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Electronic Supplementary Information for

Nanostructured proton-conducting membranes based on polymerizable zwitterionic ionic liquid microemulsions

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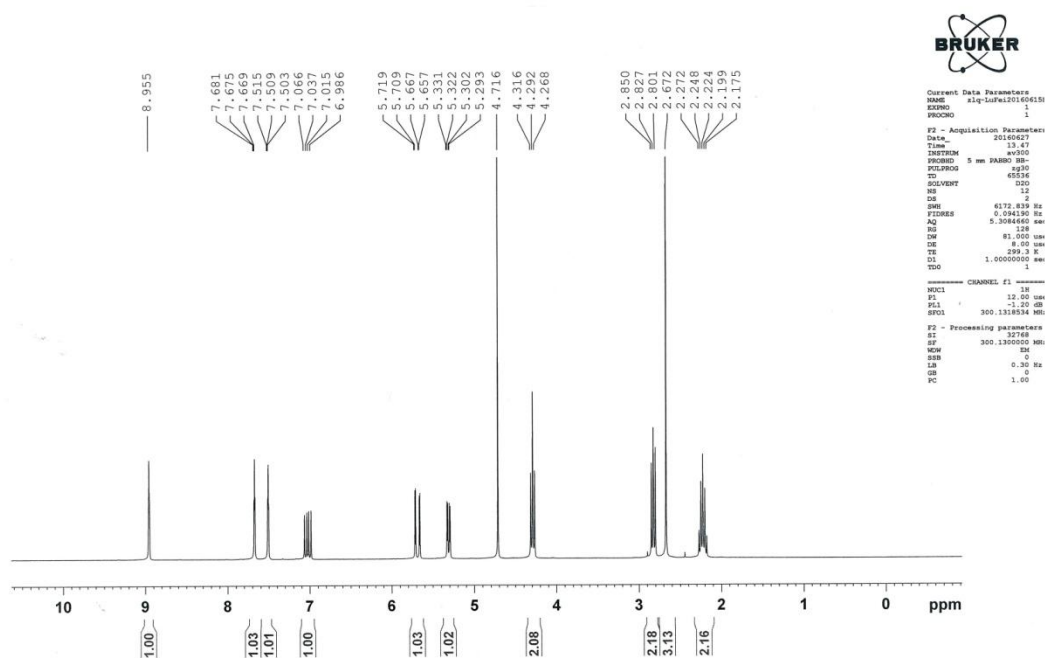


Fig. S1 ^1H NMR spectrum of 1-(3-sulfopropyl)-3-ethenyl-imidazolium methanesulfonate ([VIPS][MSA]).

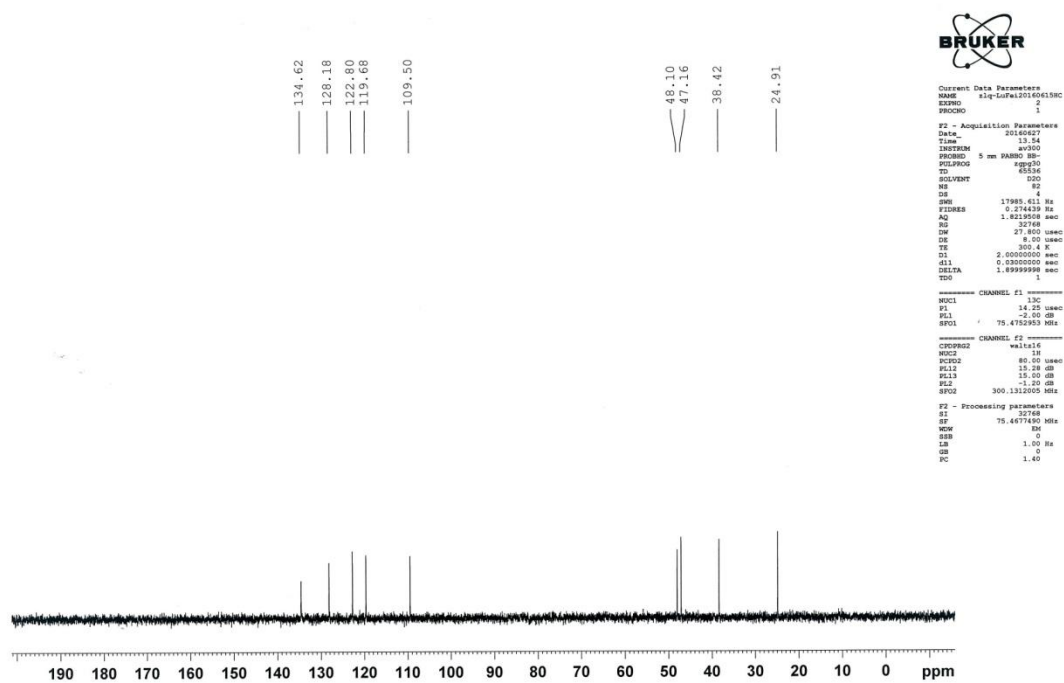


Fig. S2 ^{13}C NMR spectrum of 1-(3-sulfopropyl)-3-ethenyl-imidazolium methanesulfonate ([VIPS][MSA]).

