

Supplementary Material:

Fabrication of Tween-20 coated PVDF membrane for wastewater treatment: Optimization of preparation parameters, removal and membrane fouling control performance

Daoji Wu¹, Weiwei Zhou^{1,2}, Xiaoxiang Cheng^{1,}, Congwei Luo^{1,**}, Peijie Li¹, Fengzhi Zhang¹, Zixiao Ren¹*

(1. School of Municipal and Environmental Engineering, Shandong Jianzhu University, Jinan, Shandong, China, 250101

2. Shandong Urban Construction Vocational College, Jinan, Shandong, China, 250103)

*Corresponding author.

E-mail address: cxx19890823@163.com (Xiaoxiang Cheng);

luocongwei@sdjzu.edu.cn (Congwei Luo).

Table S1 Characteristics of commercial PVDF microfiltration membrane.

Components	Parameters
Type of membrane module	Hollow fiber membrane
Membrane pore size (μm)	0.2
Fiber inner diameter (mm)	0.5
Fiber outer diameter (mm)	0.8
Original contact angle	105°

Table S2 The main quality of raw wastewater.

Item	COD	BOD ₅	SS	NH ₄ -N	pH
Quality (mg/L)	350	150	100	30	6-9

Fig. S1 Chemical structural formula of Tween-20 ($x+y+z=20$).

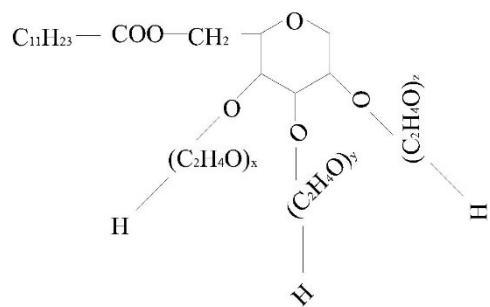


Fig. S2 Experiment Device of MBR.



Fig. S3 FTIR spectra of virgin and Tween-20 modified PVDF membranes.

