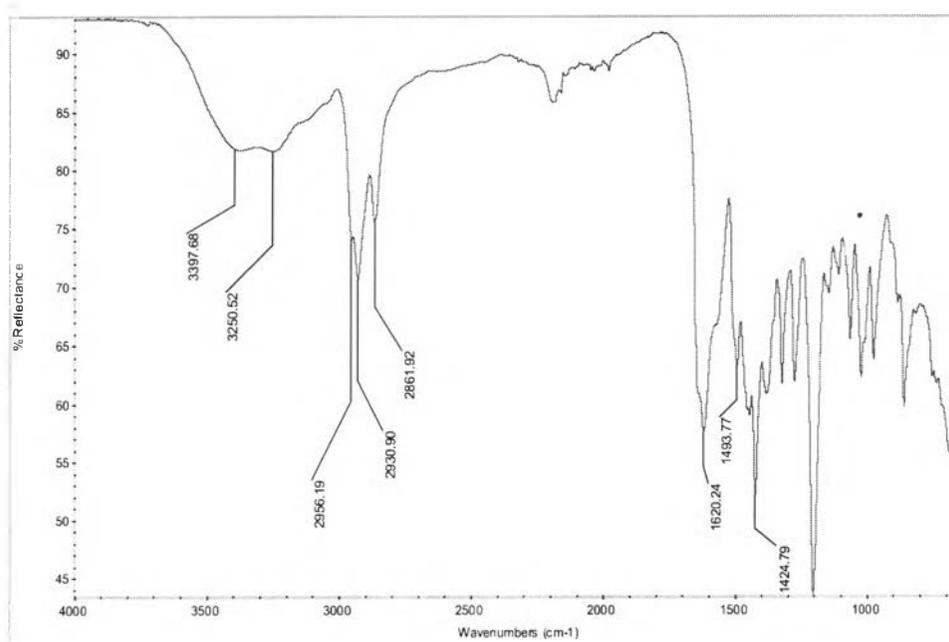


Figure S.21 FT-IR spectrum of PPE I

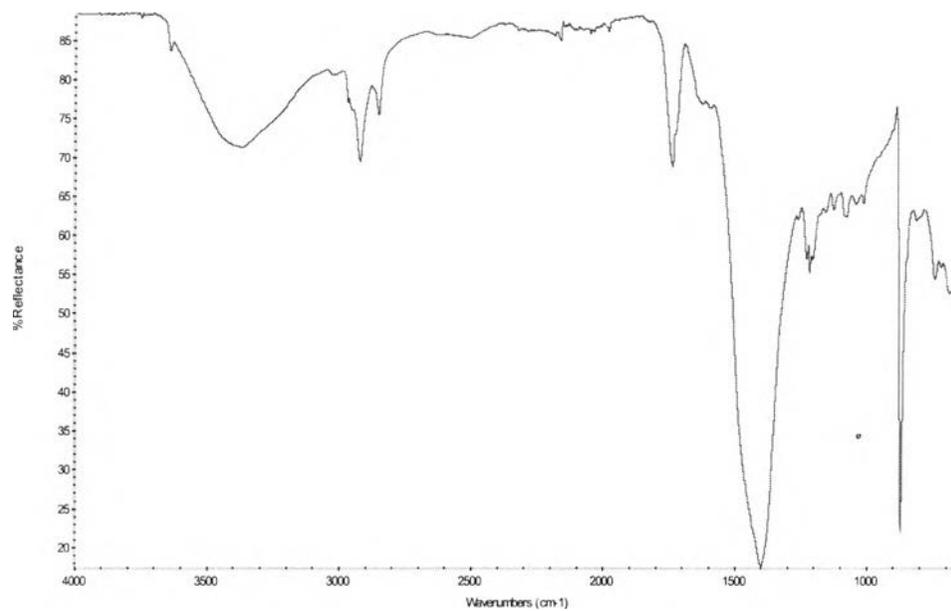


Figure S.22 FT-IR spectrum of PPE II

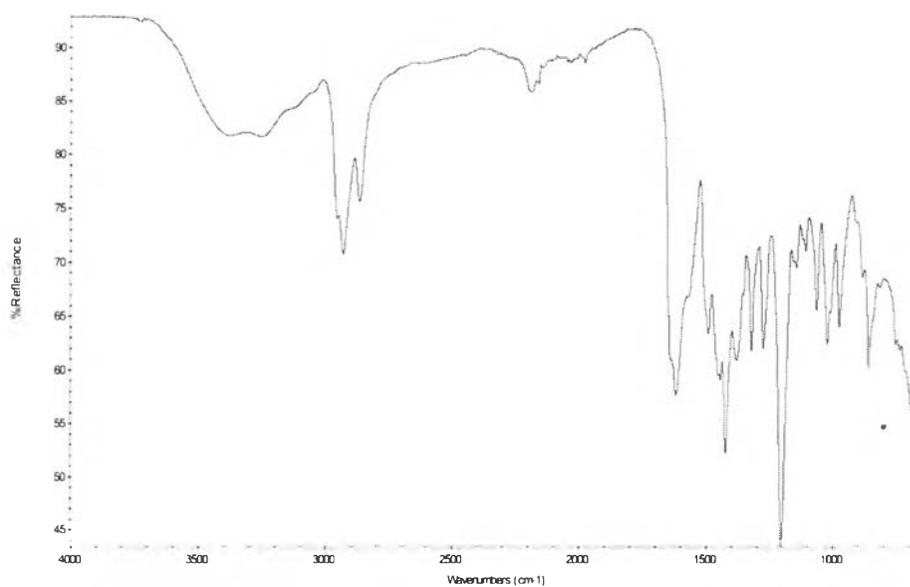


Figure S.23 FT-IR spectrum of PPE III(c)



