

Supplementary Materials

Article

Pressure-Dependent Clustering in Ionic-Liquid-Poly (Vinylidene Fluoride) Mixtures: An Infrared Spectroscopic Study

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Figure S1: Structure of [HEMIm][TFSI], choline [TFSI], and PVdF.

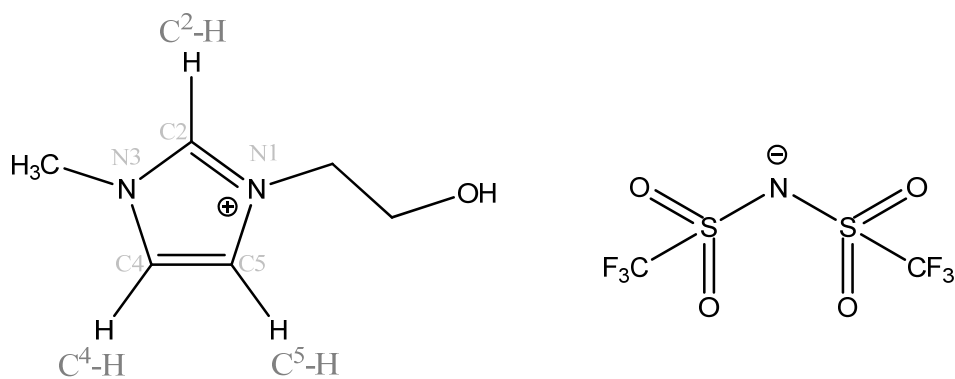
Figure S2: IR spectra of mixture of PVdF containing 20 wt% [HEMIm][TFSI] at (a) ambient pressure and (b) 0.4, (c) 0.7, (d) 1.1, (e) 1.5, (f) 1.8, and (g) 2.5 GPa.

Figure S3: IR spectra of pure PVdF at (a) ambient pressure and (b) 0.4, (c) 0.7, (d) 1.1, (e) 1.5, (f) 1.8, and (g) 2.5 GPa.

Figure S4: IR spectra of pure choline [TFSI] at (a) ambient pressure and (b) 0.4, (c) 0.7, (d) 1.1, (e) 1.5, (f) 1.8, and (g) 2.5 GPa.

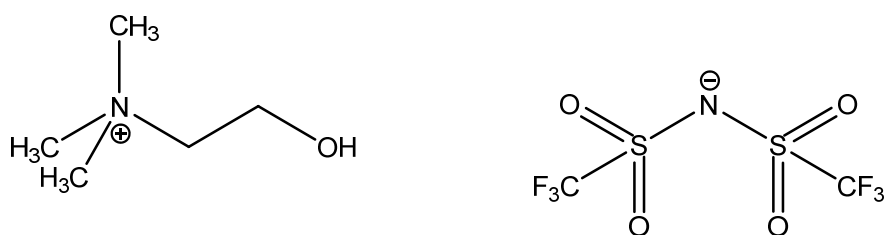
1-(2-Hydroxyethyl)-3-methylimidazolium bis(trifluoromethylsulfonyl)imide

[HEMIm][TFSI]



Choline bis(trifluoromethylsulfonyl)imide

Choline [TFSI]



