

1 Supporting information

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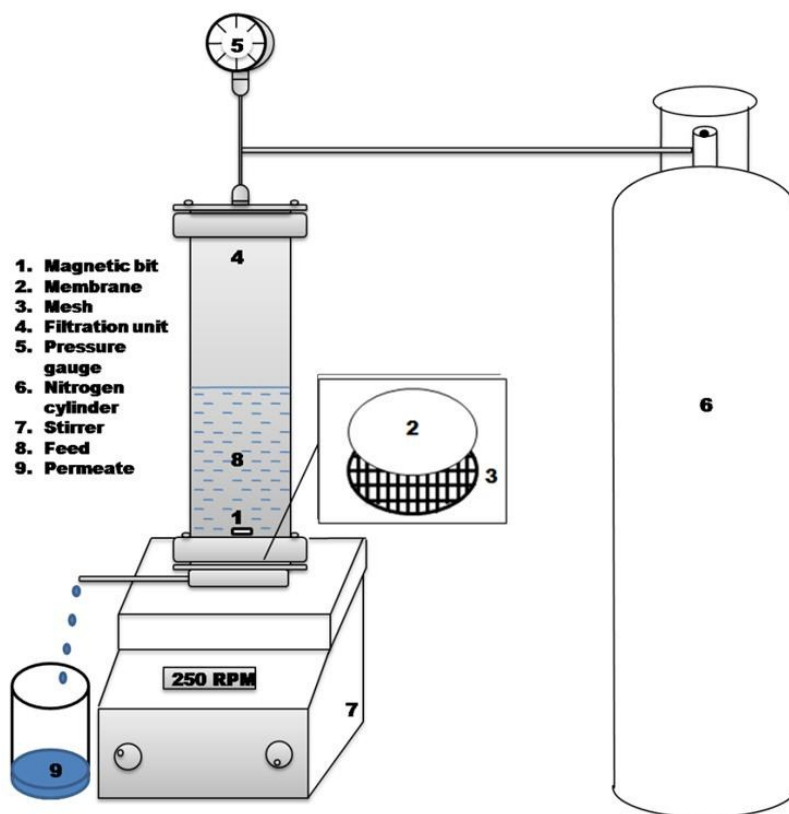
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S.1. Experimental set up for the rejection of metal ions.

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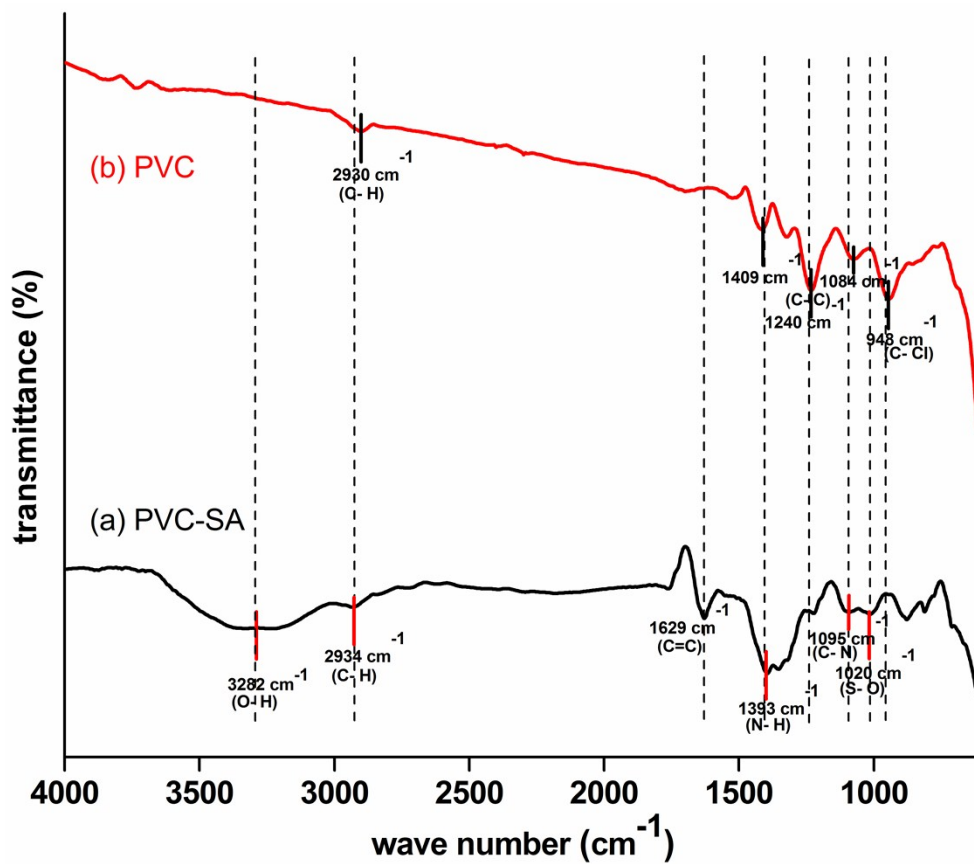
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S.2. ATR-IR spectrum of PVC modified with sulfanilic acid.

