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Drinking Water Engineering and Science Discussions

Interactive comment on "Evaluation of Thin Film Composite Forward Osmosis Membranes: Effect of Polyamide Preparation Conditions" *by* Aya Mohammed Kadhom et al.

Anonymous Referee #2

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The authors presented the effect of exposure time of MPT and TMC on the water/salt flux in the prepared FO membranes. From the desalination point of view, an optimal FO membrane should have high water flux but low salt flux. Why did the authors concluded that the best results were found to be at 5 min for MPD and 1 min for TMC reaction times (highest water and salt fluxes)? In the figures, please avoid using abbreviations like LMH, GMH. In the authors publication: M. Al-Furaiji et al.: TFC membranes supported with nanofibers for forward osmosis process, the water and salt flux reported is much lower as compared with the values presented in this manuscript. What drives such differences? If we zoom-in to compare the water flux and salt flux reported in M. Al-Furaiji et al.: TFC membranes supported with nanofibers for forward osmosis

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Discussion paper

process (previous work) and in current work, the water flux is approx 4 time higher than that reported in previous work, but the salt flux is approx 6-8 time higher than that reported in previous work. This means that the salt rejection by the FO membrane prepared in the current work will be significantly lower than the membrane prepared in your previous work. it will be interesting comparison to be discussed in the manuscript.

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