Electronic Supplementary Material (ESI) for Journal of Materials Chemistry A

Supporting Information

Ion Conduction and phase morphology in sulfonate copolymer ionomers based on ionic liquid - sodium cation mixtures.

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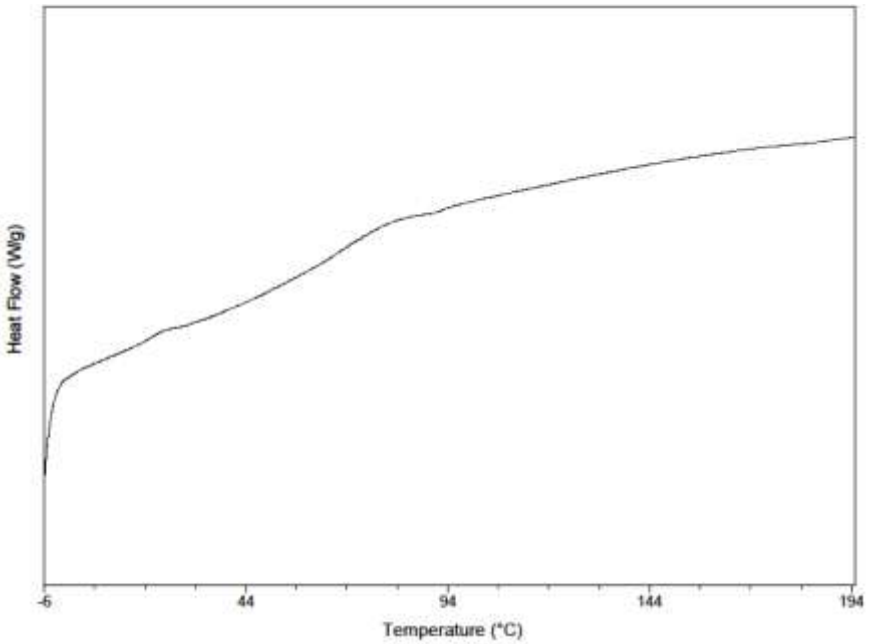

Fig. S1 DSC thermogram of poly ([N_{1222}][AMPS]-co-Na[VS]) (90:10) ionomer with 10% PEG

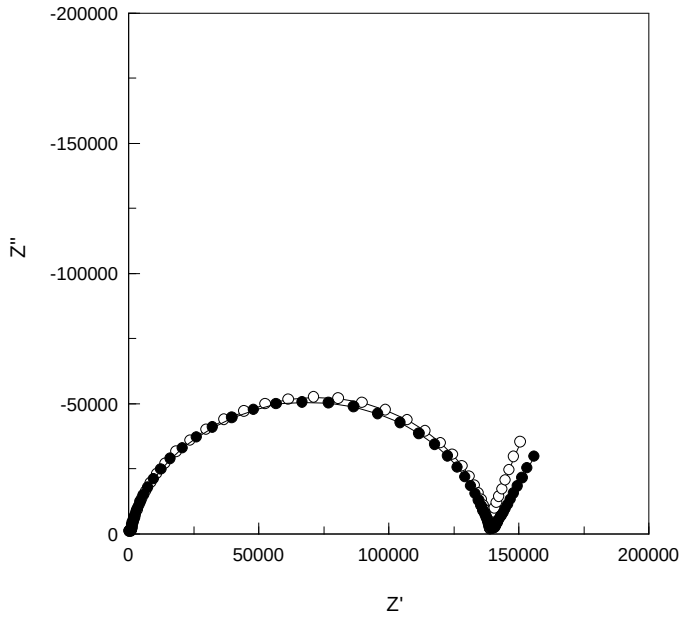

Fig. S2 Impedance plane plot of poly ([N_{1222}][AMPS]-co-Na[VS]) (90:10) ionomer with 10% PEG