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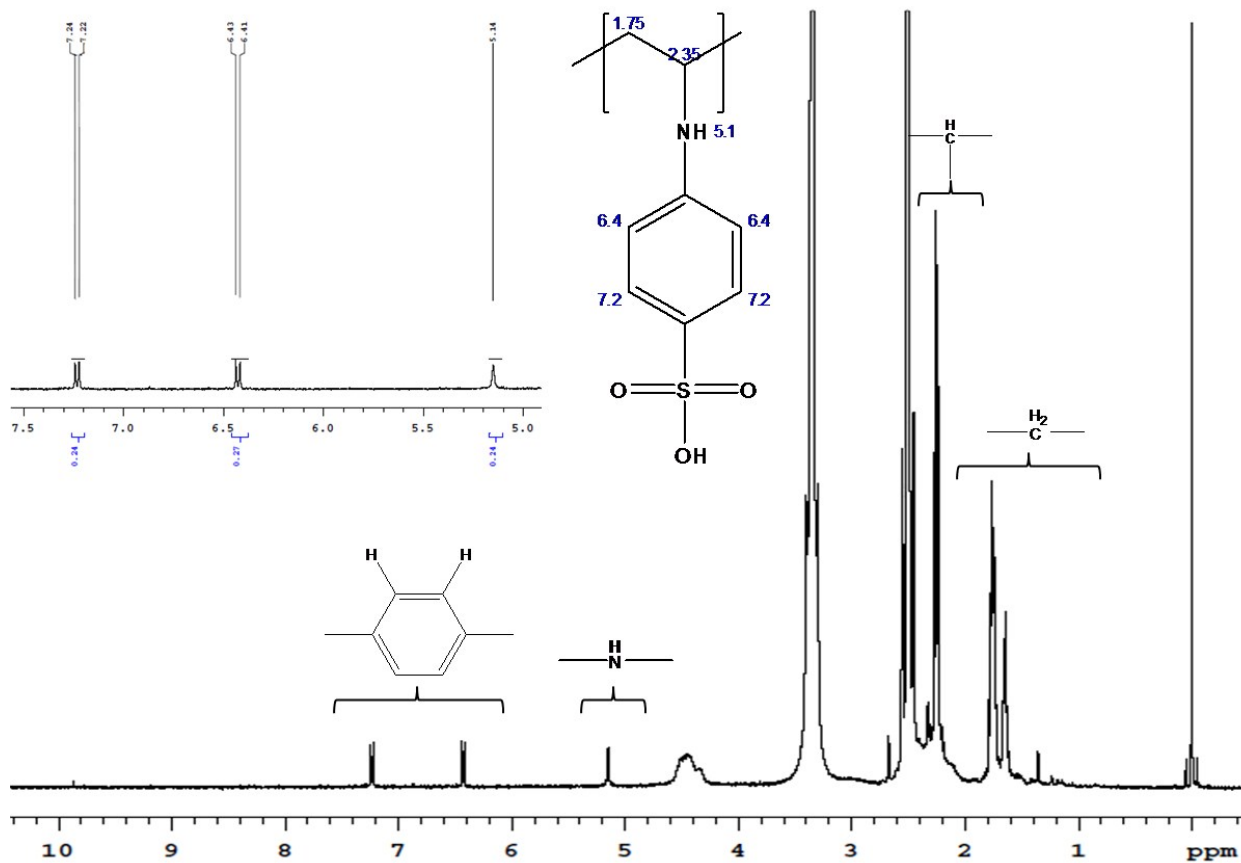
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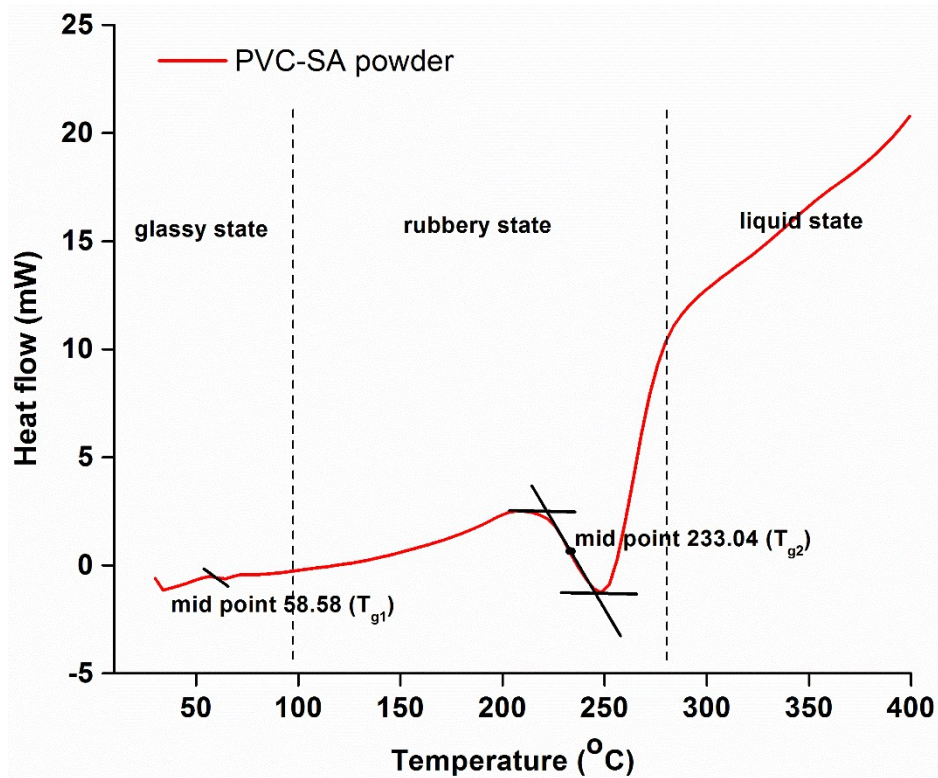
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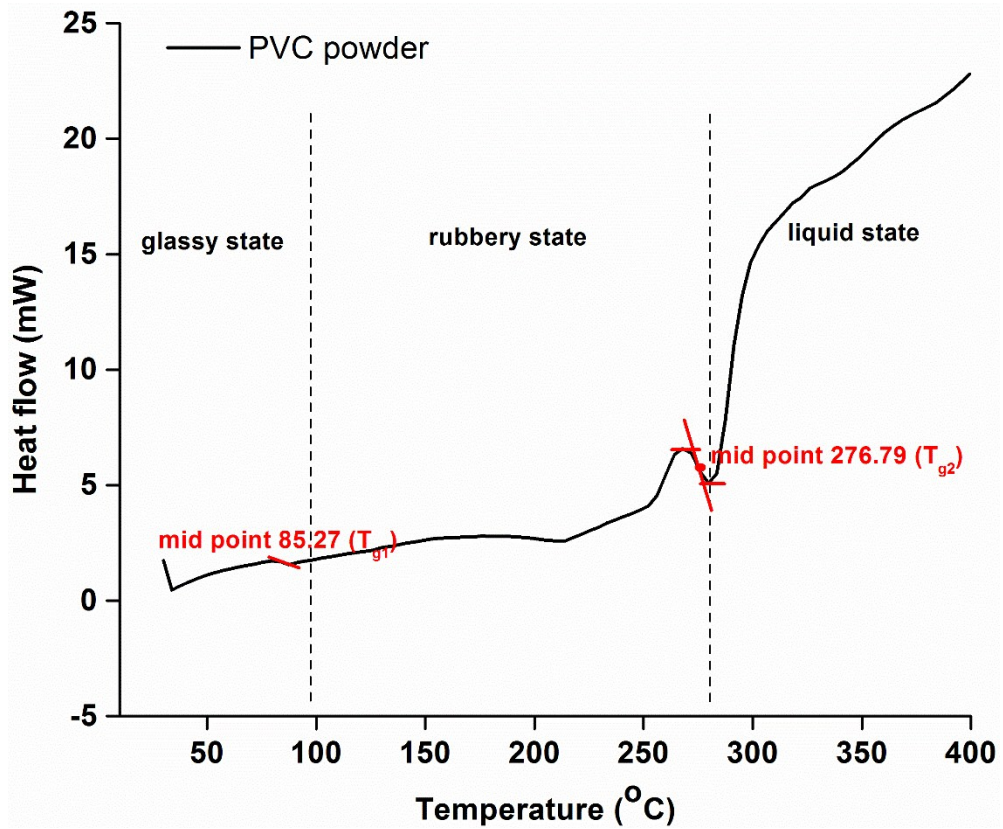
S.3. <sup>1</sup>H NMR spectrum of PVC modified with sulfanilic acid.