Polyvinylidene fluoride

PVdF

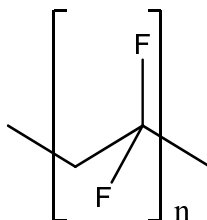


Figure S1. Structure of [HEMIm][TFSI], choline [TFSI], and PVdF

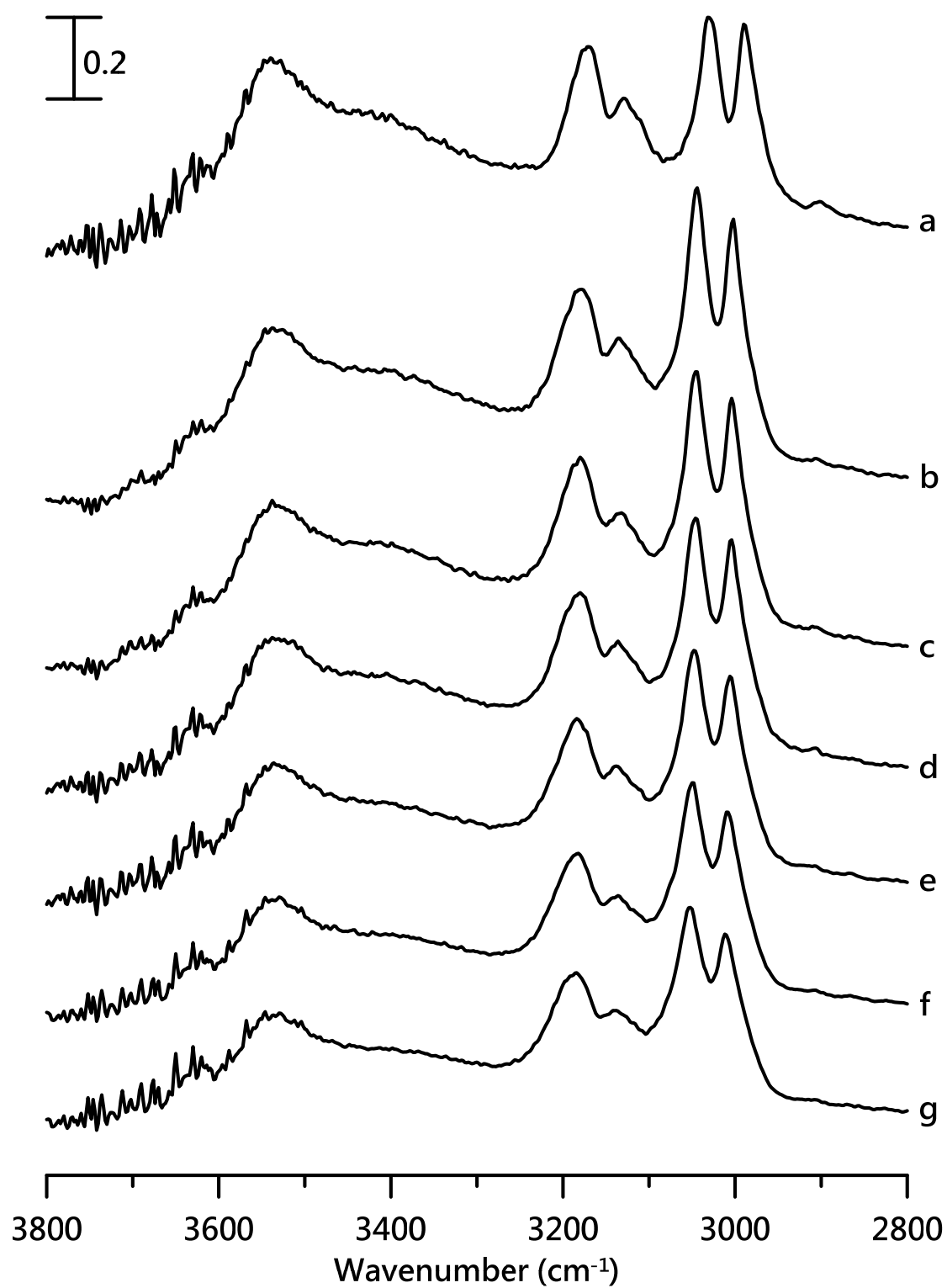


Figure S2. IR spectra of mixture of PVdF containing 20 wt% [HEMIm][TFSI] at (a) ambient pressure and (b) 0.4, (c) 0.7, (d) 1.1, (e) 1.5, (f) 1.8, and (g) 2.5 GPa.

