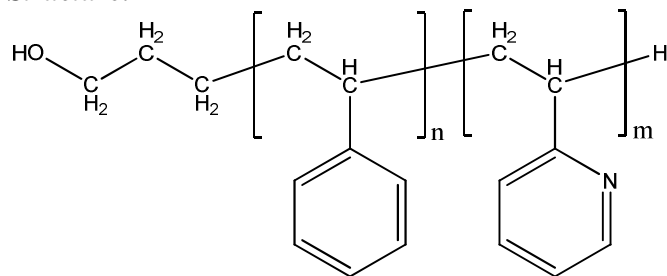


Sample Name: Hydroxy terminated Poly(styrene-b-2 vinyl pyridine)

Sample #: P19893A- HOS2VP

Structure:

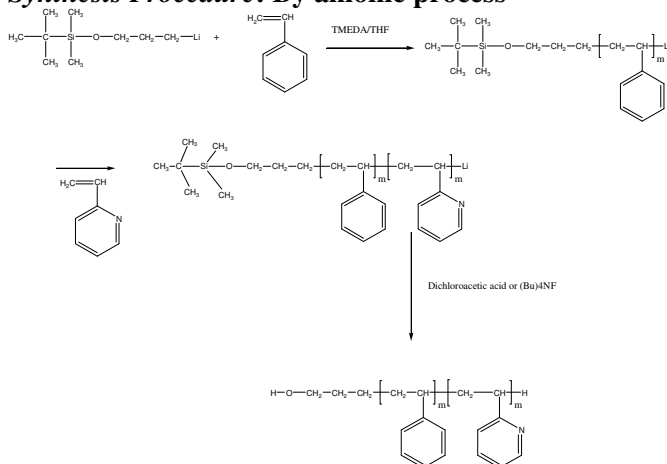


Composition:

Mn x 10 ³ S-b-2VP	PDI
69.0-b-27.0	1.14

T _g for PS block: 102°C	
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Synthesis Procedure: By anionic process



Characterization:

The polymer was characterized by GPC and ¹H NMR.

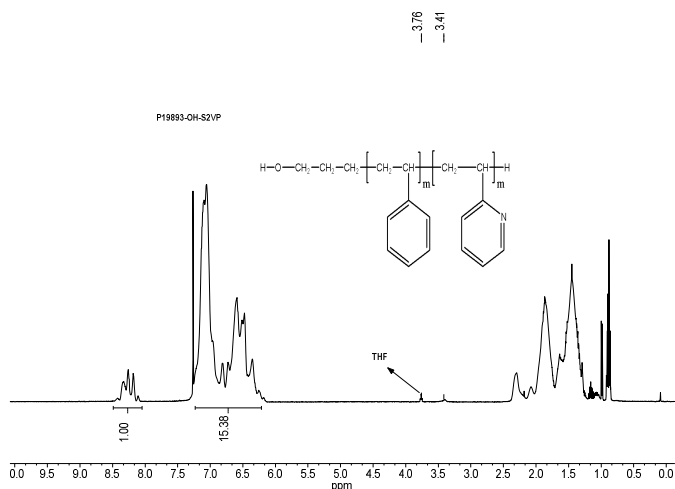
Purification:

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:

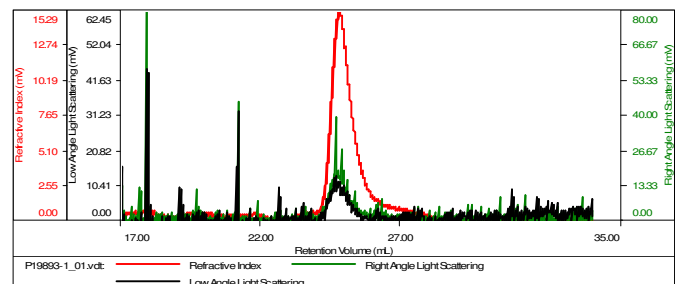
¹H-NMR Spectrum of the polymer



SEC elugram of the polymer:

Sample ID:P19893-1

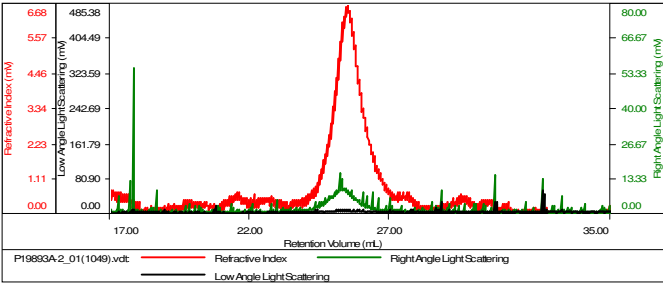
Concentration (mg/mL)	0.1768
Sample concd (mL/g)	0.1850
Method File	PS80K-May112016-0000.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	Mn (Da)	Mw (Da)	Mw/Mn	IV (dL/g)	Mp (Da)
P19893-1_01.vdt	69,277	74,796	1.080	1.0000	75,260

Sample ID:P19893A-QH-S2VP

Concentration (mg/mL)	0.1153
Sample ch/dc (mL/g)	0.1850
Method File	PS80K-April-18-2016-0001.vcm
Column Set	3x PL 1113-6300
Solvent	THF



Sample	Mh (Da)	Mw (Da)	Mw/Mh	IV (dL/g)	Mp (Da)
P19893A_2_01(1049).v	95,852	109,247	1.140	3.5950	94,087