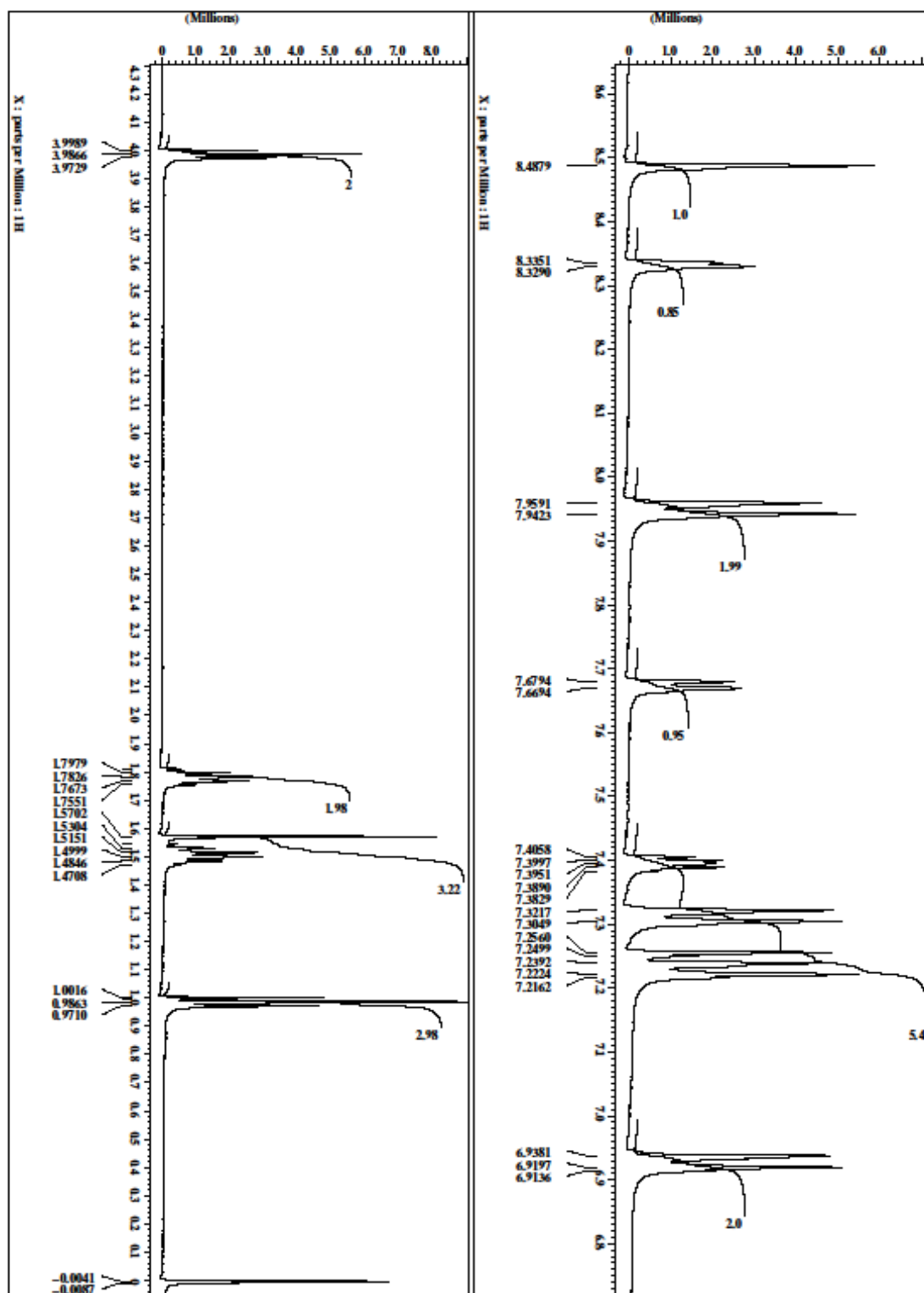


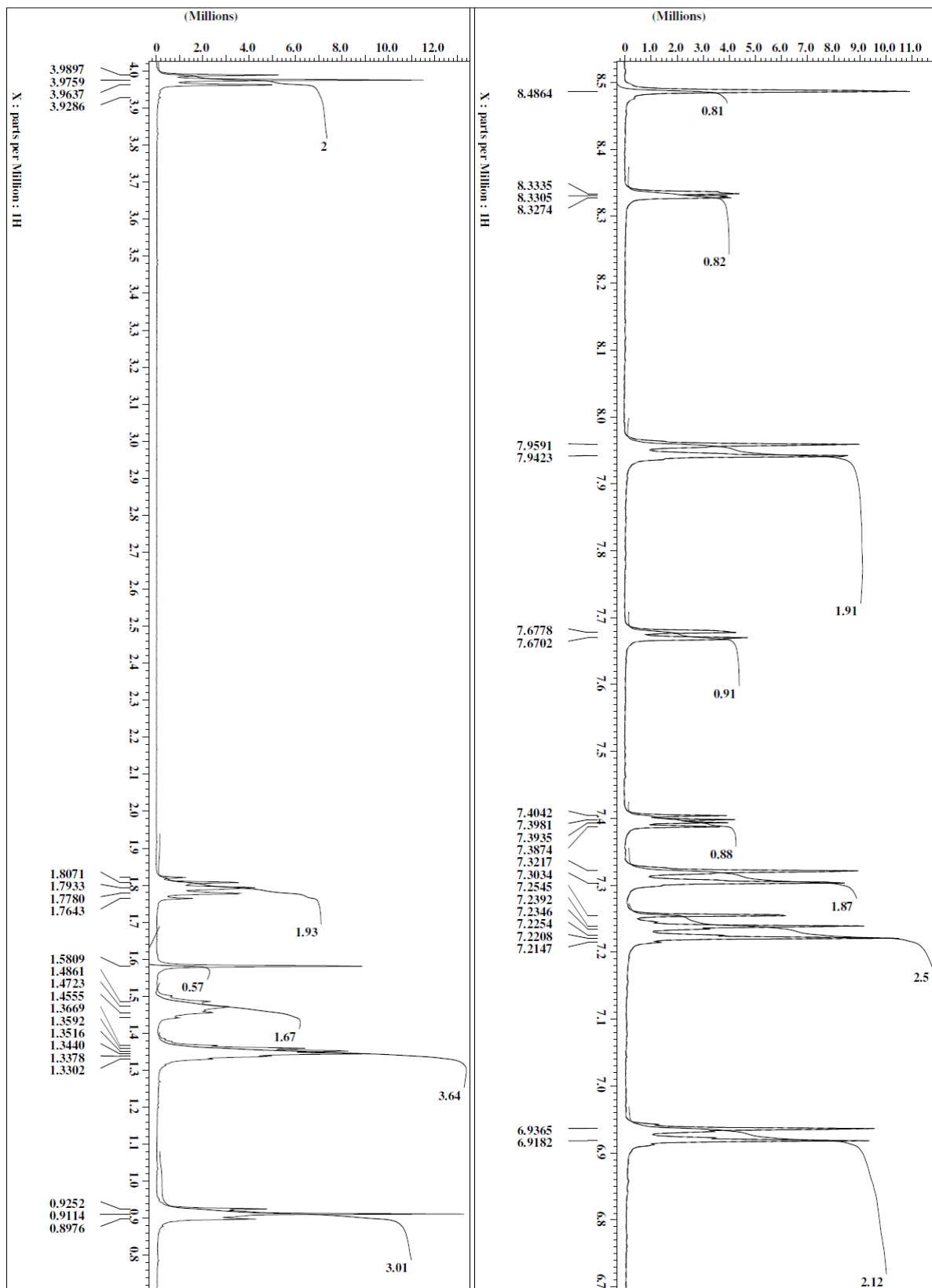
Supplementary material

A molecular insight on supramolecular assembly of thiophene polymer.