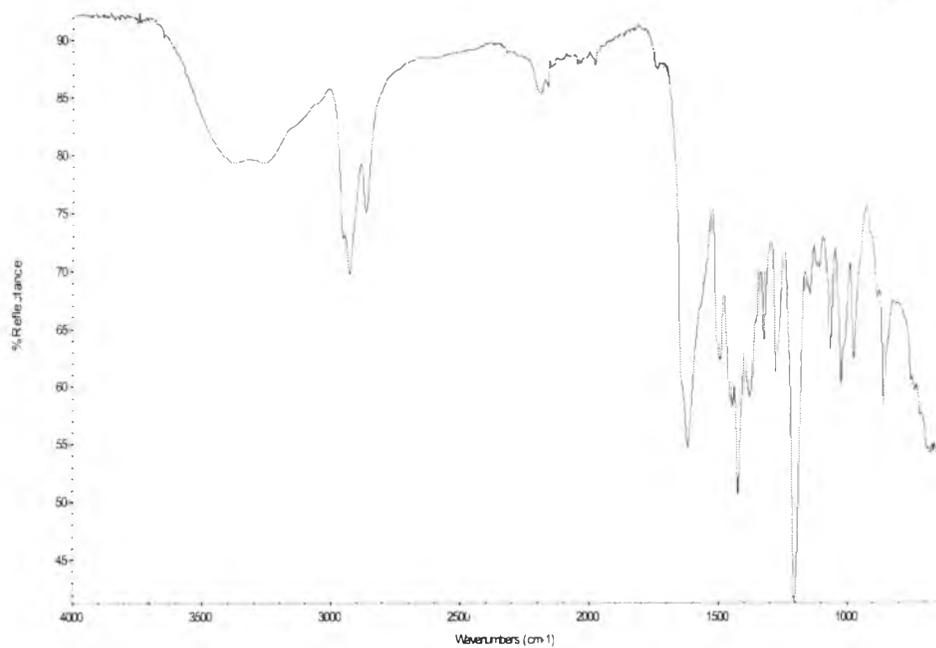


Figure S.24 FT-IR spectrum of PPE IV

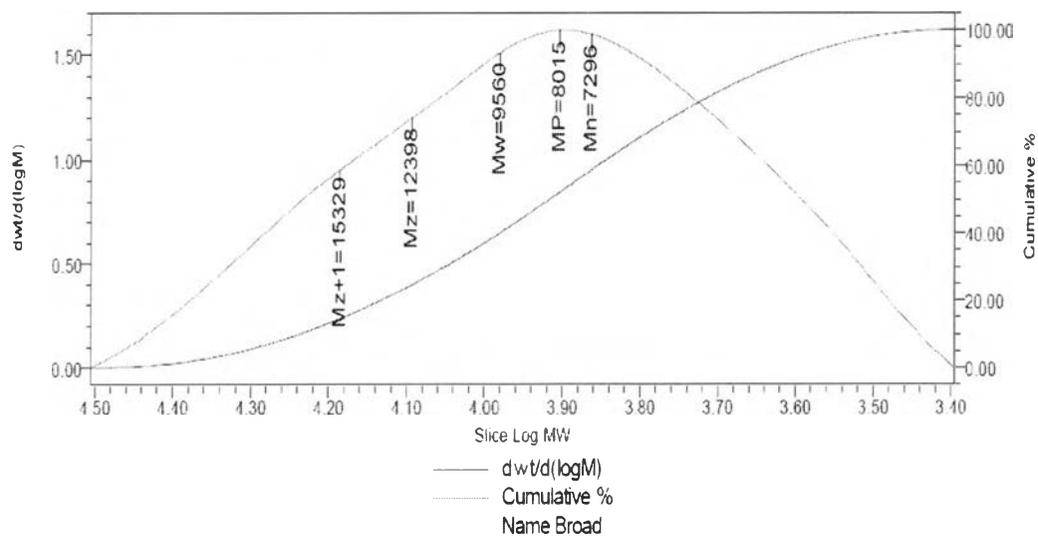


Figure S.25 GPC of PPE II



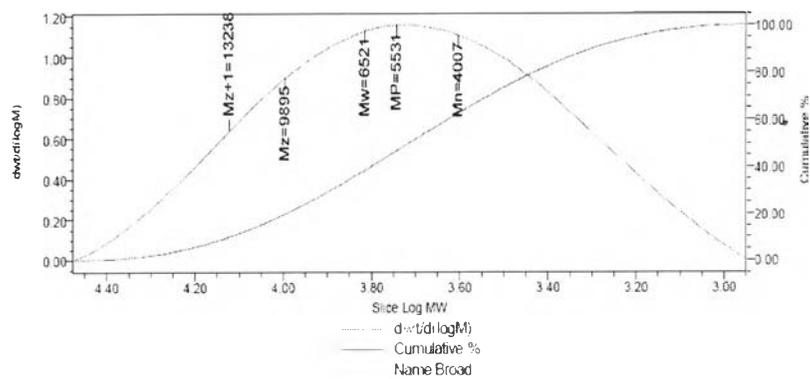


Figure S.26 GPC of PPE IV

