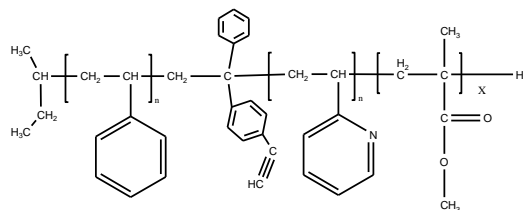


Sample Name: Poly(styrene-b-2-vinyl pyridine-b-methylmethacrylate) bearing ethynyl (acetylenic triple bond) phenyl –phenyl ethylene at the junction of S-2VP block

Sample #: P18346-S(acetylene)2VPMMA

Structure:

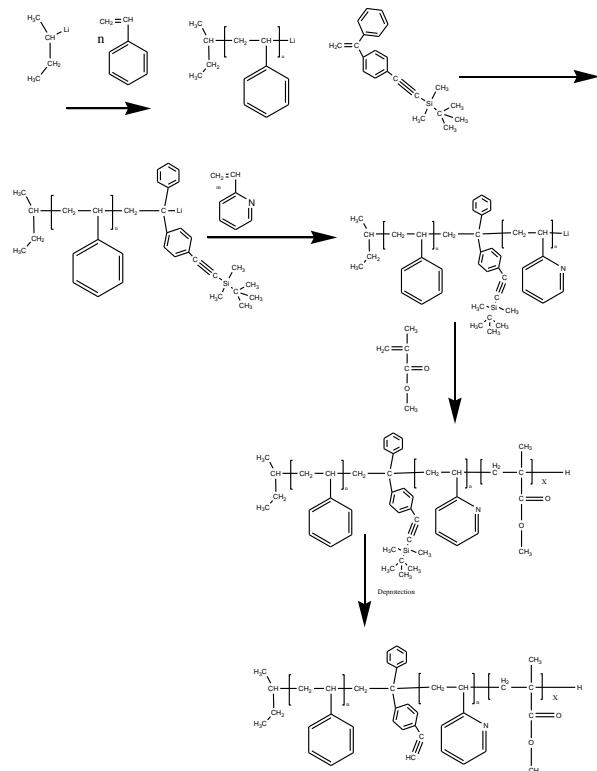


Composition:

Mn x 10 ³ S-b-2VP-b-MMA	PDI
34.5-b-8.5-b-13.5	1.23
T _g (°C)	105; 132

Synthesis Procedure:

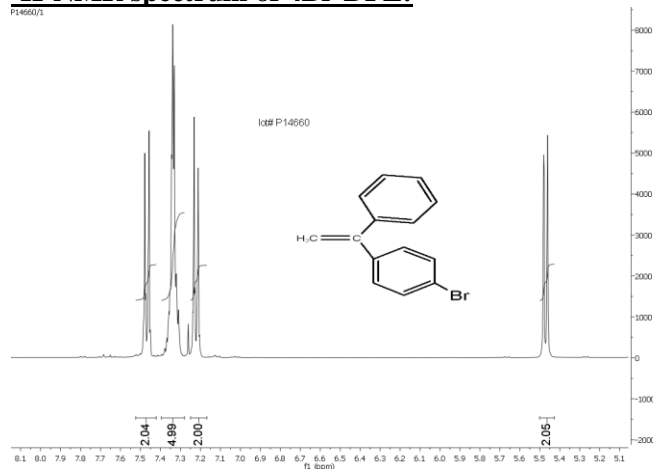
The product was synthesized by anionic process as illustrated below:



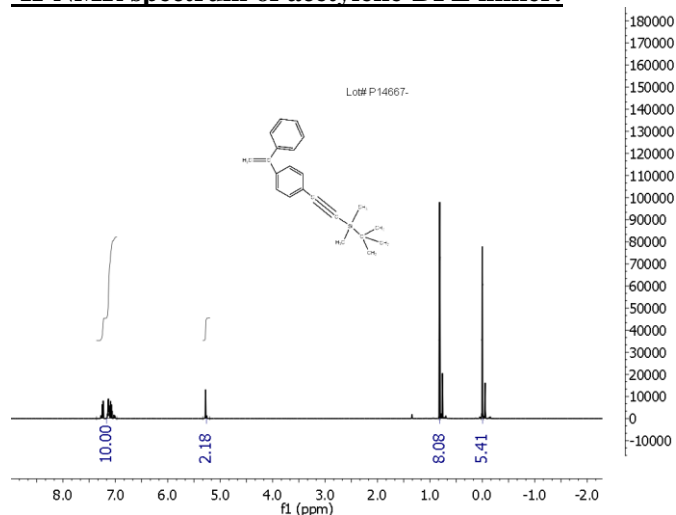
Characterization:

The polymer was characterized by SEC with THF or DMF as eluent and ¹H NMR spectroscopy.