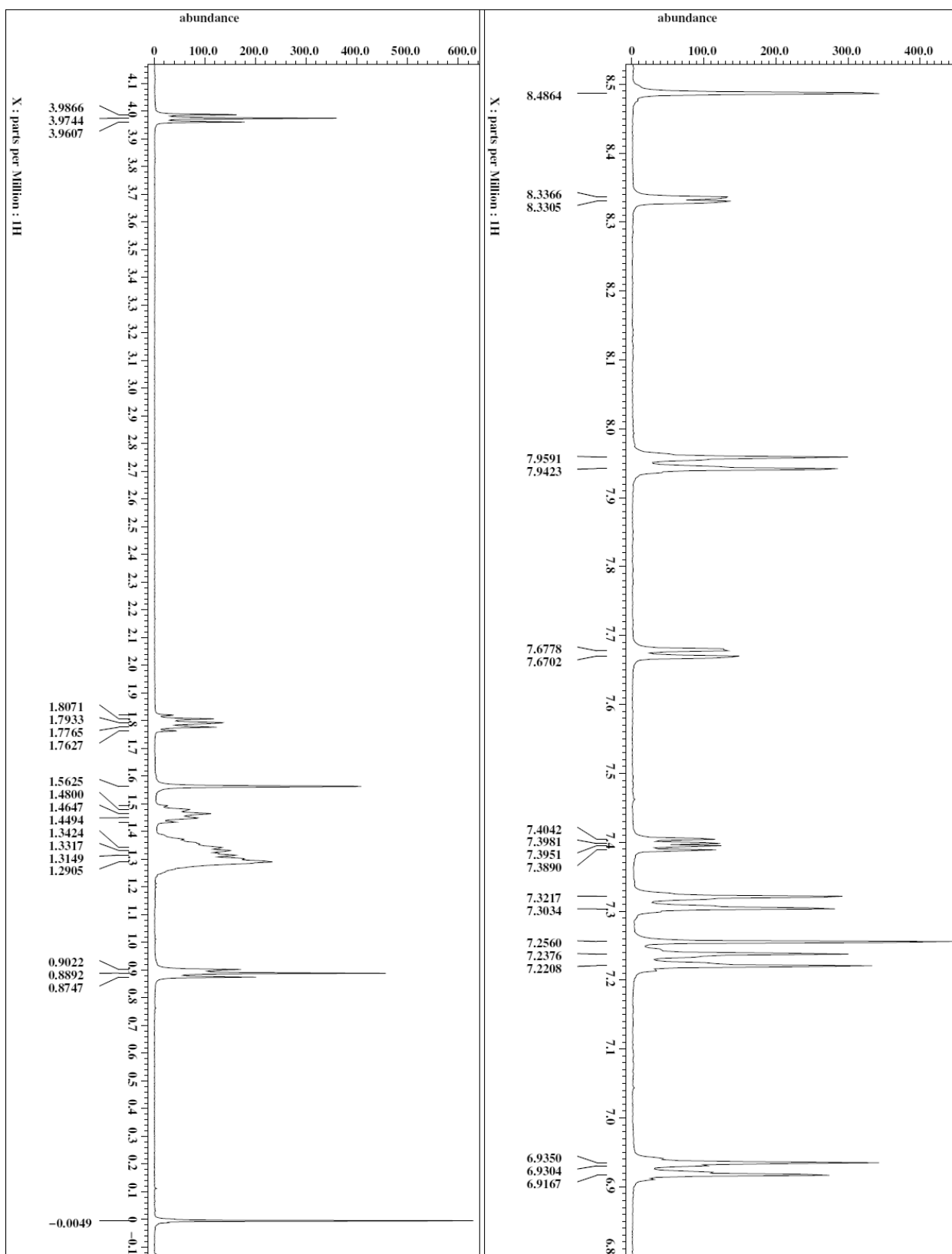
Chandrasekaran SuryaNarayanan, Ezhakudiyan Ravindran, Soundaram
Jeevarathinam Ananthakrishnan, Narayanasatri Somanathan and Asit Baran
Mandal.