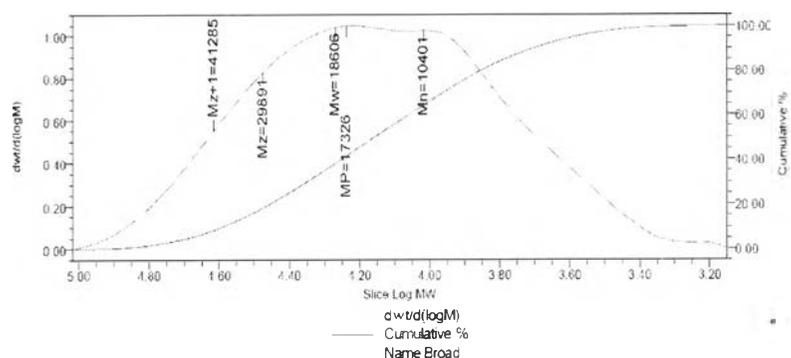


Figure S.27 GPC of PPE III(a)

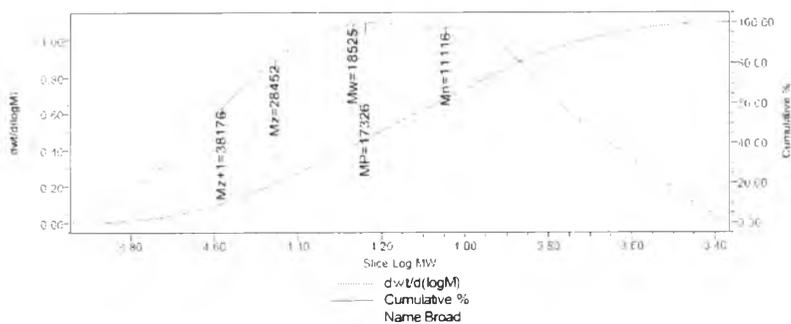


Figure S.28 GPC of PPE III(b)



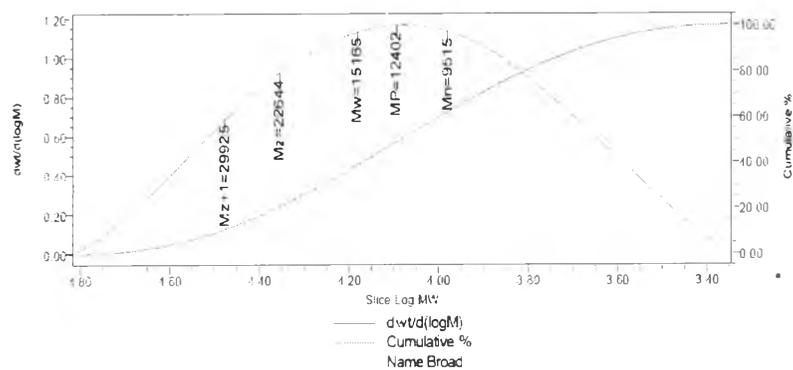


Figure S.29 GPC of PPE III(d)