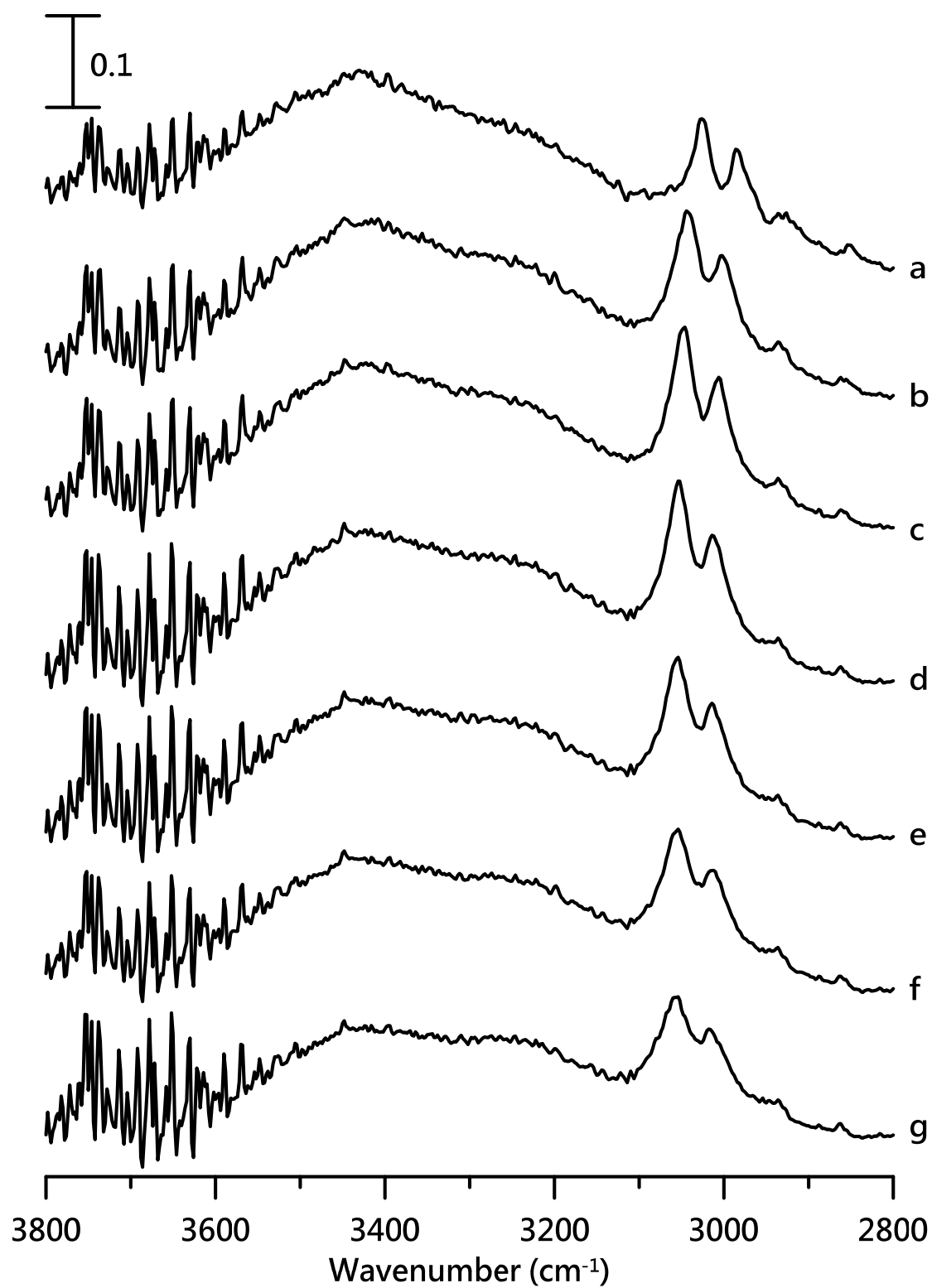


Figure S3. IR spectra of pure PVdF at (a) ambient pressure and (b) 0.4, (c) 0.7, (d) 1.1, (e) 1.5, (f) 1.8, and (g) 2.5 GPa.

