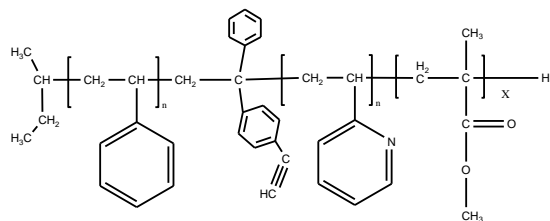


Sample Name: Poly(styrene-b-2-vinyl pyridine-b-methylmethacrylate) bearing ethynyl (acetylenic triple bond) phenyl –phenyl ethylene at the junction of S-2VP block

Sample #: P18348P-S(acetylene)2VPMMA

Structure:

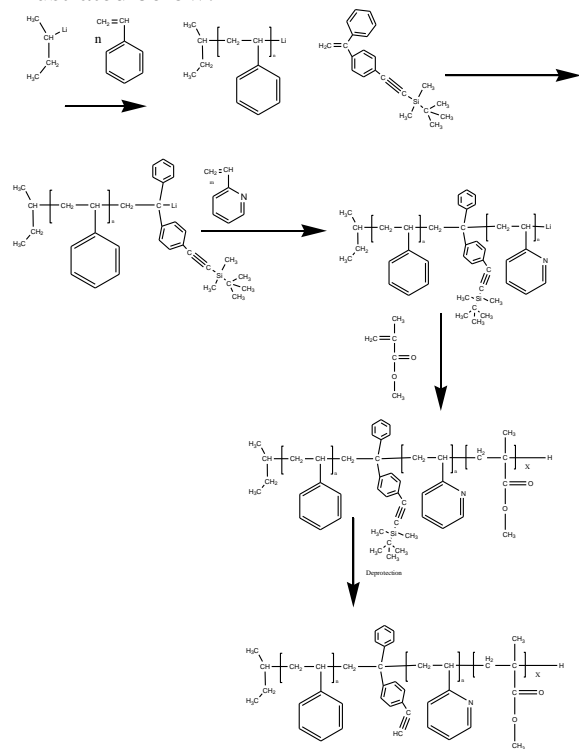


Composition:

Mn x 10 ³	PDI
S-b-2VP-b-MMA	
31.5-b-12.5-b-381.0	1.20
T _g (°C)	125

Synthesis Procedure:

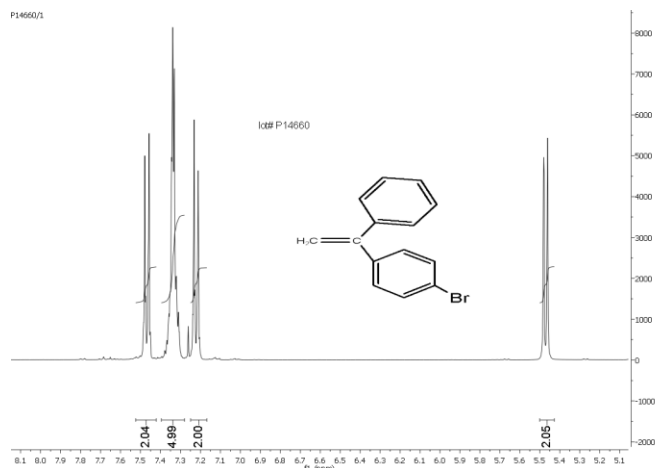
The product was synthesized by anionic process as illustrated below:



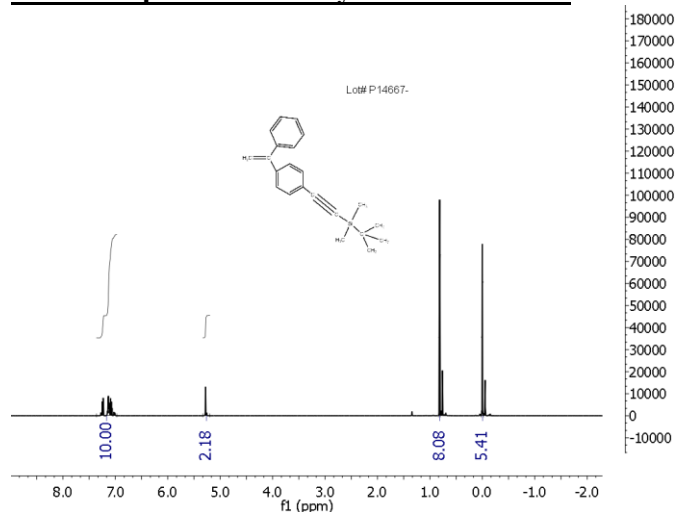
Characterization:

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

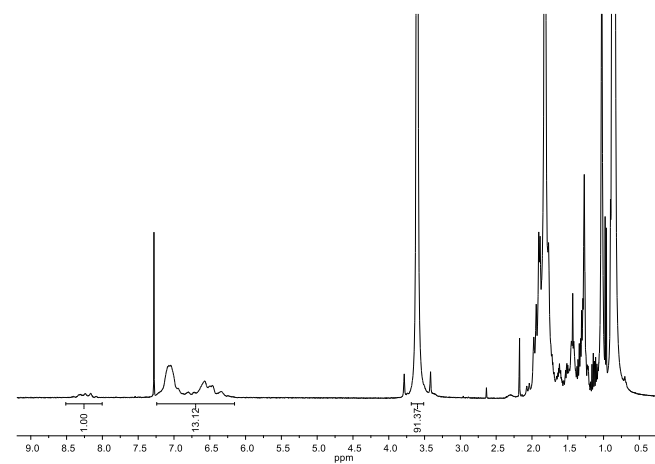
¹H-NMR spectrum of 4Br-DPE :



¹H-NMR spectrum of acetylene-DPE linker :



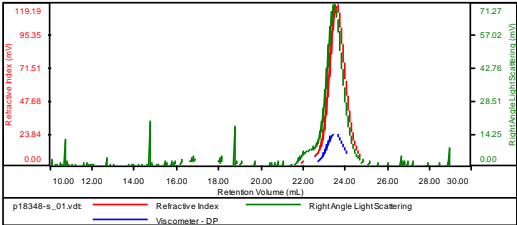
¹H-NMR spectrum of the final polymer:



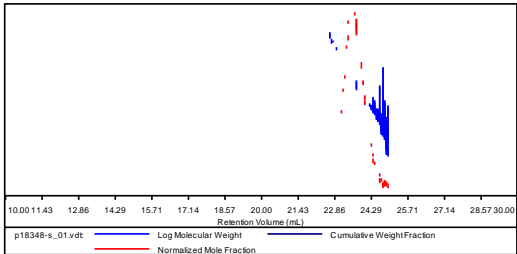
SEC elugarm of the block polymer S(acetylene) 2VP:

Sample ID: P18348-S

Concentration (mg/mL)	2.8748
Sample dn/dc (mL/g)	0.1850
Method File	PS80K-NOV25-2013-0001.vcm
Column Set	3x PL 1113-6300
System	System 1



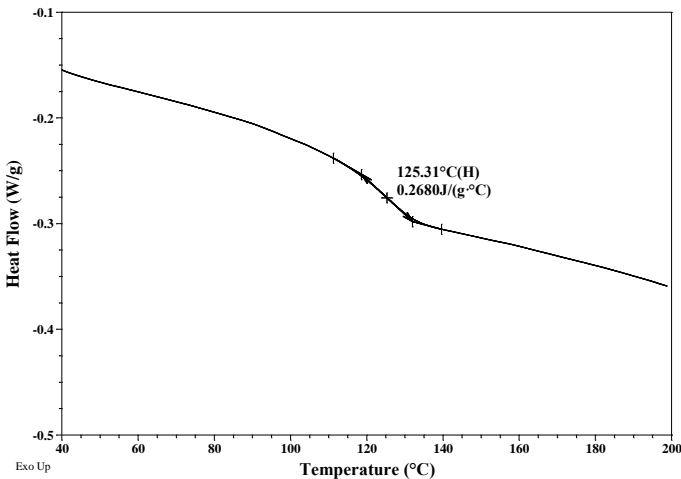
Sample	Mn	Mw	Mp	Mw/Mn	IV
p18348-s_01.vdt	38,028	40,260	39,274	1.059	0.2732



DSC of the final block polymer:

Sample: P18348P
Size: 7.1000 mg

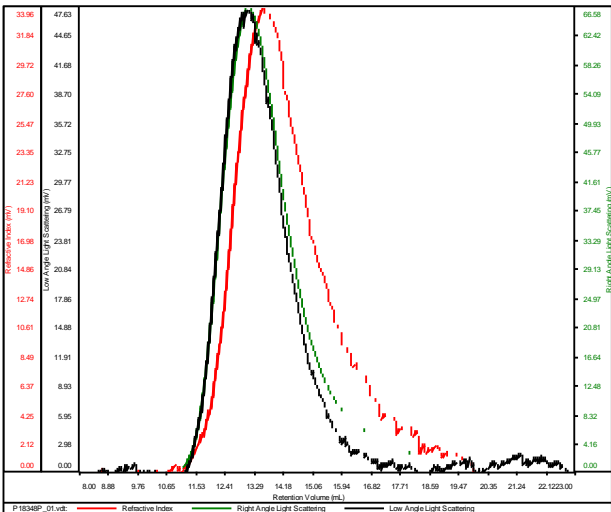
File: P18348P.001



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

P18348P

Conc	5.5972
dn/dc	0.0700
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
P18348P_01.vdt	425,123	506,223	549,303	1.191	0.9203