

the streaming potential coefficient $dU_{str}/d\Delta p$ and the Debye length that describes the extension of the diffuse layer of the EDL at the solid-liquid interface.

The analysis of streaming current and streaming potential data for forward osmosis membranes shows a significant zeta potential at an ionic strength as high as 3 mol/l which predicts that electrostatic interactions are maintained at high salinity. The suggested method for the extrapolation of zeta potential to high ionic strength enables the direct correlation between the charge density at the membrane-feed water interface with membrane properties such as salt rejection and fouling propensity.

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