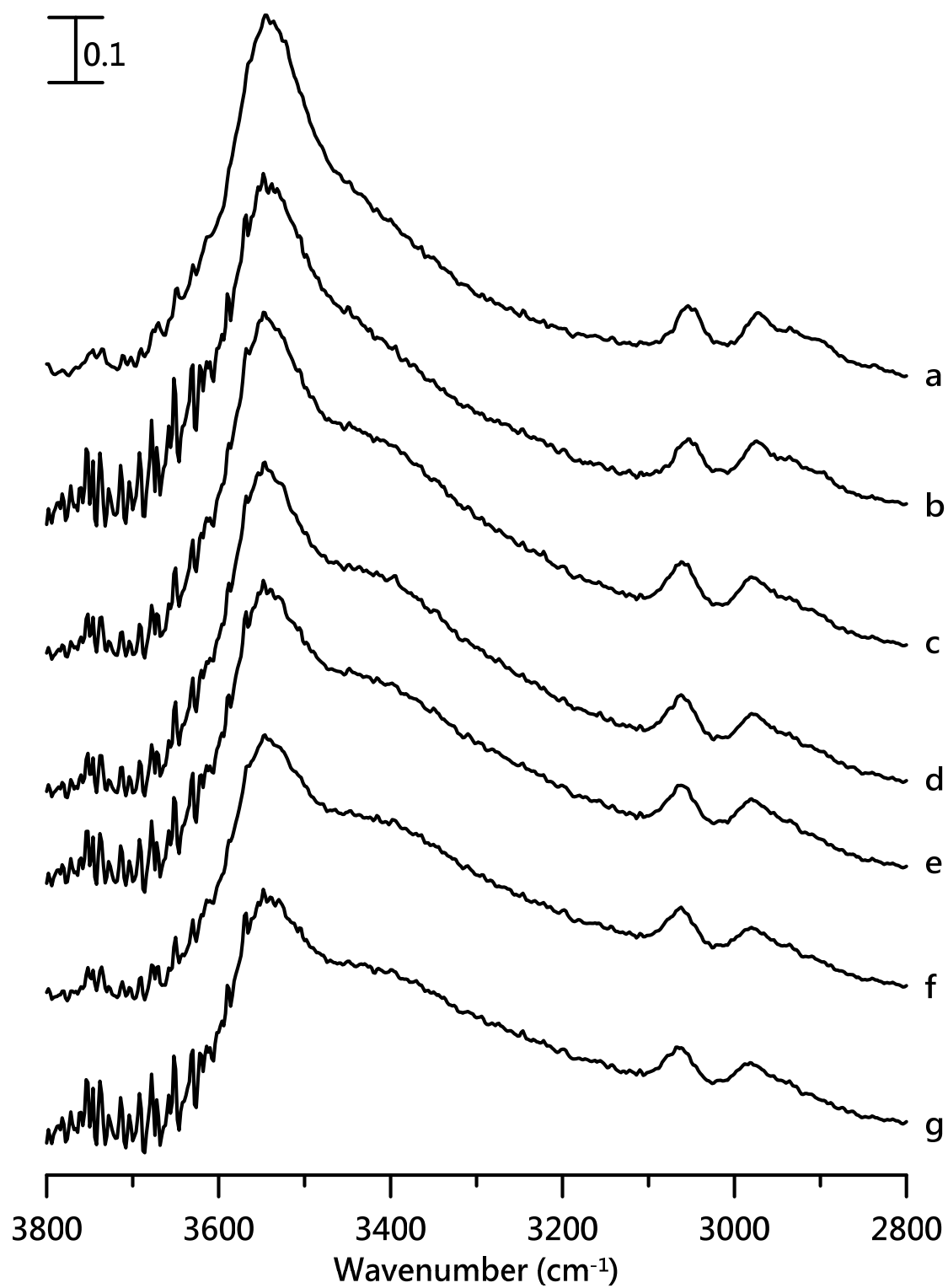


Figure S4. IR spectra of pure choline [TFSI] at (a) ambient pressure and (b) 0.4, (c) 0.7, (d) 1.1, (e) 1.5, (f) 1.8, and (g) 2.5 GPa.