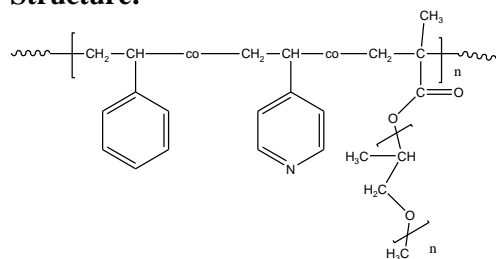Sample Name: **Random Copolymer Poly(styrene-co-4-vinypyridine –co-propylene glycol methyl ether methacrylate)**

Sample #: **P40997-S4VPPGMAran**

Structure:

Composition:

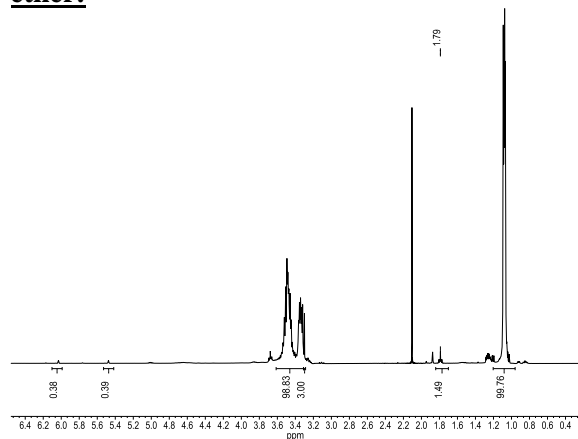| Mn x 10^3 PS-co-P4VP-co-PGMA	PDI
55.0	1.7
S:4VP:PGMA mole ratio	7:52:41
Mn of Propylene glycol methyl ether methacrylate : ~2000	Values of n : 34 units

Synthesis Procedure:
The polymer was prepared by RAFT polymerization of styrene, 4-vinylpyridine, and poly(propylene glycol) methyl ether methacrylate (M_n[PPO]=2000 g/mol). Lot P40994
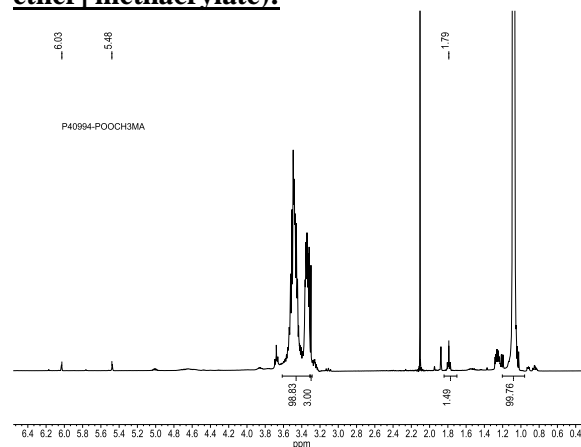
Characterization:
The polymer was characterized by ^{1}H-NMR and size exclusion chromatography (SEC).
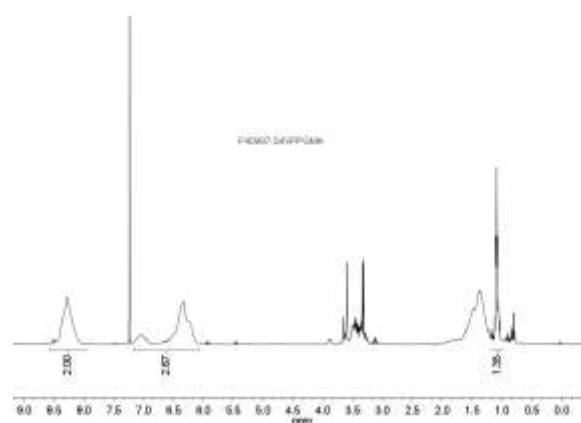
^{1}HNMR spectrum of poly (propylene oxide) methyl ether:

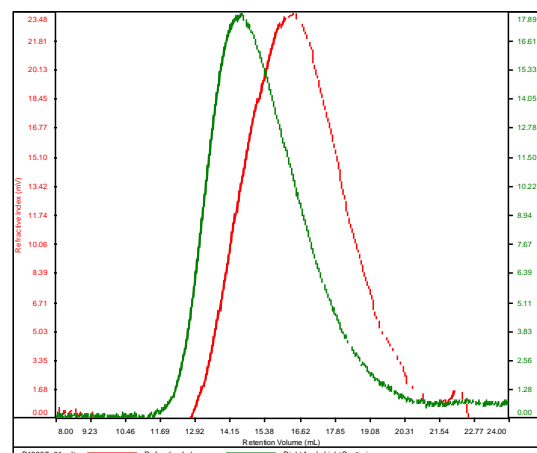**^{1}HNMR spectrum of poly([propylene oxide methyl ether] methacrylate):**

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

SEC of the random copolymer:

P40997-S4VPPGMAran

Conc	2.4689
dn/dc	0.1650
Solvent	DMF w 0.023M LiBr
Flow Rate	0.7000
Method	PS80k_2018-03-09-0000.vcm

Sample	Mn	Mw	Mp	Mw/Mn	IV
P40997_01.vdt	55,529	94,033	59,986	1.693	0.3396