

Supporting Information

Role of Extracellular Polymeric Substances in Biofouling of Reverse Osmosis Membranes

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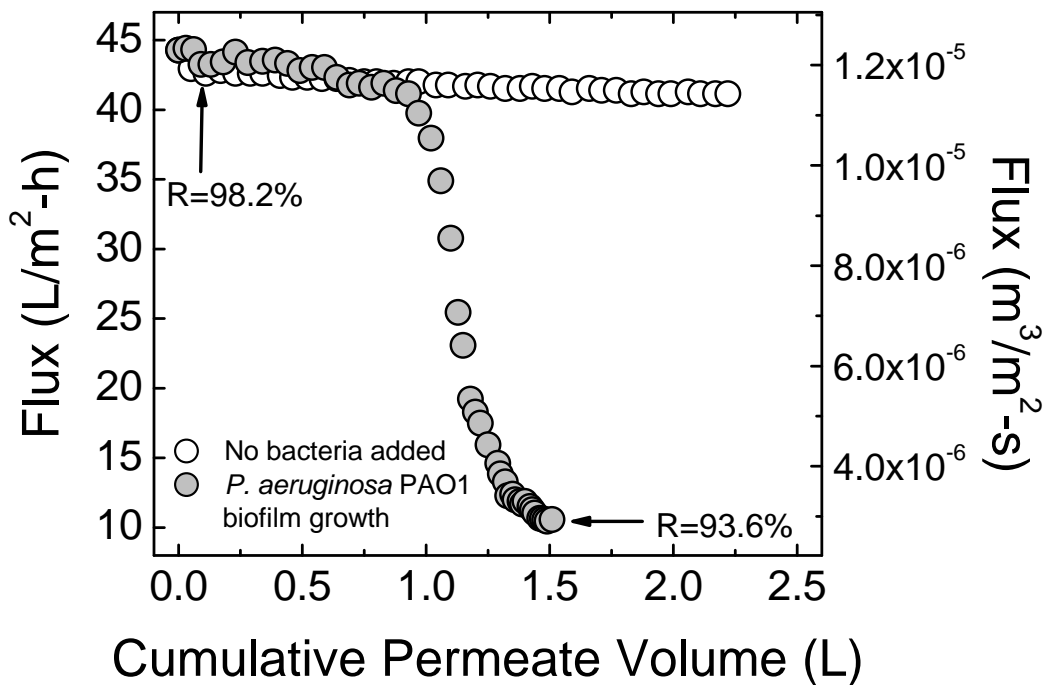


FIGURE S1. Permeate flux and salt rejection (R) upon growth of a *P. aeruginosa* PAO1 biofilm on an RO membrane. Experimental conditions were as follows: initial cell concentration of 10^7 cells per mL in a synthetic wastewater medium with an ionic strength of 14.6 mM and pH 7.4; initial permeate flux of 1.23×10^{-5} m/s (44.3 L/m²-h or 26.1 gal/ft²-day); crossflow velocity of 8.5 cm/s, and the temperature was fixed at 25 °C. At the end of the fouling run with biofilm, the cumulative volume of 1.5 L corresponds to 27.8 hours of filtration. At the end of the control experiment without biofilm, the cumulative volume of 2.2 L corresponds to 26.5 hours of filtration. Note that the membrane surface area is 2.00×10^{-3} m².