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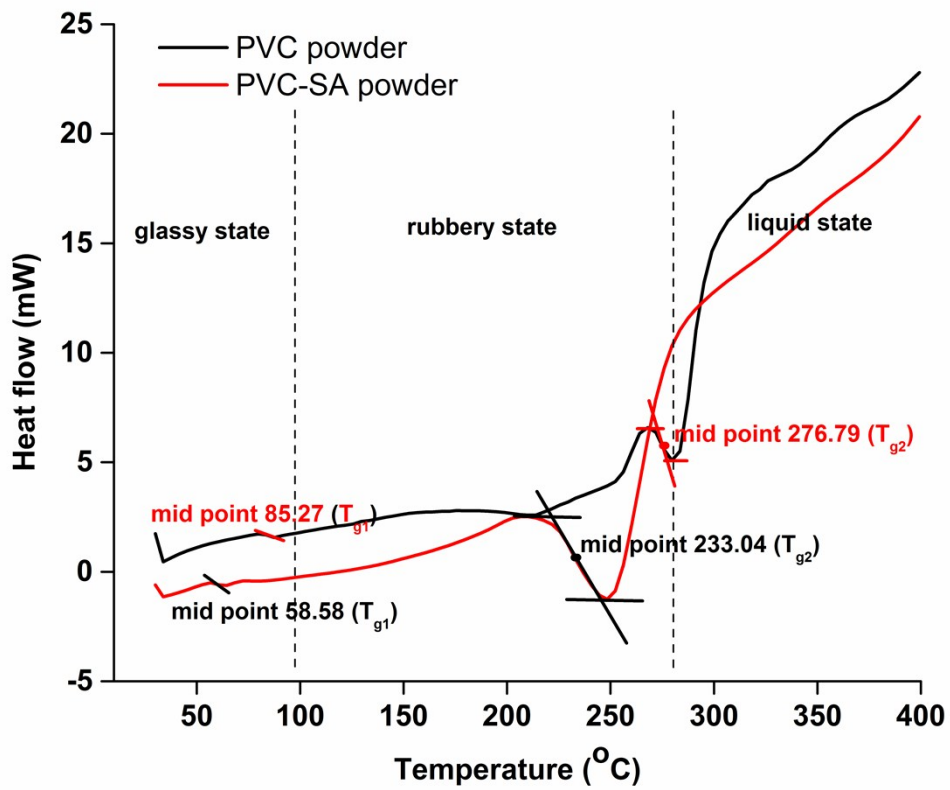
S.4. DSC plot of PVC-SA.