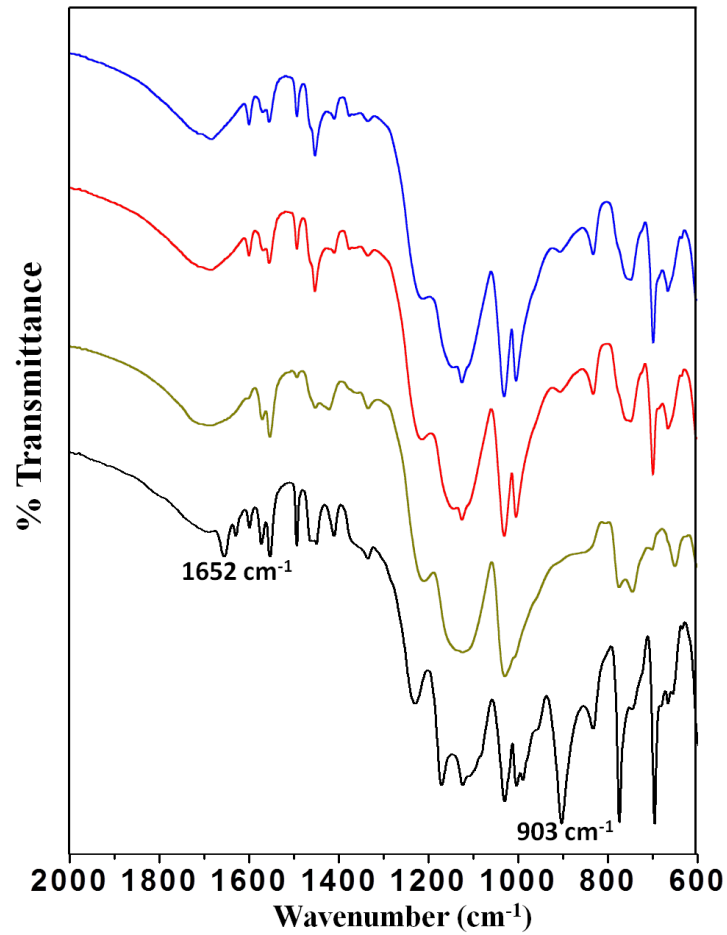


Fig. S3 FT-IR spectra of the ternary mixture with weight ratio [VIPS][MSA]:DBSA:St = 44:37:19 (black curve), Film-O/IL (green curve), Film-Bi (red curve) and Film-IL/O (blue curve).

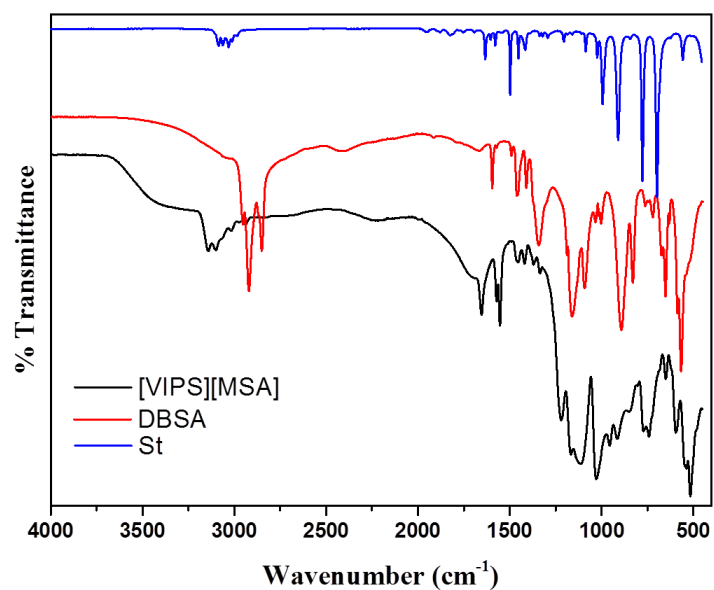


Fig. S4 FT-IR spectra of [VIPS][MSA] (black curve), DBSA (red curve) and St (blue curve).

Table S1 Compositions of the different proton conducting membranes.

Samples	Weight Fraction		
	[VIPS][MSA]	DBSA	St
Film-O/IL	62.0 wt%	25.0 wt%	13.0 wt%
Film-Bi	43.8 wt%	37.5 wt%	18.7 wt%
Film-IL/O	25.0 wt%	37.5 wt%	37.5 wt%