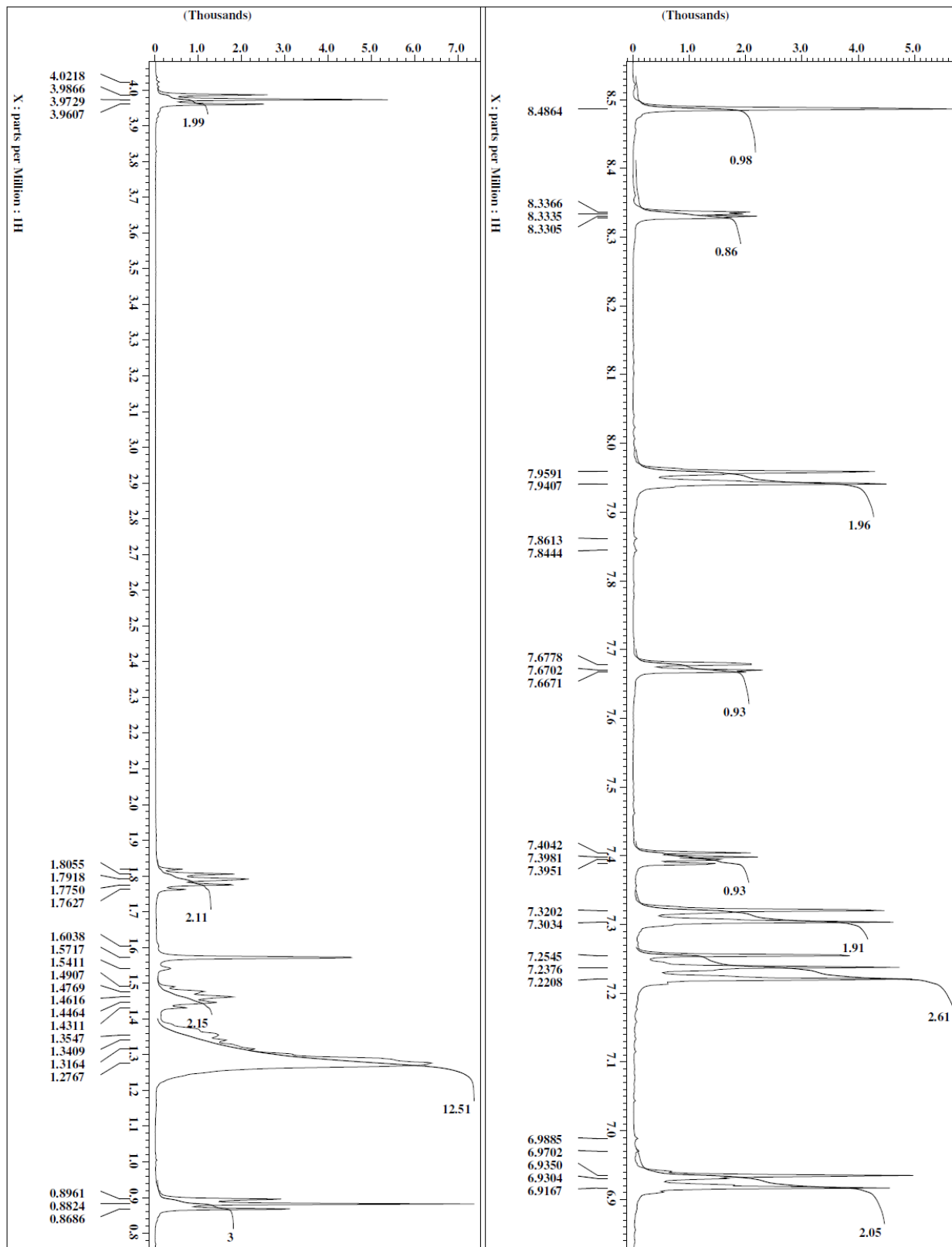
BPTC ^1H NMR



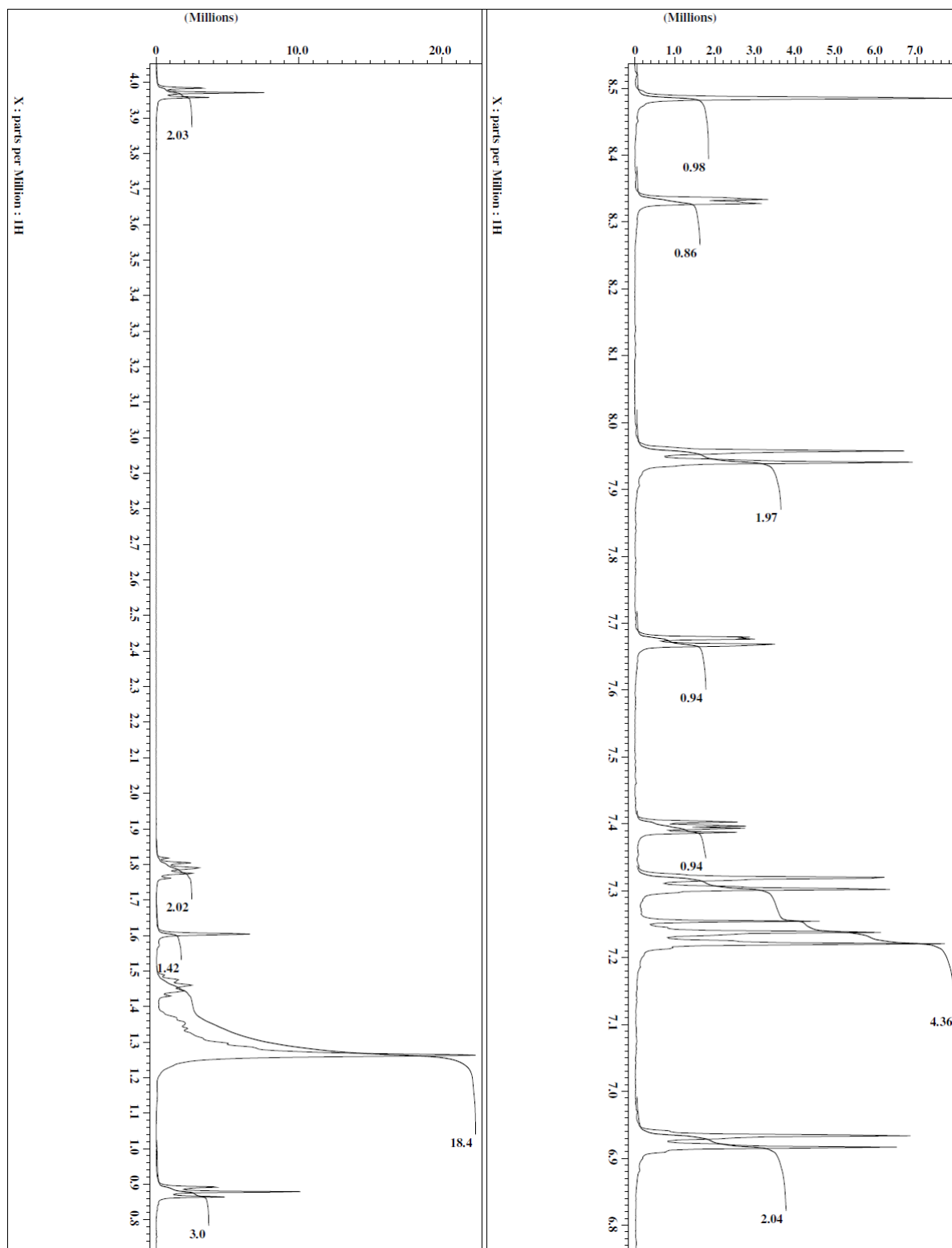
HPTC ^1H NMR.