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S.5. DSC plot of PVC.

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S.6. DSC plot of PVC and PVC-SA together for comparison.

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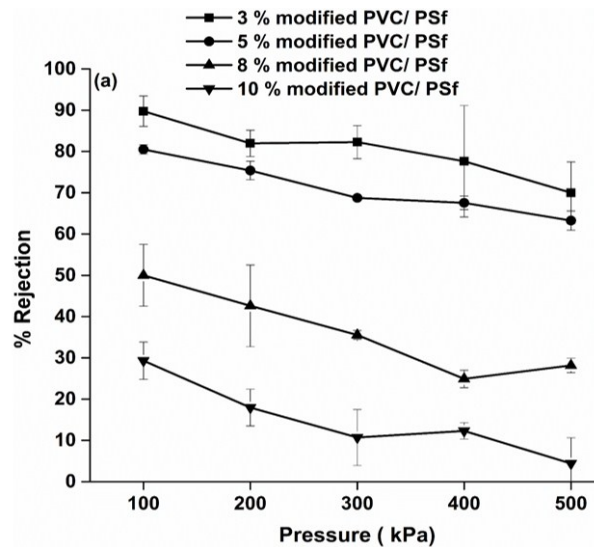
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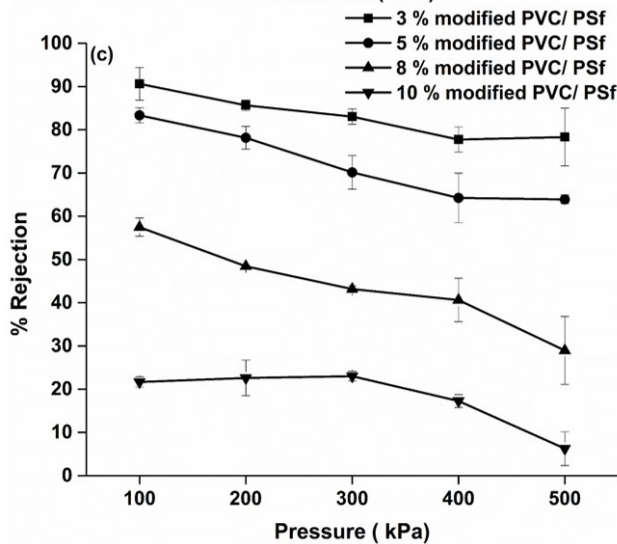
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171 S.7 % Rejection of metal ions (a) Cadmium (b) Chromium and (c) Lead using blend membranes

