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Supplementary Information

Preparation of Heterogeneous Cation- and Anion-Exchange Membranes by Eco-Friendly Method: Electrochemical Characterization and Desalination Performance

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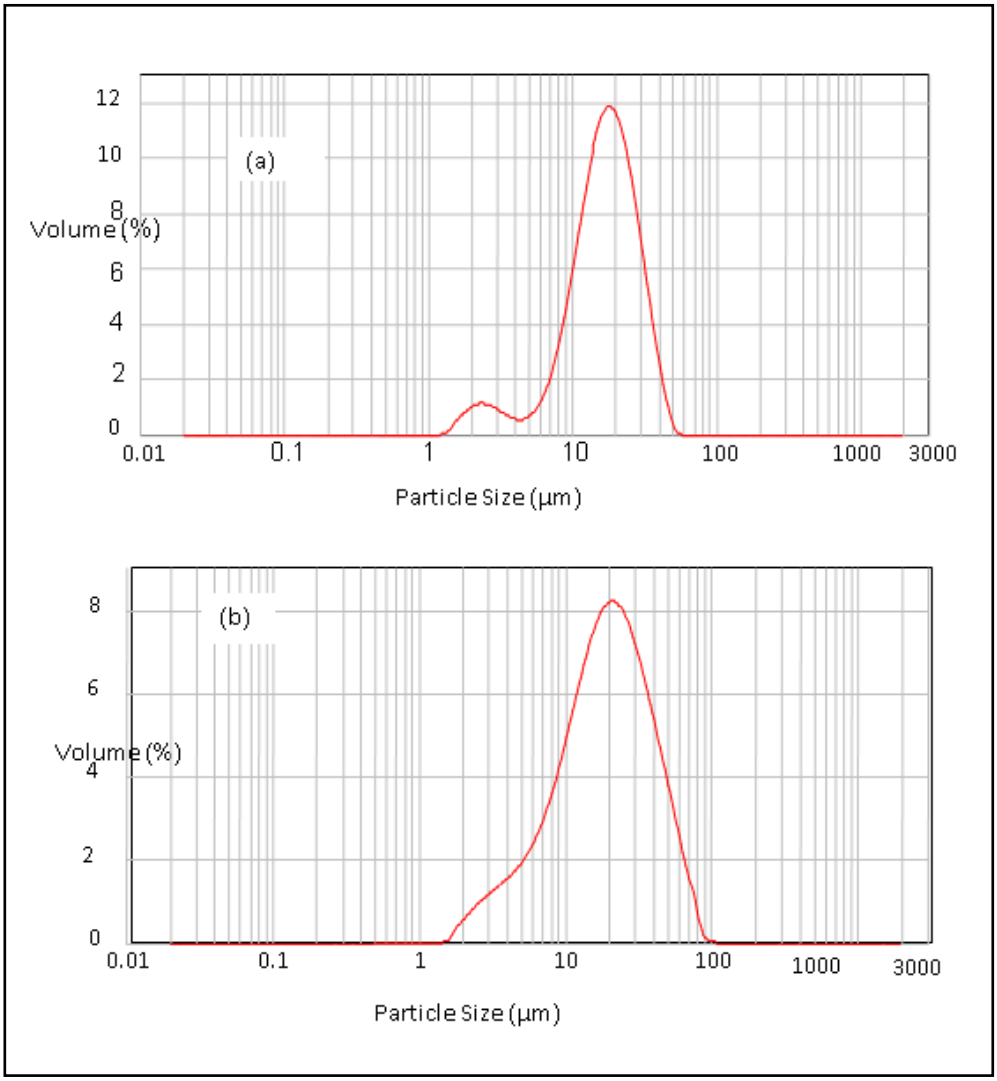

Fig. S1. Particle size distribution of (A) CXR, and (b) AXR.