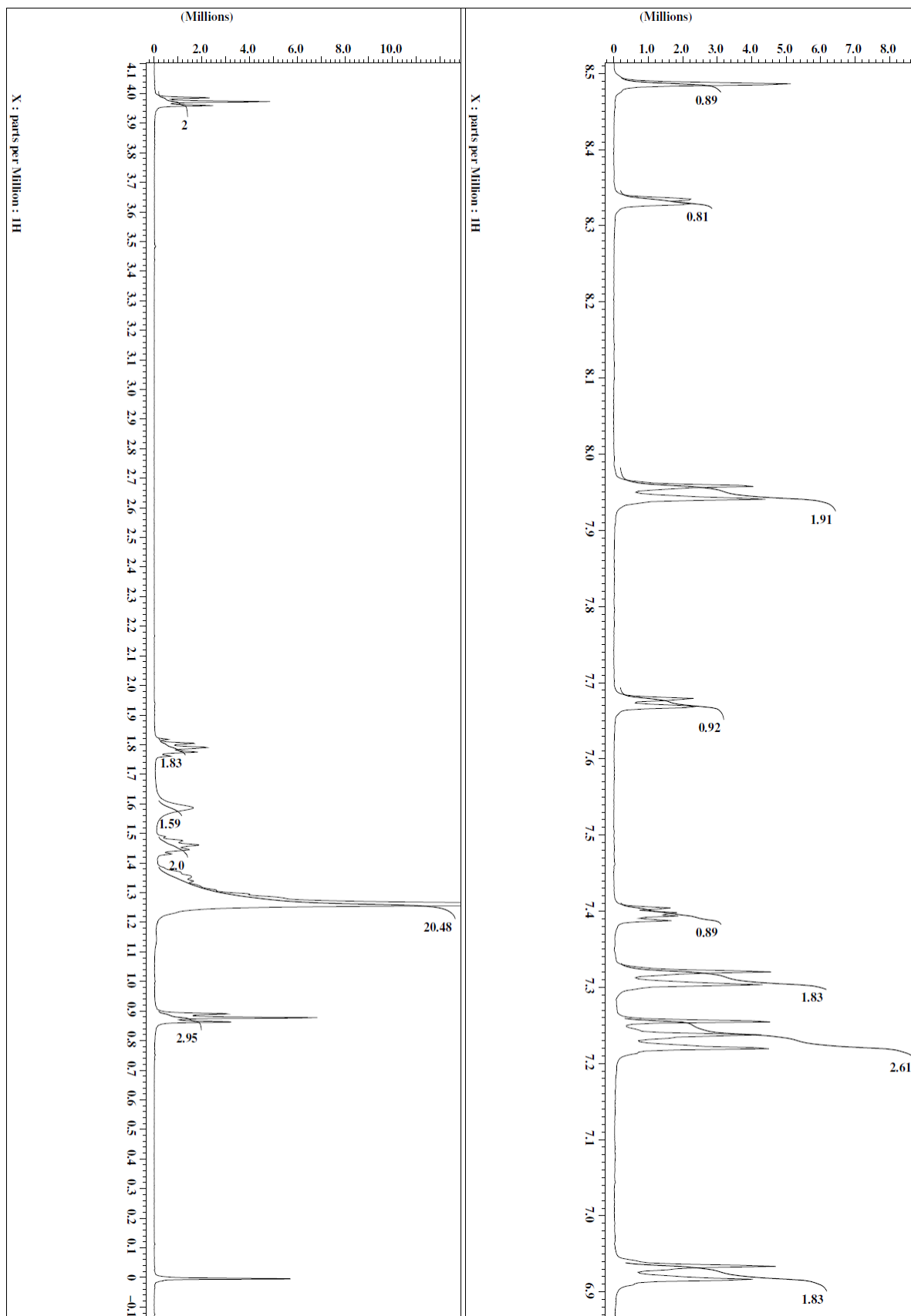
OPTC ^1H NMR



DPTC ^1H NMR

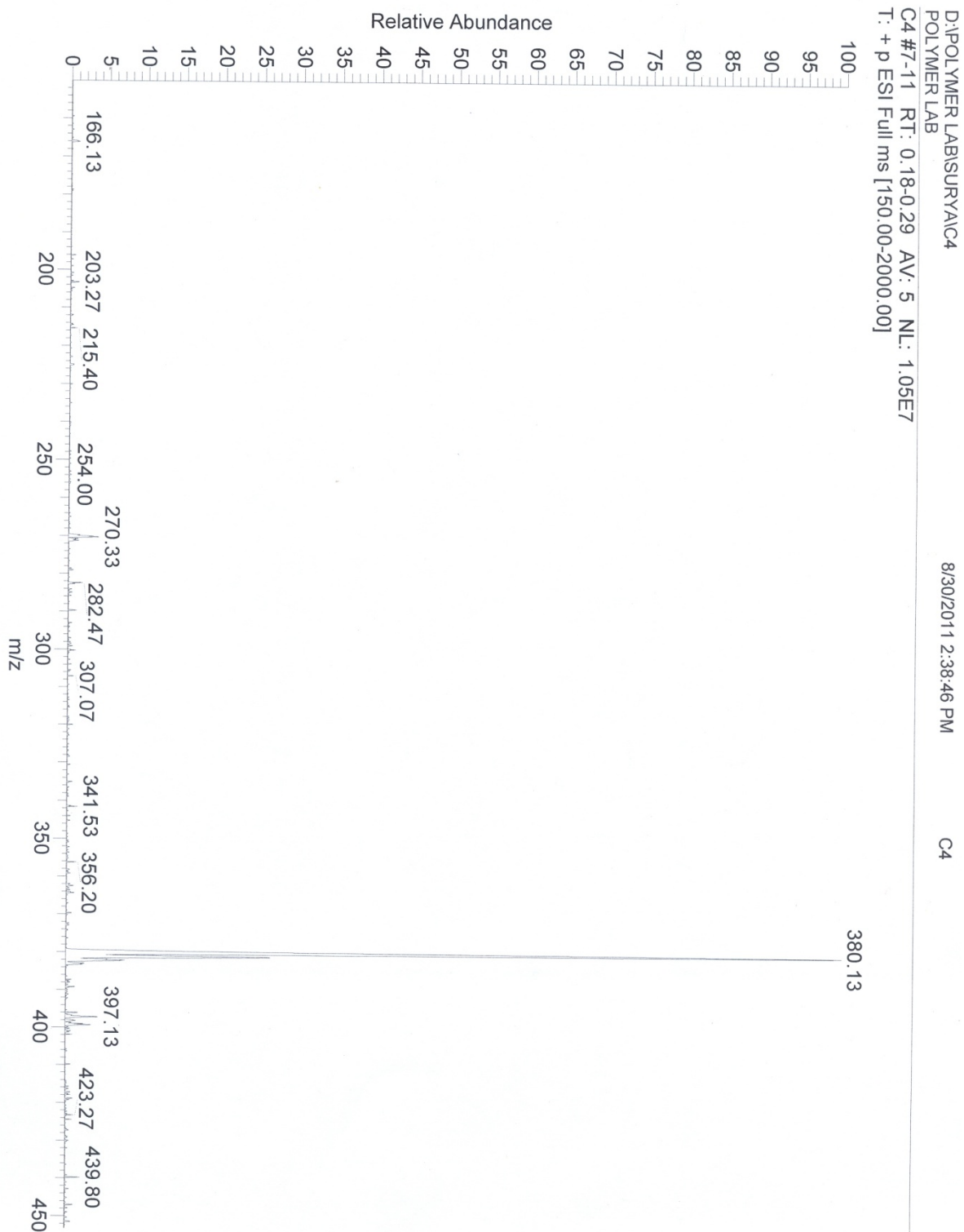


DDPTC ^1H NMR



TDPTC ^1H NMR

BPTC ESI-MS



HPTC ESI-MS

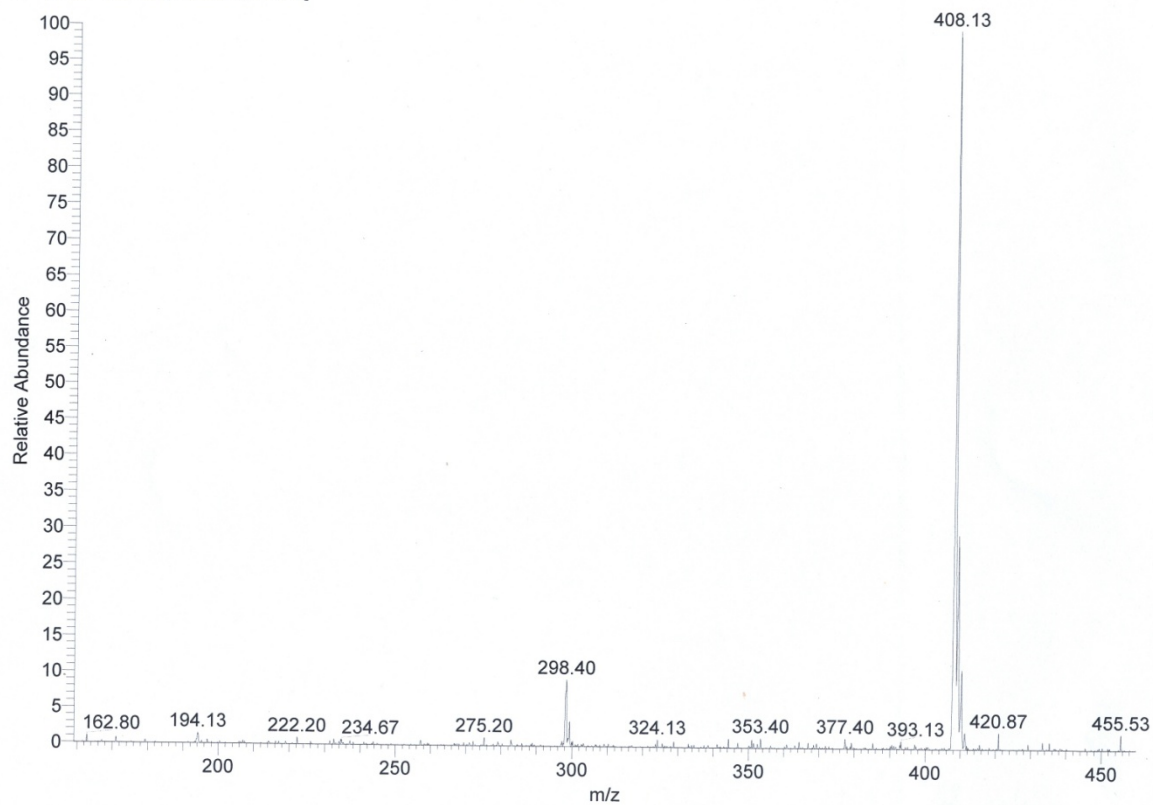
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8/30/2011 3:08:19 PM