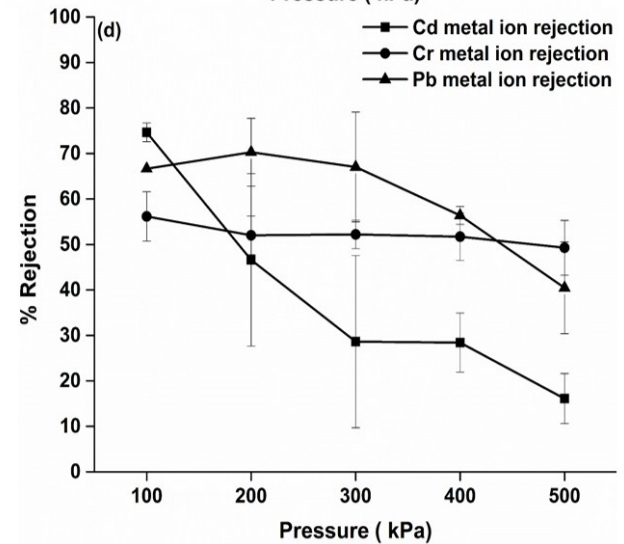
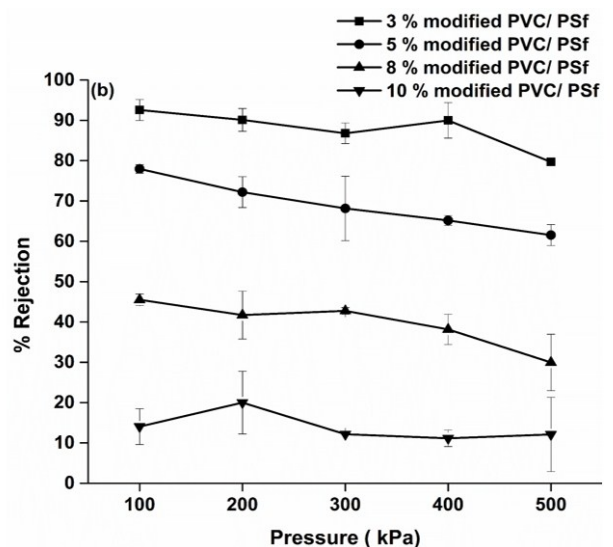
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and (d) represents the rejection of all three metal ions by NF 270 membrane.

