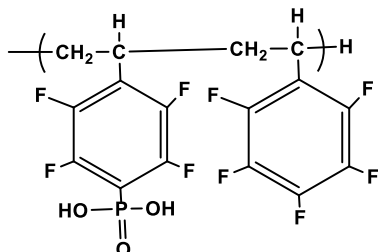


Sample Name: Phosphonic acid functionalized Poly(pentafluorostyrene) random copolymer

Sample #: P44260B-5FS-4FSPO₃H₂ran

Structure:



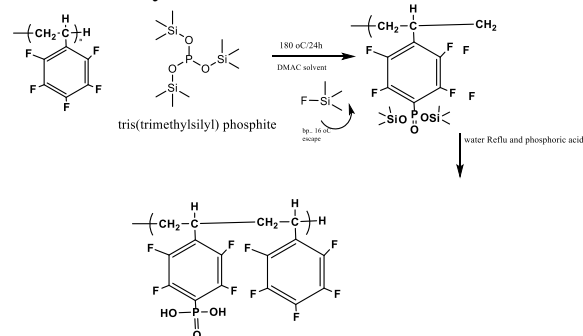
Composition:

$M_n \times 10^3$	PDI
210.0	1.37
Phosphonation~ 15%	

Polymer shows film forming properties.

Synthesis Procedure:

The following reaction scheme shows phosphonation of polypentafluorostyrene in N,N-dimethyl acetamide:



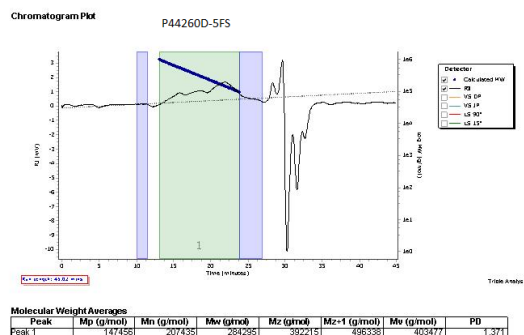
Characterization:

The product was characterized by size exclusion chromatography (SEC), ¹H NMR, FNMR and DSC data analysis.

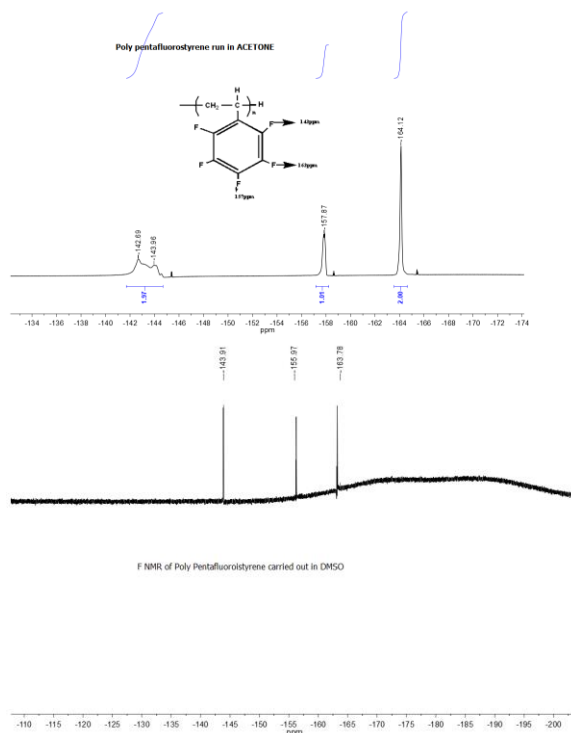
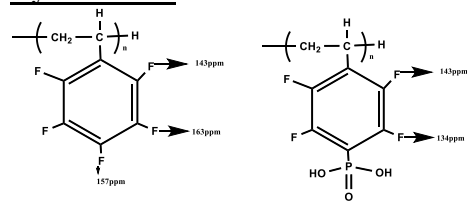
Solubility:

Polymer is soluble in DMSO mixture or in DMSO-Acetone.

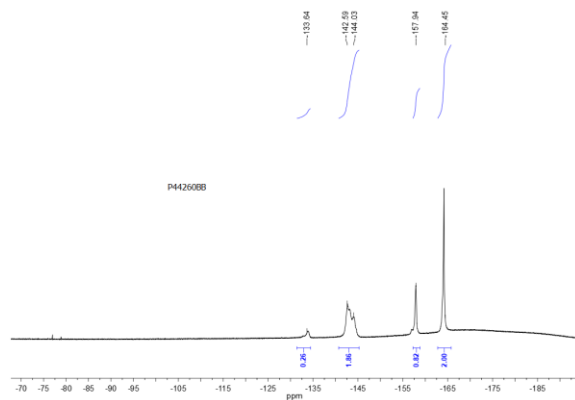
SEC elugarm of Poly pentafluorostyrene:



FNMR spectrum of Poly pentafluorostyrene used:

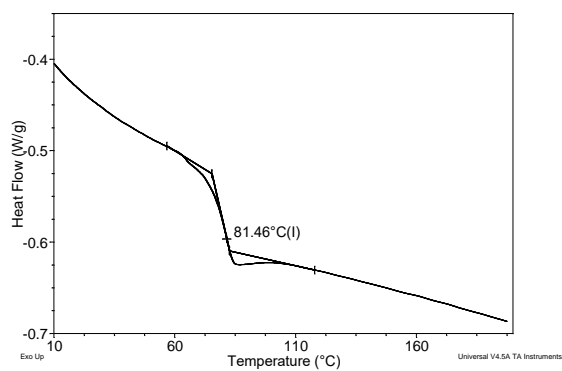


FNMR spectrum of Polymer with 15% phosphonation:



DSC thermogram for the polymer: Poly Pentafluorostyrene:

Sample: P44260-5FS



Phosphonation with about 15%:

Sample: P44260B