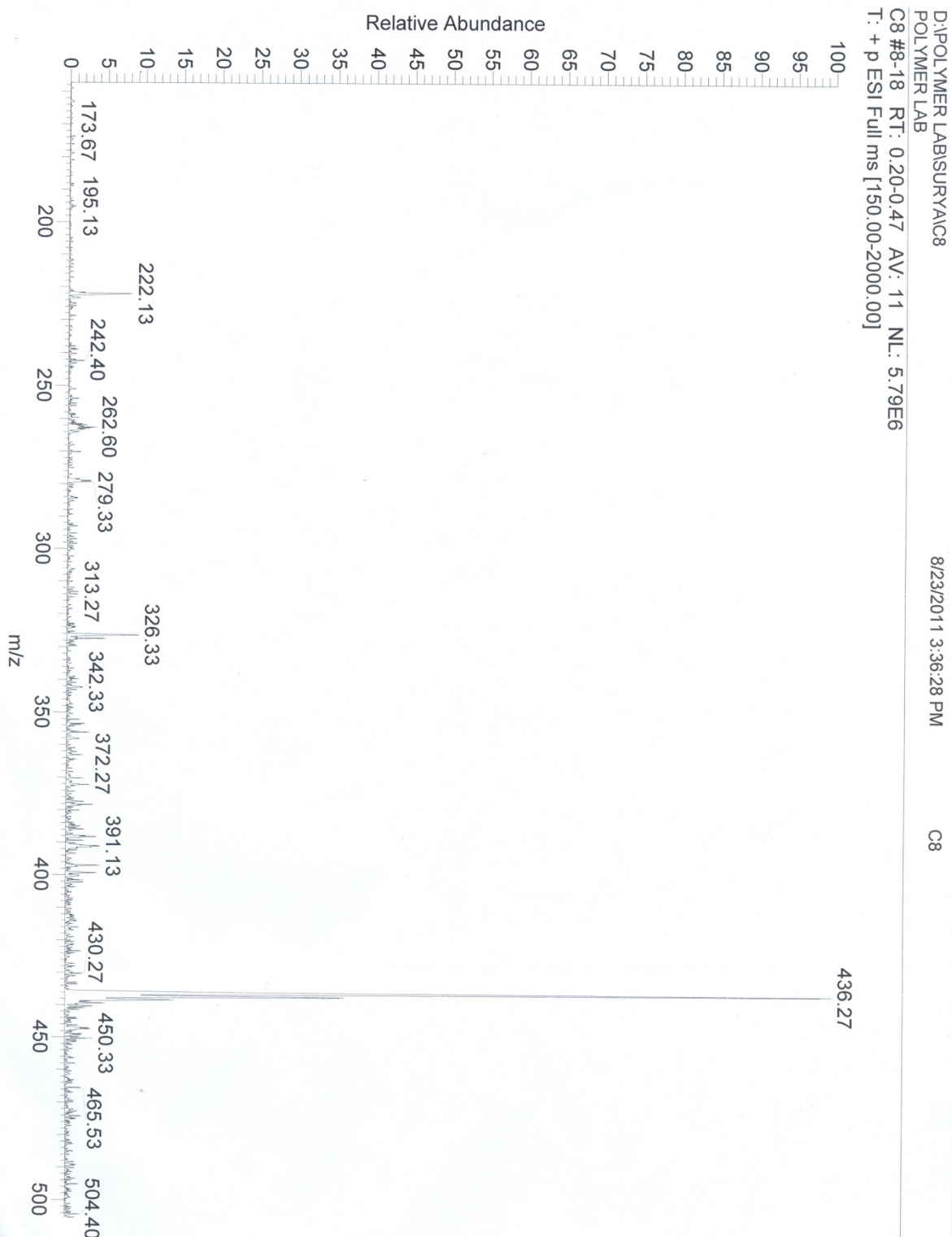
C6

C6 #12-21 RT: 0.30-0.54 AV: 10 NL: 8.66E6

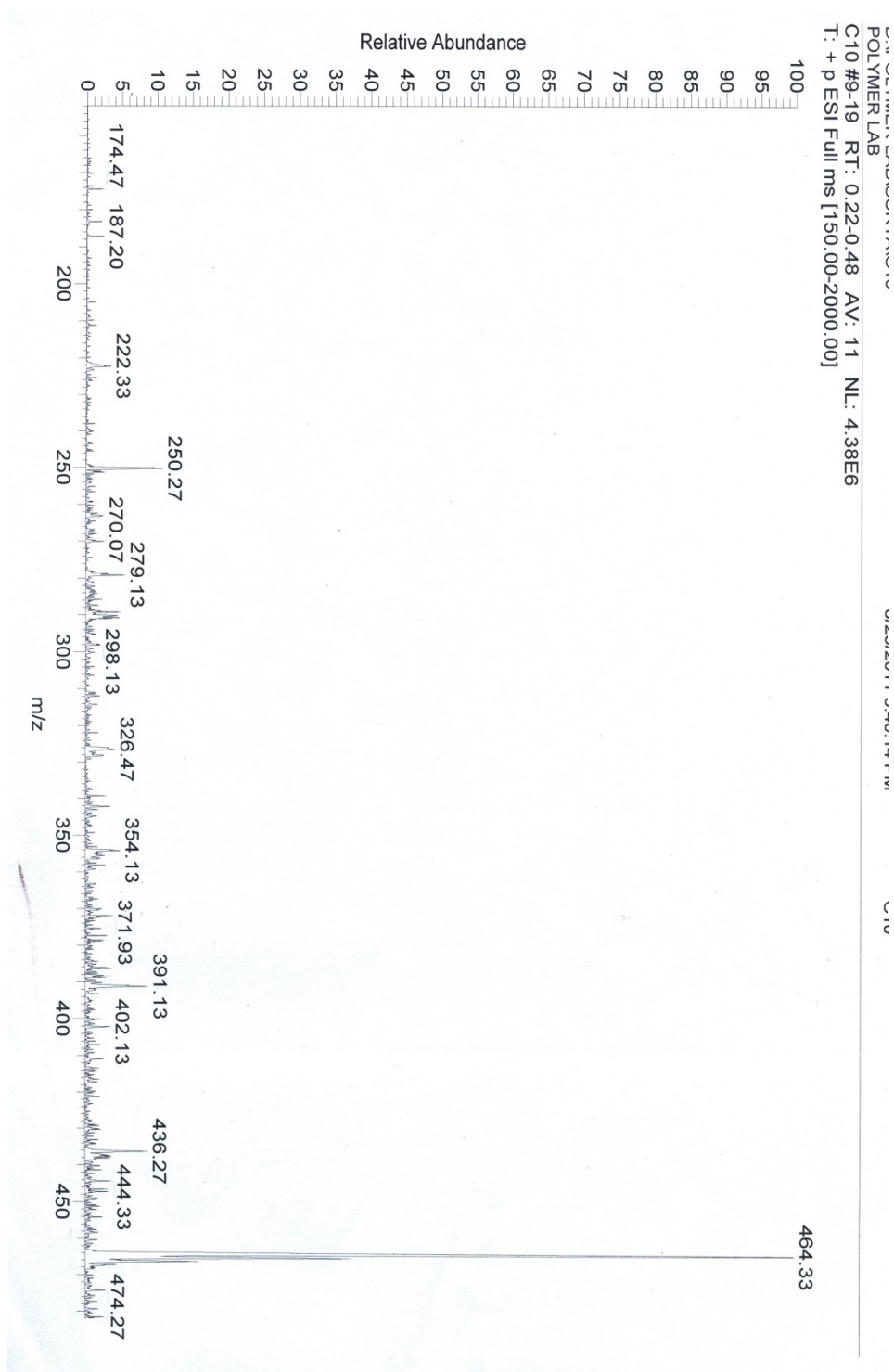
T: + p ESI Full ms [150.00-2000.00]



