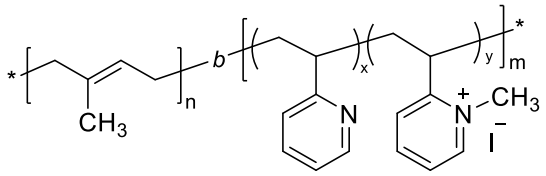
Sample Name: Poly(1,4-isoprene)-*b*-poly(N-methyl 2-vinyl pyridinium iodide)

Other Name: Poly(1,4-isoprene)-*b*-poly(2-vinyl pyridine, quaternized with methyl iodide)

Sample # P670-Ip2VPQ

Structure:



Composition:

$M_n \times 10^3$ (g/mol) [Ip-*b*-2VP]	M_w/M_n
18.0-*b*-18.7	1.03

Degree of quaternization: 37%

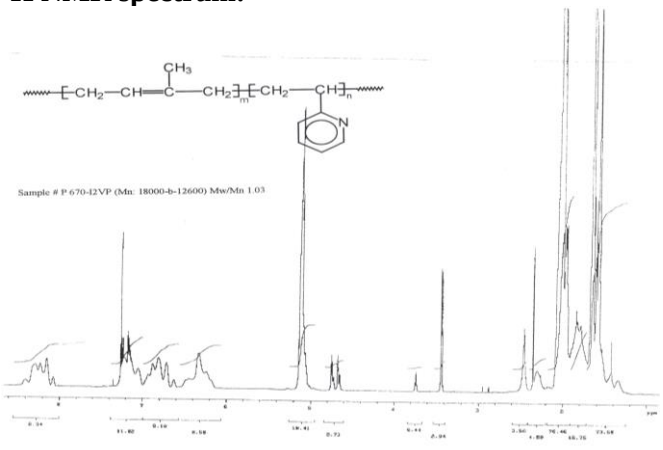
Synthesis procedure:

Poly(1,4-isoprene–*block*–2-vinyl pyridine) was prepared by living anionic polymerization of isoprene followed by addition of 2-vinyl pyridine sequentially.

Characterization:

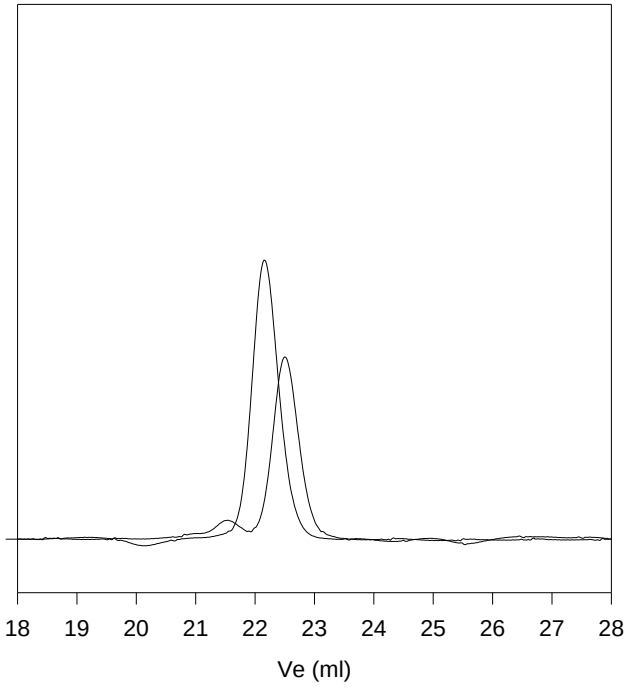
The product was analyzed by proton NMR spectroscopy, size exclusion chromatography (SEC), and elemental analysis.

^{1}H NMR spectrum:



SEC chromatograms of poly(isoprene) and poly(isoprene)-b-poly(2-vinyl pyridine):

P670-Ip2VP Before Quaternization



Elemental analysis:

SAMPLE ID	LAB ID	ANALYSIS	RESULTS	
670P12VPQ-1	P-6904	Carbon	68.16	%
		Hydrogen	7.96	%
		Nitrogen	4.22	%
		Iodine	17.85	%
670P12VPQ-2	P-6905	Carbon	70.85	%
		Hydrogen	8.52	%
		Nitrogen	4.17	%
		Iodine	13.86	%