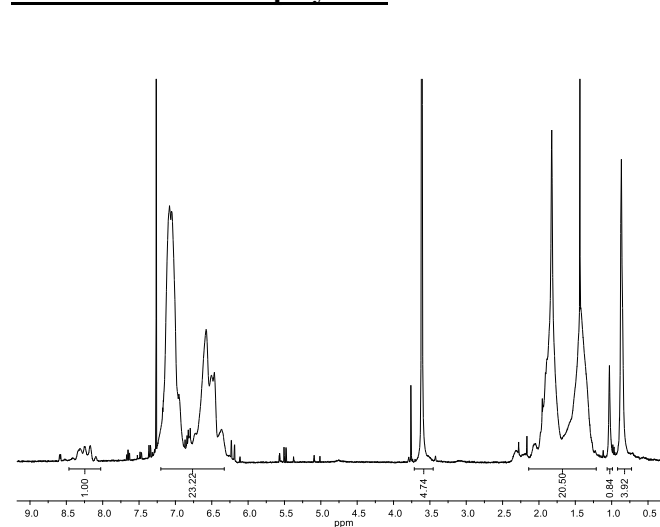
¹H-NMR spectrum of 4Br-DPE:



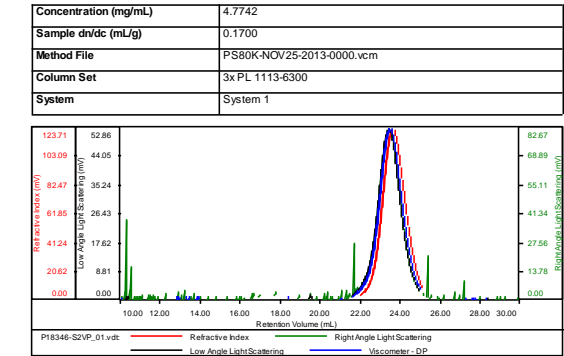
¹H-NMR spectrum of acetylene-DPE linker:



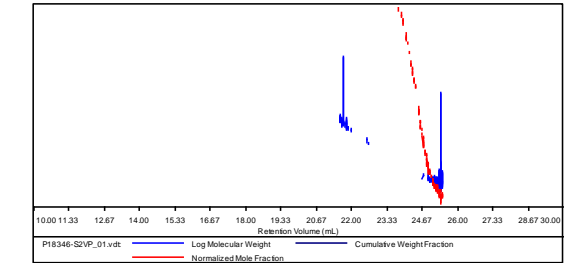
¹H-NMR of the final polymer:



SEC of the block polymer S(acetylene) 2VP:
Sample ID: P18346-s2vp



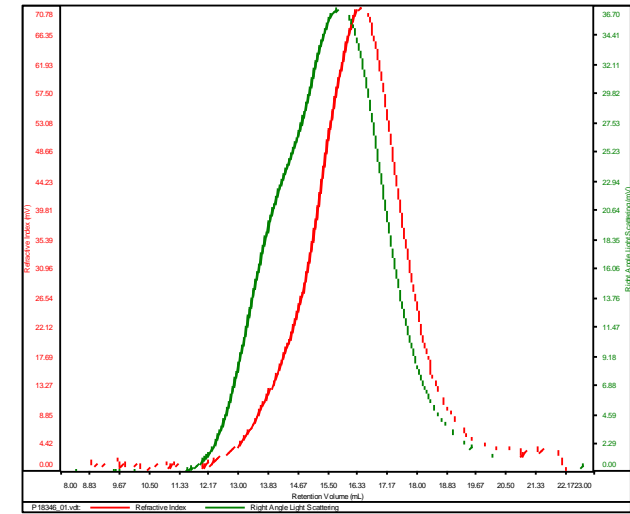
Sample	Mn	Mw	Mp	Mw/Mn	IV
P18346-S2VP_01.vdt	43,168	48,832	46,880	1.131	0.2482



SEC of the final block polymer S(acetylene)
2VPMMA:

P18346

Conc	4.7791
dn/dc	0.1750
Solvent	DMF w 0.023M LiBr
Flow Rate	0.7000
Method	PS-80k_2018-04-02-0000.vcm



Sample	Mn	Mw	Mp	Mw/Mn	IV
P18346_01.vdt	57,683	70,966	53,444	1.230	0.3584

DSC of the final block polymer:

Sample: P18346
Size: 5.4000 mg
File: P18346.001

