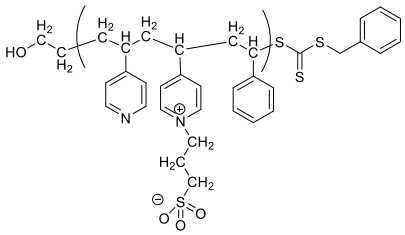
Sample Name: **Poly (styrene-co-4-vinypyridine-co-1-(3-Sulfopropyl)-4-vinylpyridinium), random**

Sample #: **P44127A-S4VP4VPSPran**

Structure:



Composition:

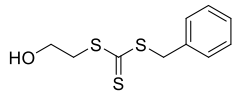
Mn x 10^3 PS-co-P4VP-4VPSP	**PDI**
26.0	1.4
P4VP (mol%): 90	
S: 4VP:4PSP 1:8.5:0.5	
CAS Number: 26222-40-2 for S4VPran	

Synthesis Procedure:

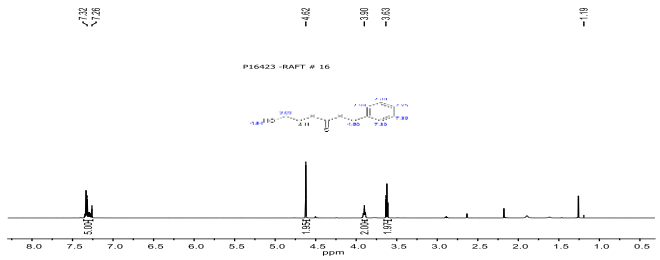
The polymer is prepared by RAFT polymerization of styrene and 4-vinylpyridine. Following RAFT reagent was used.

Benzyl-2-hydroxyethyltrithiocarbonat

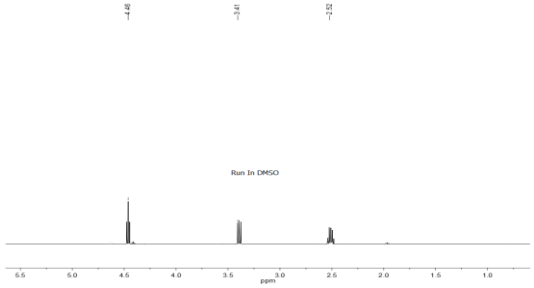
Structure:

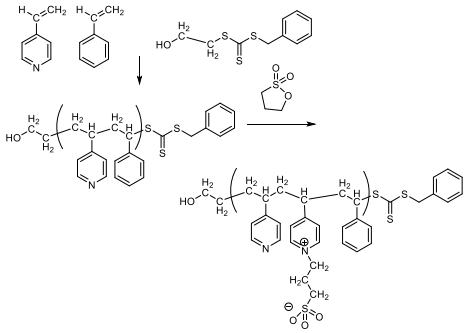


^{1}H-NMR spectrum of RAFT (400 MHz, $CDCl_3$):



HNMR of Proanesultone in DMSO:





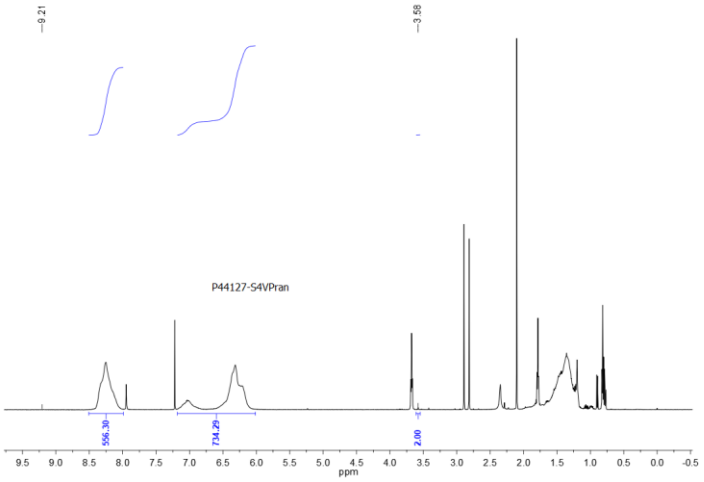
Characterization:

The product was characterized by size exclusion chromatography (SEC) and ^{1}H NMR data analysis.

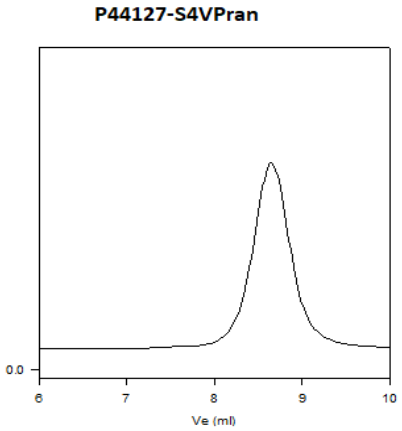
Solubility:

CHCl3	**Soluble**
DMF	**Soluble**
THF	**in-soluble**
Methanol	**Soluble**
Water	**Insoluble**

^{1}H-NMR Spectrum of the random copolymer:



SEC of the random copolymer:



Mn 26,000 Mw:36,000 Mw/Mn : 1.4

[1]H-NMR Spectrum ion CdCl3 of the S4VP with propane sultone random copolymer: