

# Supporting Information

## Removal of Sulfadiazine by Polyamide Nanofiltration Membranes: Measurement, Modeling, and Mechanisms

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The “model” fixed charge distribution expressions:

**Equation S1.** NF90:

$$C_{Loc}(\bar{x}) = -83.4 \left( -1 + \frac{2}{1 + \exp(10(\bar{x} - 0.65))} \right) - 2.1 \quad (1)$$

**Equation S2.** NF270:

$$C_{Loc}(\bar{x}) = -76.5 \left( -1 + \frac{2}{1 + \exp(10(\bar{x} - 0.7))} \right) - 36.8 \quad (2)$$

**Equation S3.** VNF2-8040:

$$C_{Loc}(\bar{x}) = -55 \left( -1 + \frac{2}{1 + \exp(12(\bar{x} - 0.56))} \right) - 24.3 \quad (3)$$

**Equation S4.** TMN20H-400:

$$C_{Loc}(\bar{x}) = -68.8 \left( -1 + \frac{2}{1 + \exp(13(\bar{x} - 0.68))} \right) - 17.6 \quad (4)$$