## Supporting Information for Sensitivity and Resilience of Phosphatidylcholine and Phosphatidylethanolamine Lipid Membranes Against Cholinium Glycinate Bio-compatible Ionic Liquid

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Figure S1: [Ch][Gly] IL concentration dependence of area per lipid (APL) as a function of time for (a) POPC and (b) POPE lipid membrane systems. In each sub-figure, the change in APL with time for pure bilayer is also shown.



Figure S2: (a) Area per lipid (APL) and (b) bilayer thickness  $(D_{PP})$  as a function of [Ch][Gly] IL concentrations for POPC and POPE lipid bilayer. The bilayer thickness is defined as the distance between the peaks in the phosphate electron density profile along bilayer normal.