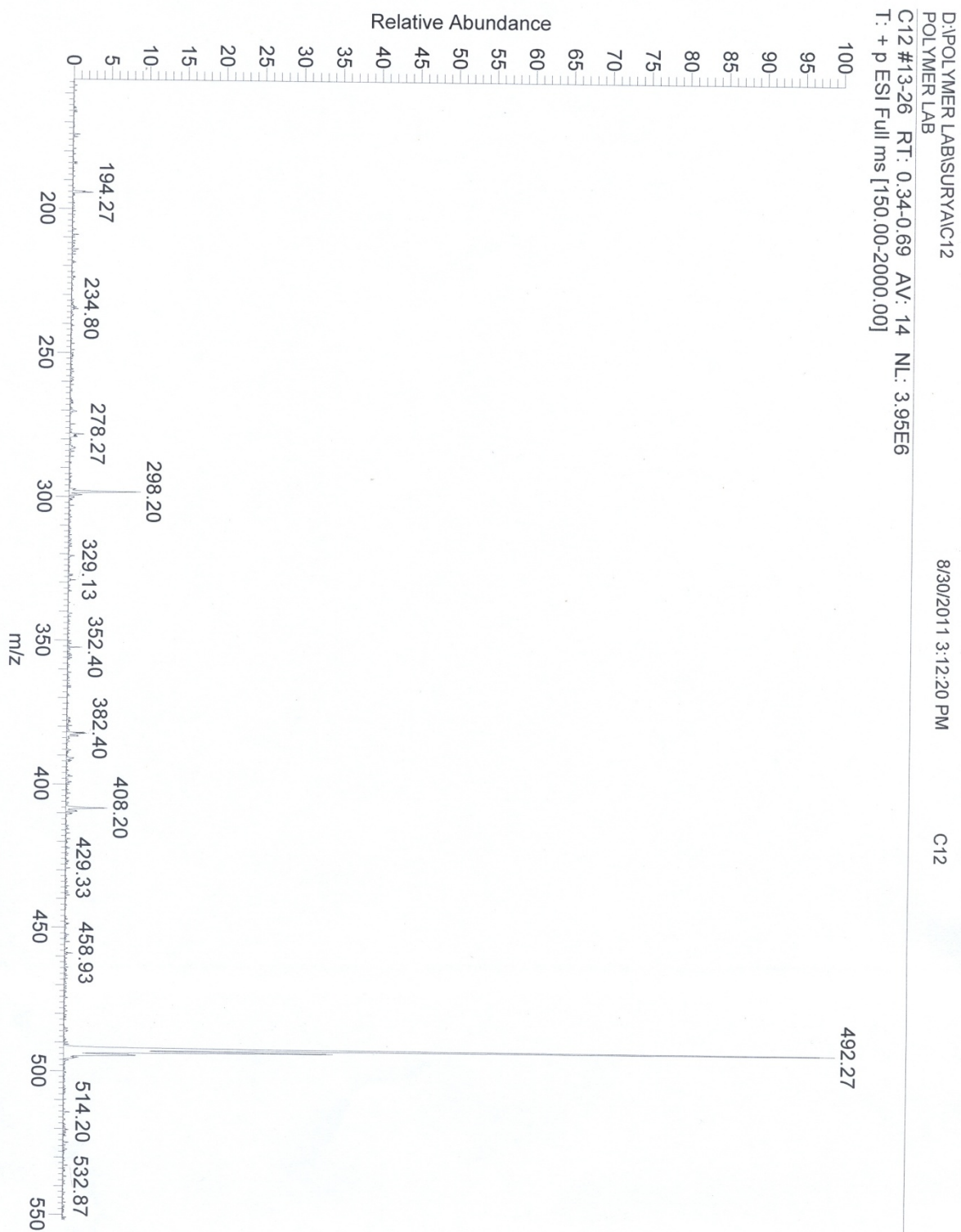
OPTC ESI-MS



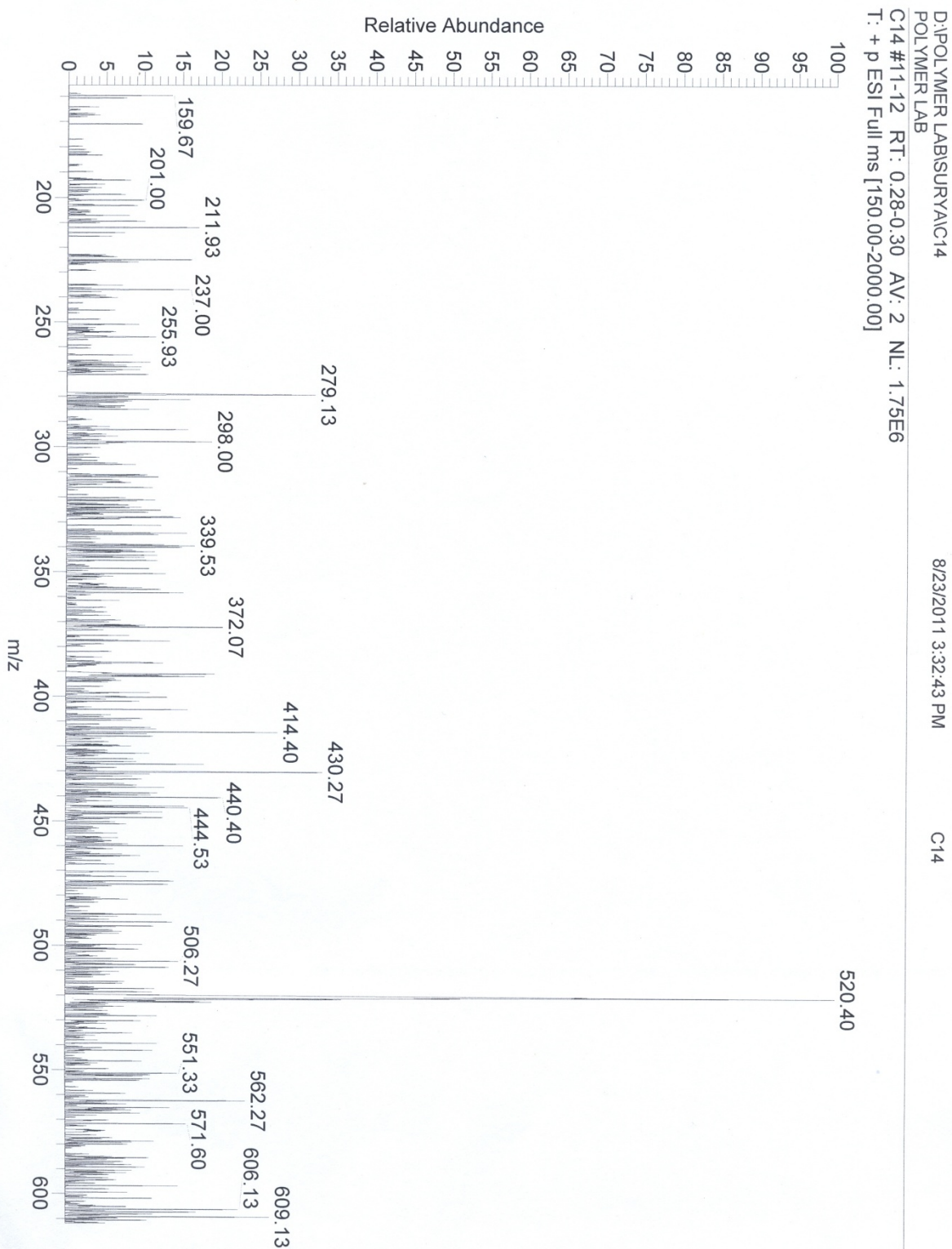
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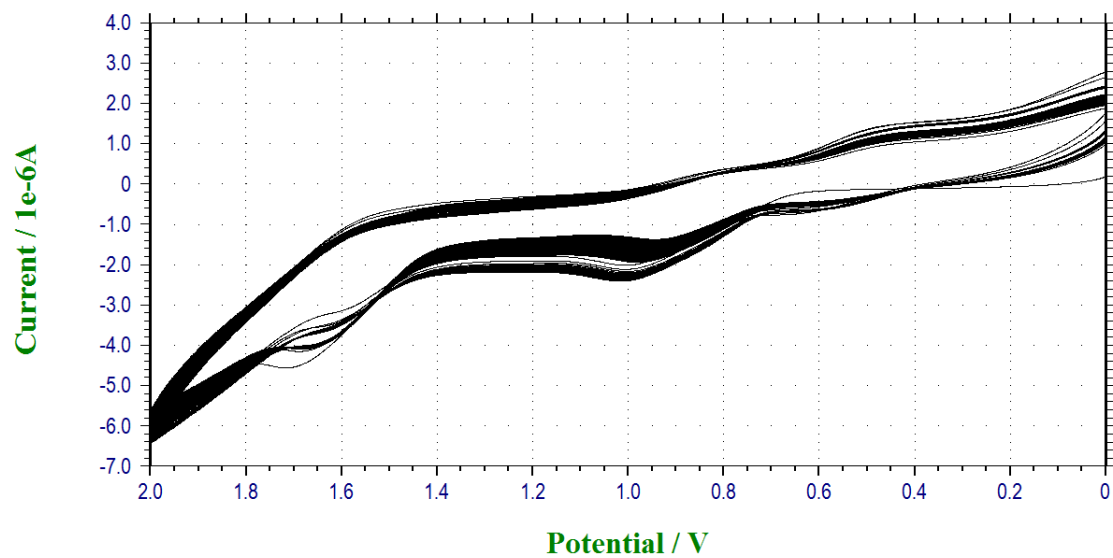
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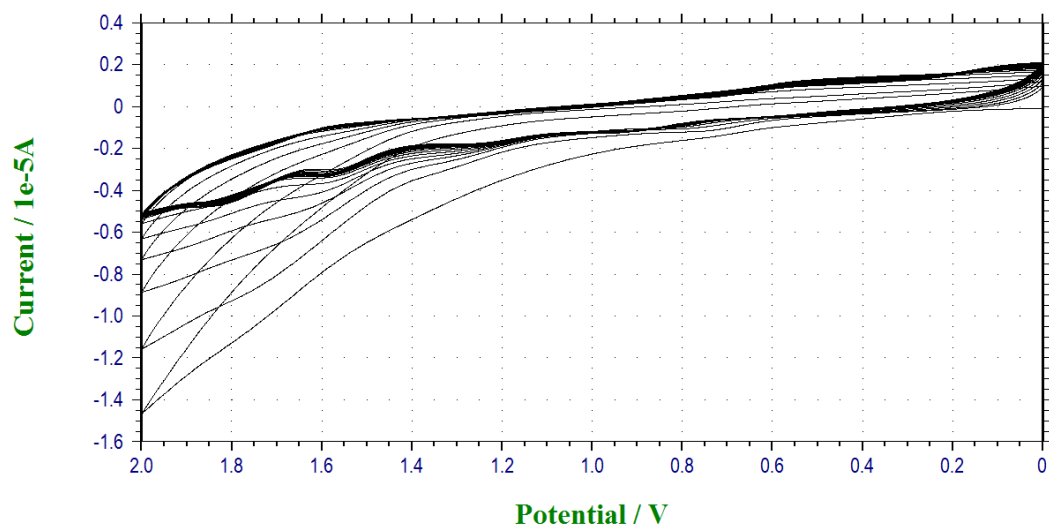
TDPTC ESI- MS