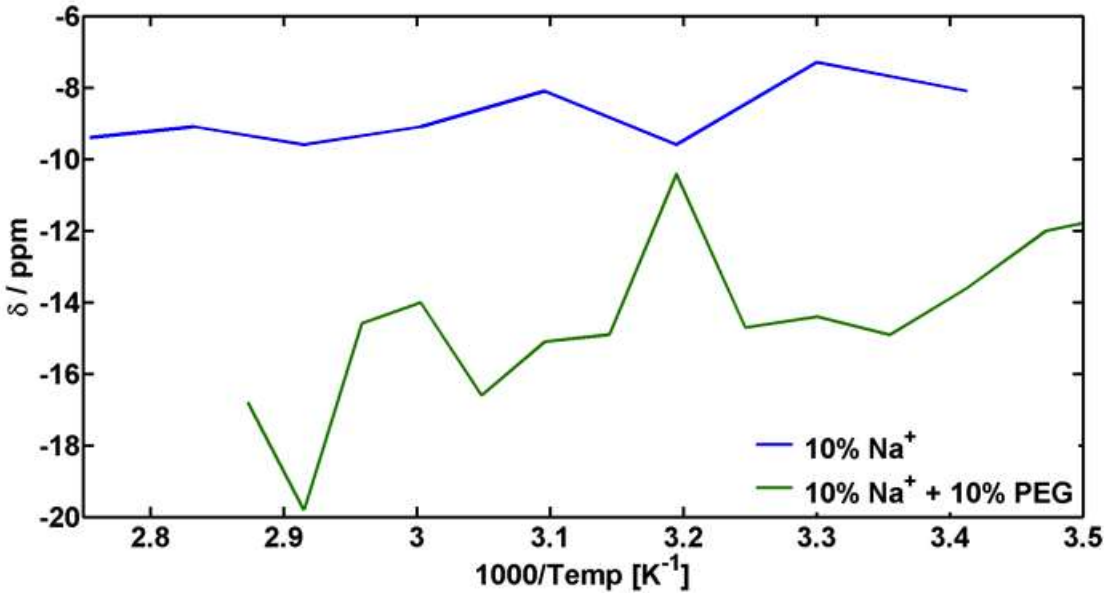

Fig. S3 Comparison of the position of the intensity maximum for 10% Na^+ and 10% PEG addition

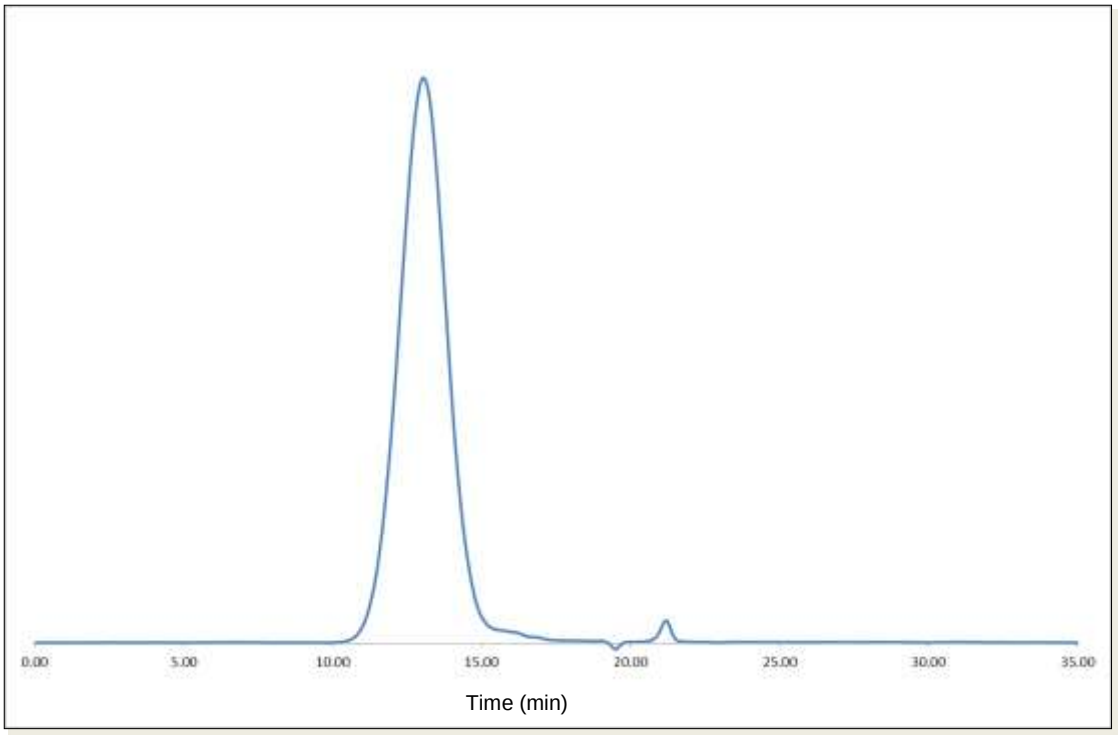

Fig. S4 Gel Permeation Chromatography of poly ([N_{1222}][AMPS]-co-Na[VS]) (50:50). Note that the small peak is solvent peak.

Table S1 Molecular weight and polydispersity index of poly ([N_{1222}][AMPS]-co-Na[VS]) with various composition of Na^+

Sample (%Na^+)	Mn (g/mol)	PDI
50	19905	2.599
20	24928	2.559
10	24750	2.589