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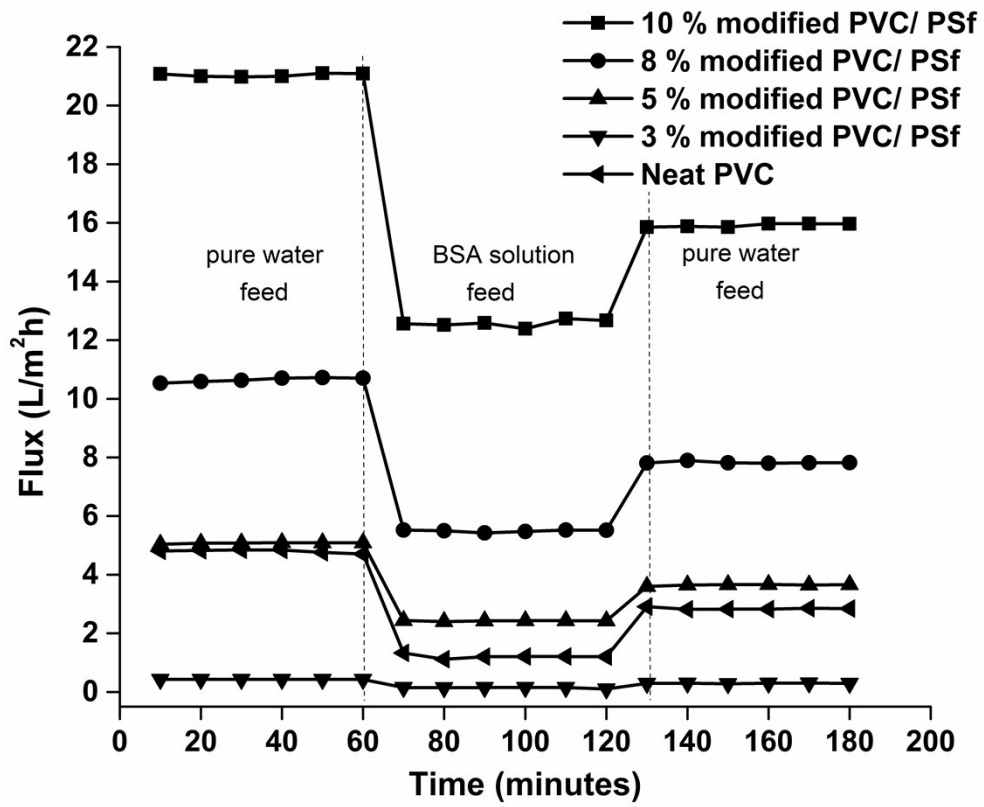
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S.8. Antifouling study of the membranes at constant interval of time.

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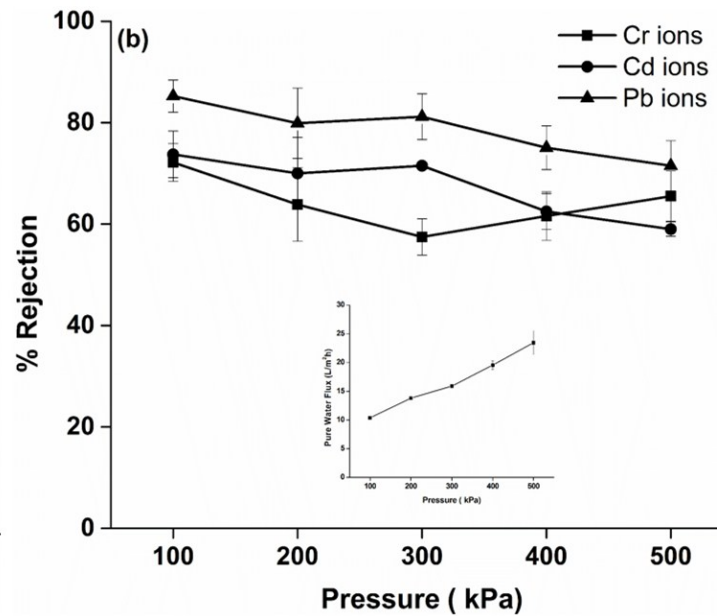
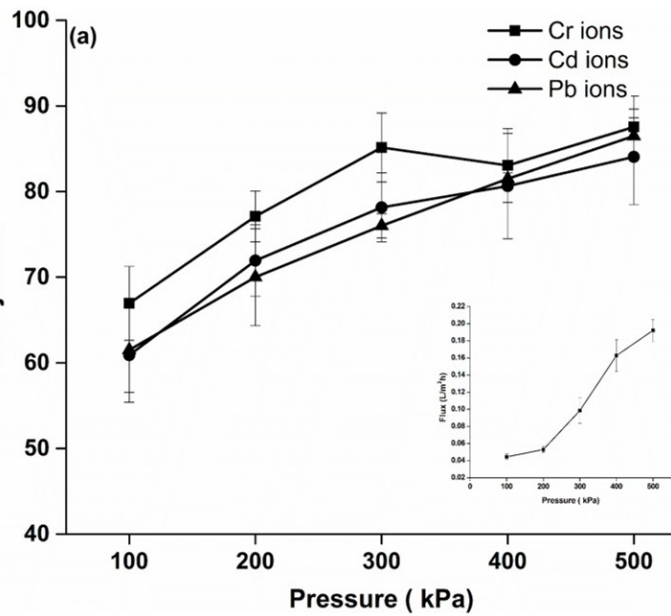
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S.9. % Rejection of Cadmium, Chromium and Lead metal ions together at different pressure by (a) 3 % PVC-SA/PSf membrane and (b) NF 270 membrane.