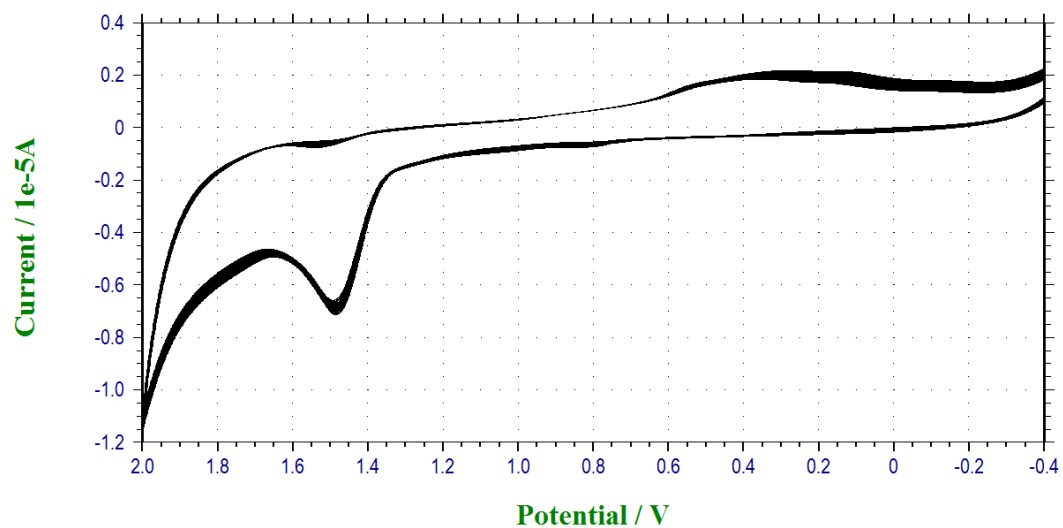
BPTC



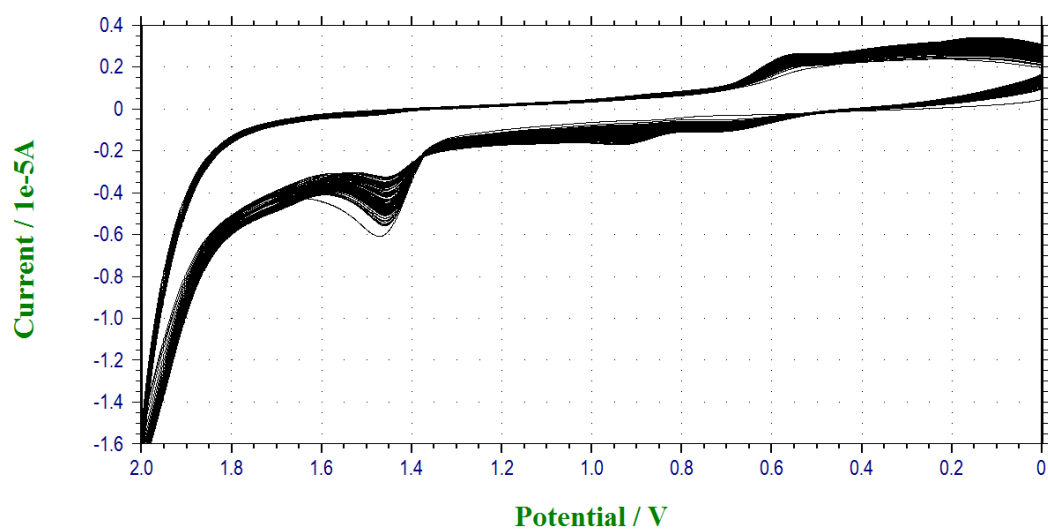
HPTC



OPTC

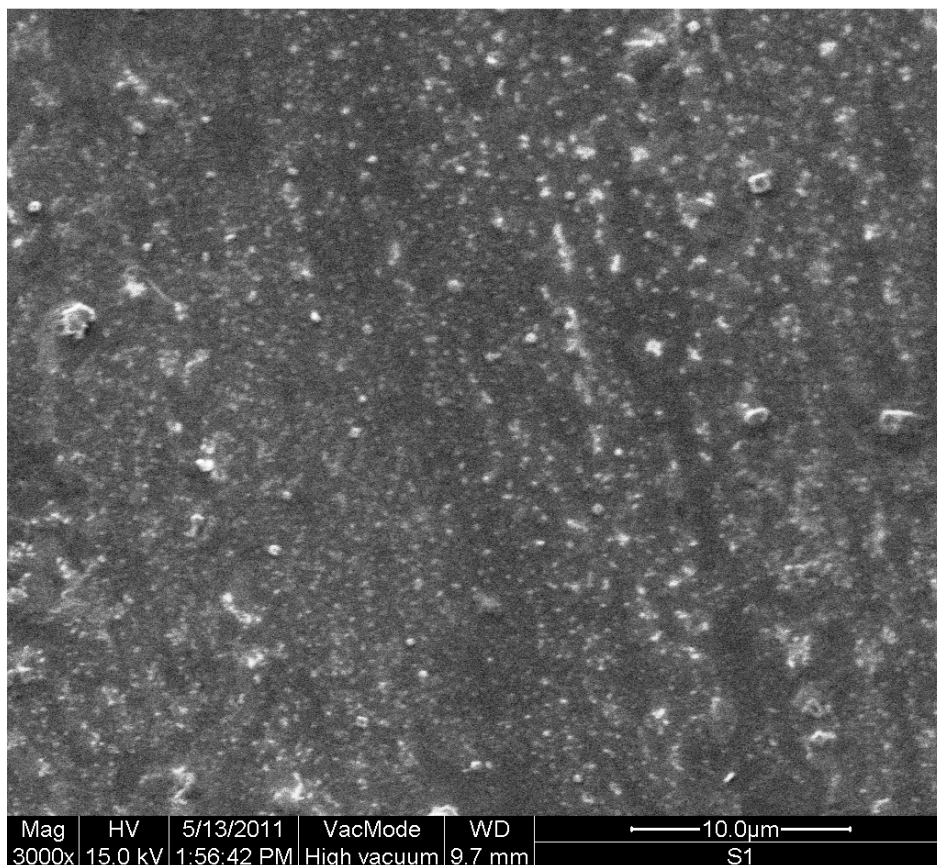


DDPTC

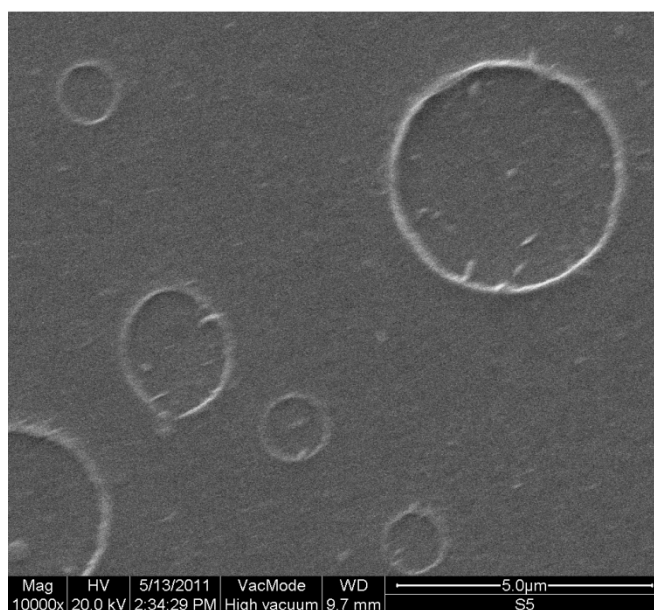


SEM images.

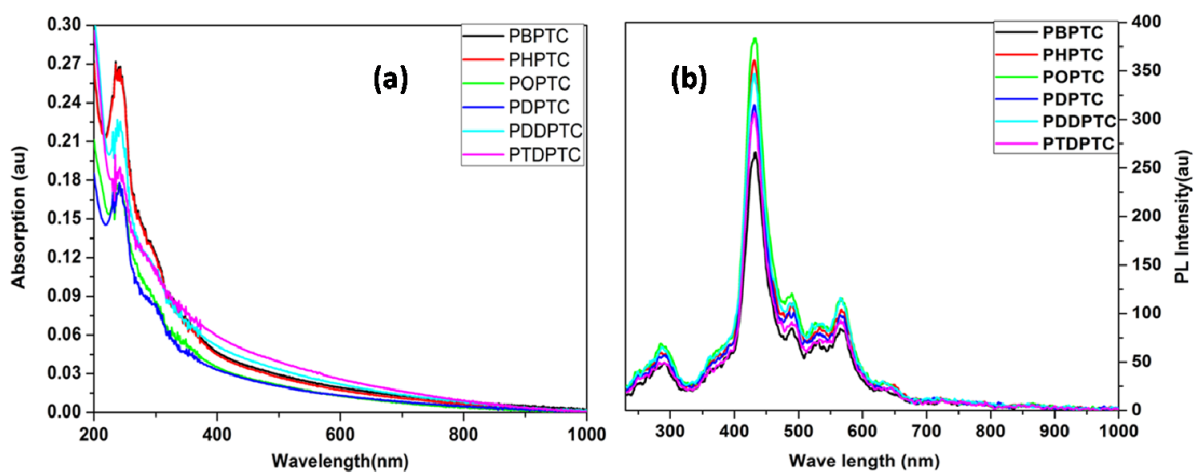
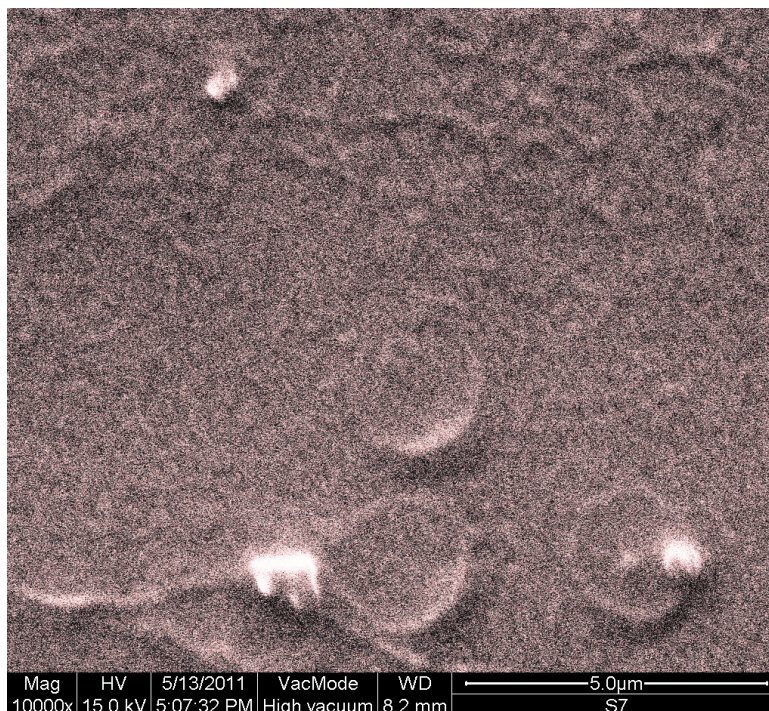
PHPTC