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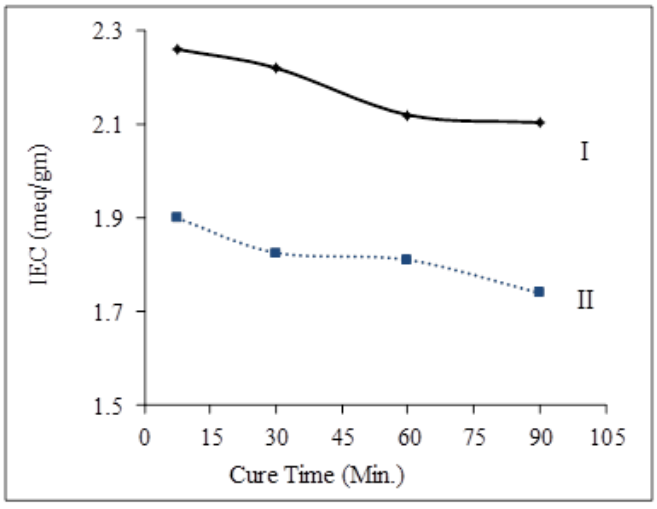
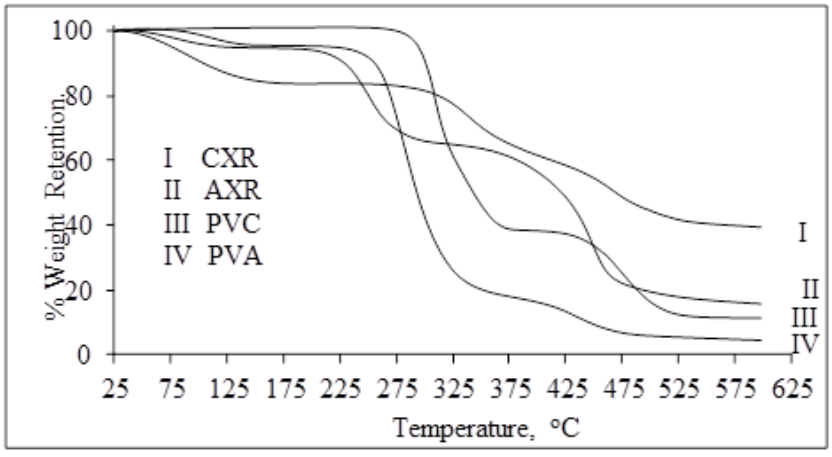
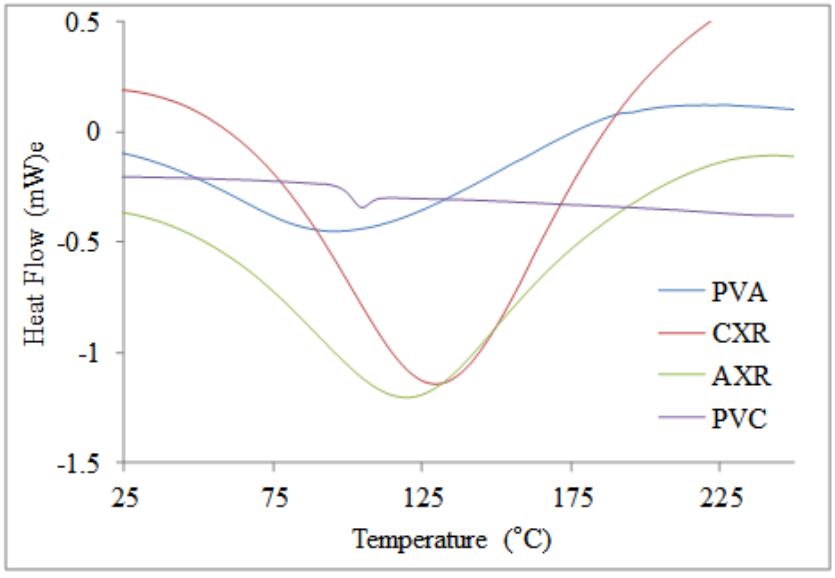


Fig. S2. Cure time vs. IEC for I: HCXM, and II: HAXM. Resin:Binder (PVA) ratio: 60:40; Crosslink conditions: 30% MA at 140 °C.



TGA thermograms of PVA, PVC, CXR and AXR.



DSC thermograms of PVA, PVC, CXR and AXR.

Fig. S3. TGA and DSC thermagram of ion exchange resins and binder.