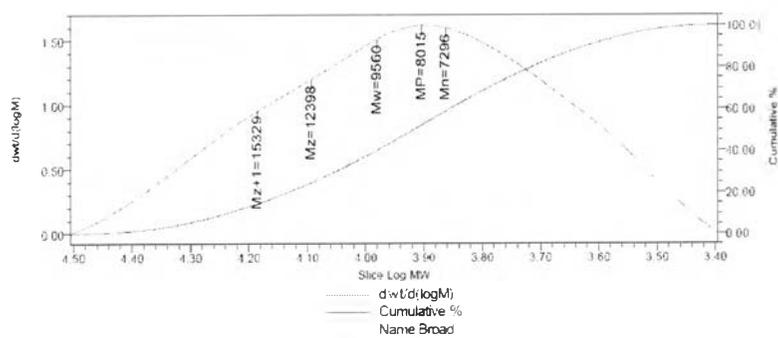


Figure S.30 GPC of PPE III(c)

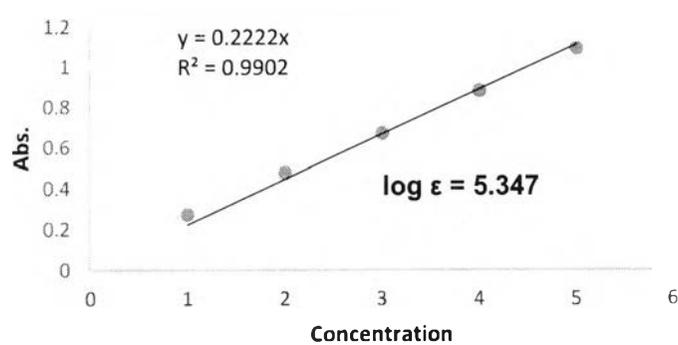


Figure S.31 Molar absorptivity of PE I

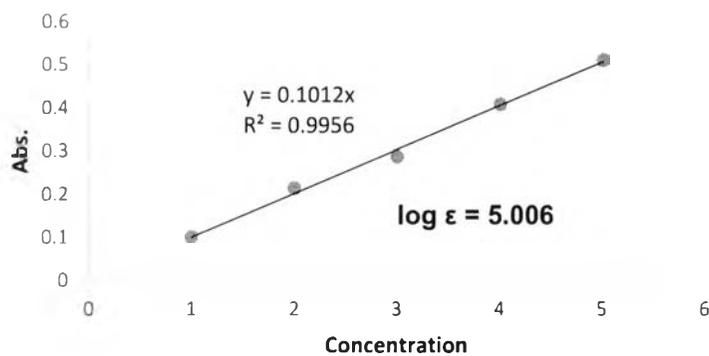
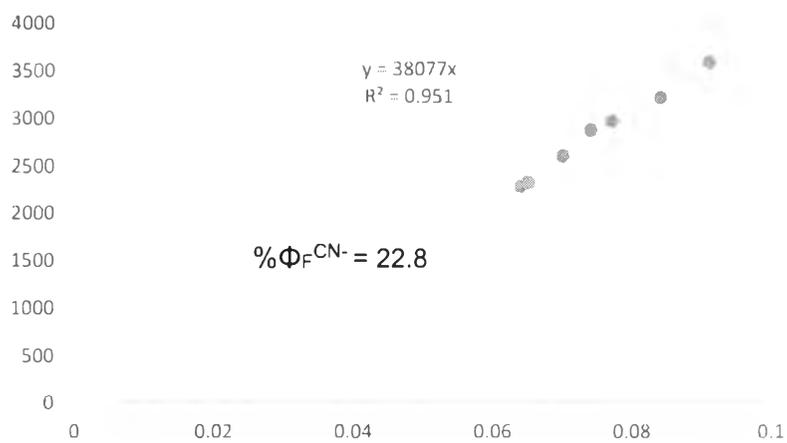
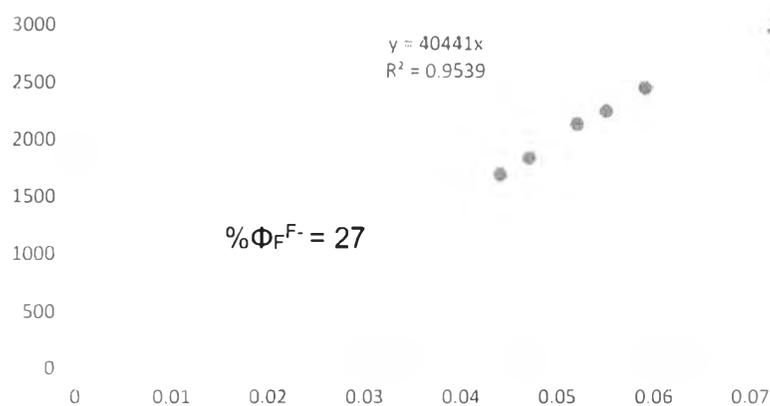


