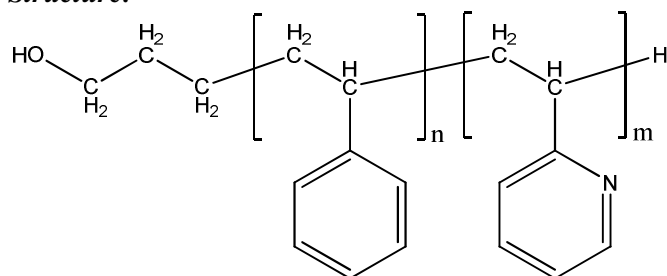


Sample Name: Hydroxy terminated Poly(styrene-b-2 vinyl pyridine)

Sample #: P19901A- HOS2VP

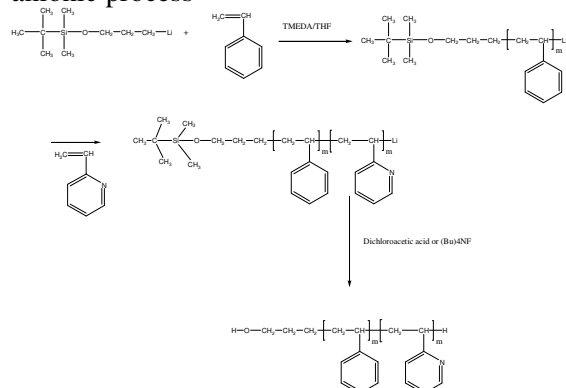
Structure:



Composition:

Mn x 10 ³ S-b-2VP	PDI
34.0-b-15.5 From HNMR	1.18
T _g for PS block:	102°C

Synthesis Procedure: The polymer was synthesized by anionic process



Characterization: The polymer was characterized by ¹H NMR and SEC.

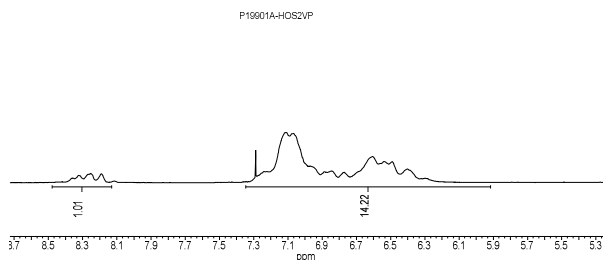
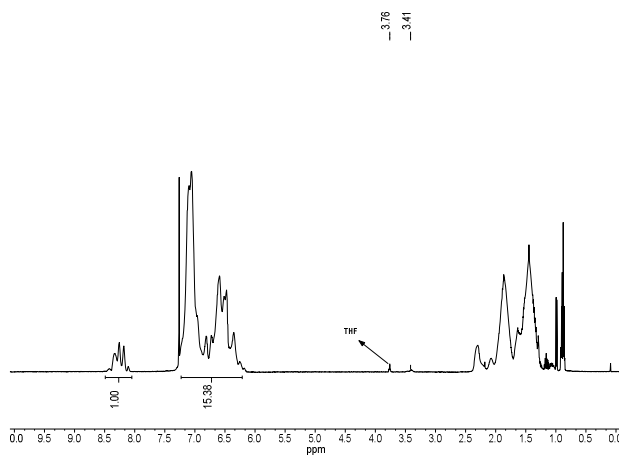
Purification:

Purification of the obtained polymer was carried out rigorously as follows to ensure the removal of the catalyst side product:

1. Polymer first soxhlet in cyclohexane to remove trace amount of homopolystyrene fraction if any present.
2. Dissolved the polymer in CHCl₃ and wash with de-ionized distilled water to remove any soluble organic catalyst side product.
3. Polymer extracted from water with chloroform.

4. Polymer solution in CHCl₃ was dried over anhydrous sodium sulfate.
5. Solution filtered and then passed through a column packed with basic Al₂O₃.
6. Solution concentrated on rota-evaporator
7. Solution precipitated in cold hexane
8. Final dried under vacuum for 48h at 5⁰⁰C:

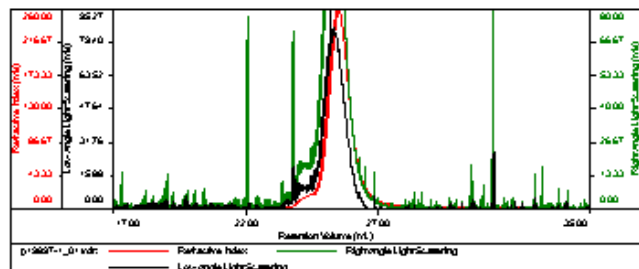
¹H-NMR Spectrum



SEC elugram of the polymer :

Sample ID:P19901-S

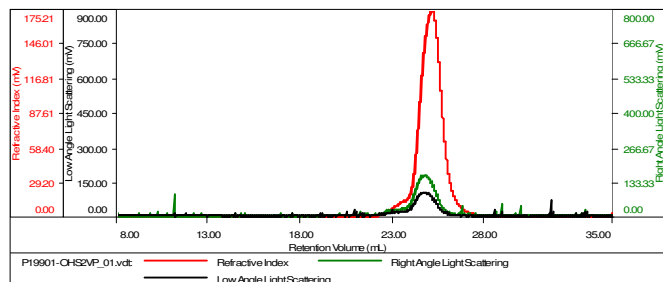
Concentration(mg/mL)	3.5681
Sample ch/c (mL/g)	0.1850
Method File	PS80K-April-18-2016-0001.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	Mn (Da)	Mw (Da)	Mw/Mn	IV (dL/g)	Mp (Da)
1_01.vcl	33,779	37,920	1.123	0.4574	34,979

Sample ID:P19901A- CHS-2VP

Concentration (mg/mL)	3.2293
Sample ch/c (mL/g)	0.1850
Method File	PS80K-April-18-2016-0001.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	Mn (Da)	Mw (Da)	Mw/Mn	IV (dL/g)	Mp (Da)
P19901-CHS2VP_01.vc	55,760	65,618	1.177	0.5332	55,748