POPTC



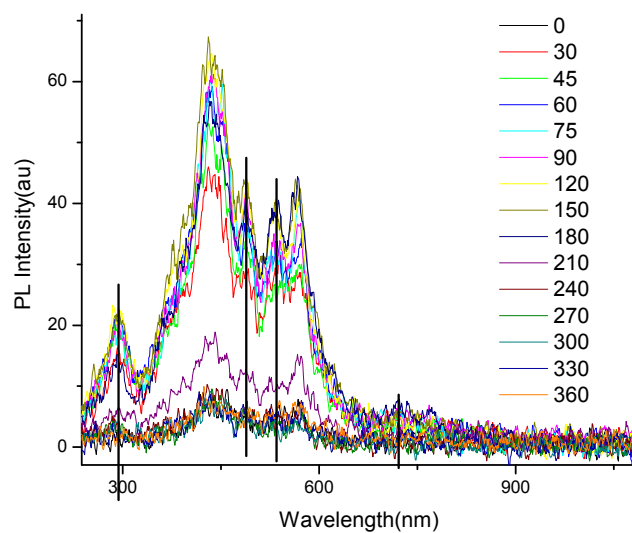
PTDPTC



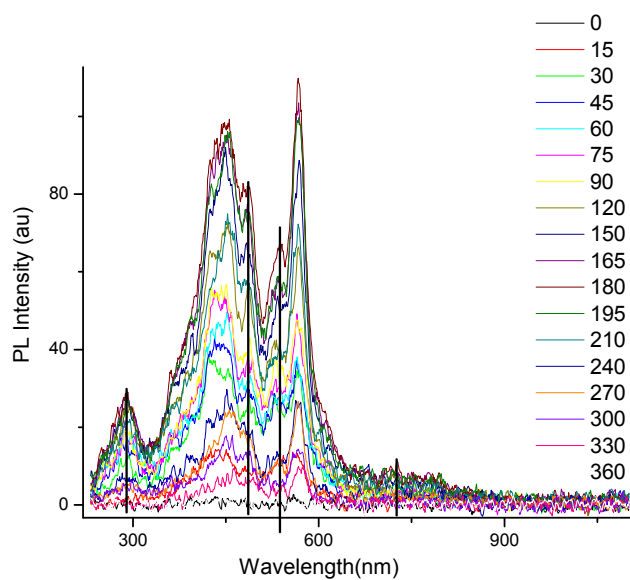
(a) Absorption and (b) Fluorescence spectra of thinfilms of all polymers

Excitation polarisation.

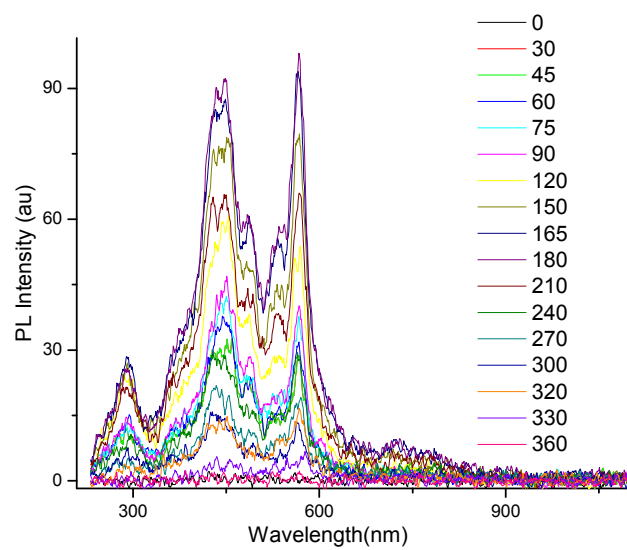
PBPTC



PDPTC



PDDPTC



PTDPTC

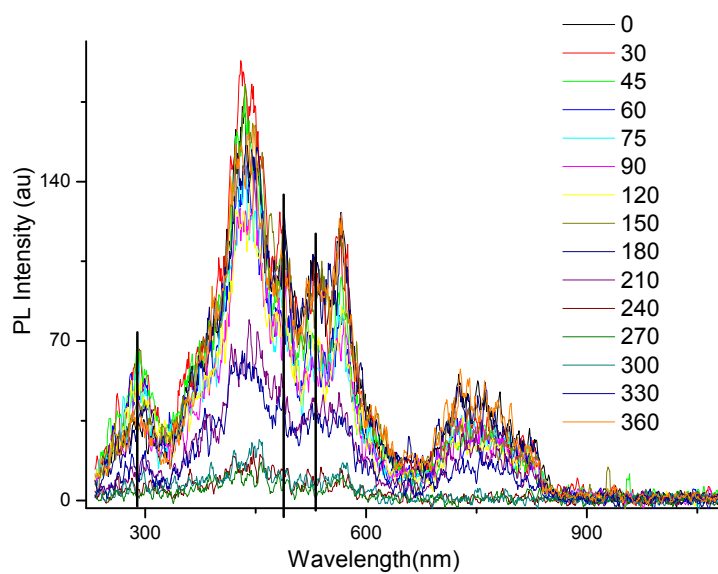


Table S1(a) Fluorescence anisotropy data for solution.

$$r = (I_{VV} - G * I_{VH}) / (I_{VV} + 2 * G * I_{VH}); G = I_{HV} / I_{HH}$$

Sample code	Monomer	Polymer
BPTC	0.012	0.05
HPTC	0.013	0.06
OPTC	0.015	0.16
DPPTC	0.011	0.11
DDPTC	0.009	0.07
TDPTC	0.010	0.10

Table S1(b) Linear dichroism data.

$$D = (I_x - I_y) / (I_x + I_y)^{19}$$

Sample code	LD values at various UV ranges in thin film			
	336	280	233	212
PBPTC	0.11	0.17	0.11	0.15
PHPTC	0.17	0.15	0.26	0.18
POPTC	0.18	0.41	0.23	0.30
PDPTC	0.11	0.23	0.14	0.27
PDDPTC	0.10	0.20	0.07	0.18
PTDPTC	0.18	0.38	0.10	0.22

Elemental analysis (%)

4-((E)-[(4 – butyloxy Phenyl) imino] methyl} phenyl thiophene 3- Carboxylate}

C: 70.20, H:5.70, N: 3.80, O:12.10, S: 8.35 (Cal. C: 69.65, H:5.58, N: 3.69, O:12.66, S: 8.44)

4-((E)-[(4 – Octyloxy Phenyl) imino] methyl} phenyl thiophene 3- Carboxylate}

C: 71.80, H:6.82, N: 3.62, O: 10.80, S: 7.25 (Cal. 71.72, H: 6.67, N: 3.22, O: 11.03, S: 7.35)

4-((E)-[(4 – decyloxy Phenyl) imino] methyl} phenyl thiophene 3- Carboxylate}

C: 72.19, H: 6.93, N: 3.32, O: 10.89, S: 6.80 (Cal. C: 72.57, H: 7.13, N: 3.02, O:10.37, S: 6.91)

4-((E)-[(4 – dodecyloxy Phenyl) imino] methyl} phenyl thiophene 3- Carboxylate}

C: 73.09, H: 7.38, N: 2.99, O:9.95, S: 6.58 (Cal. C: 73.32, H: 7.53, N: 2.85, O:9.77, S: 6.52)

4-((E)-[(4 – tetradecyloxy Phenyl) imino] methyl} phenyl thiophene 3- Carboxylate}

C: 74.19, H: 7.50, N:2.55, O:10.15, S: 6.07 (Cal. C:73.99, H. 7.90, N:2.70, O:9.25, S: 6.17)