Figure S.32 Molar absorptivity of PE II

Figure S.33 Quantum yield of PE I toward CN^- Figure S.34 Quantum yield of PE II toward F^-

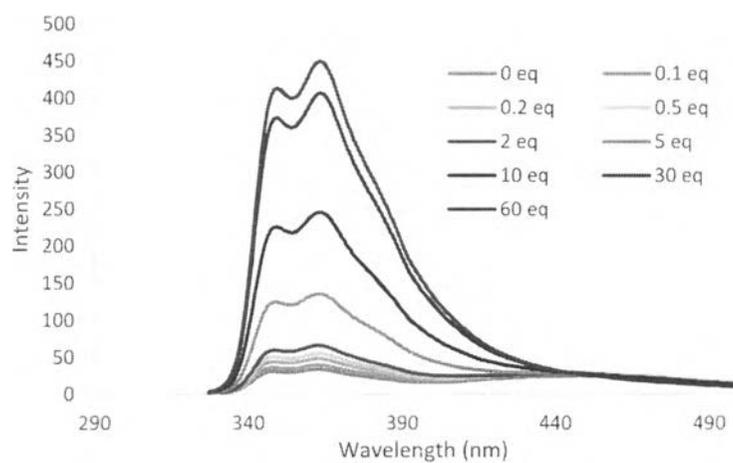


Figure S.35 Fluorescence intensity of PE I (5 μM) at various equiv of cyanide in 90%DMSO/ HEPES buffer pH 7.4.

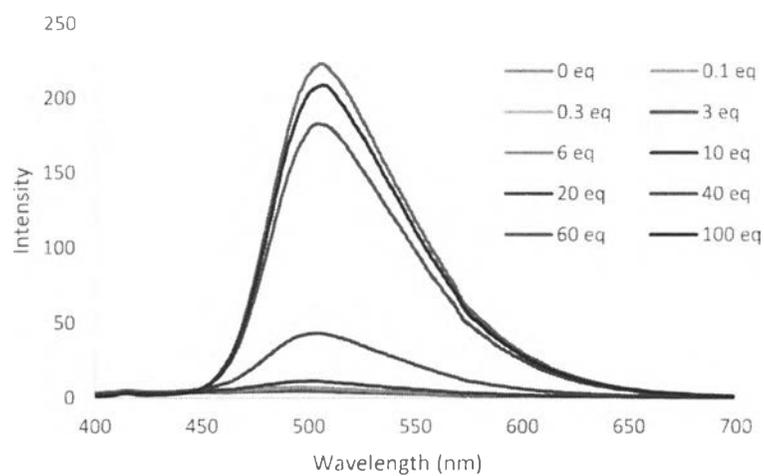


Figure S.36 Fluorescence intensity of PE II (5 μM) at various equiv of fluoride in 90%DMSO/ HEPES buffer pH 7.4.



VITA

Ms. Chanantida Jongwohan was born in 1988, March 29th at Yasothon province, Thailand. She has finished her high school from Sornkaewwongwaiwittaya at Yasothon in 2007. In 2011, she graduated with bachelor degree in science, major of chemistry from Naresuan University. During her studied at Naresuan University, she had finished a project of organic synthesis and applied a master degree at Chulalongkorn University in the same year. Whereupon, she has joined a group of MAPS research unit under the supervision of Assistant Professor Sumrit Wacharasindhu During her master degree, she was a teaching assistance for Department of chemistry, Faculty of Science, Chulalongkorn University. Her current address is 57 Moo. 7 Kornoir, Maung, Yasothon, Thailand 35000.

