

Supplementary Information

Synthesis of Nanofiber Membrane from Acrylonitrile Butadiene Styrene (ABS) Waste Using Electrospinning as Air Filtration Media

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Supplementary Information Results and Discussion

1. The FTIR spectra of the solvents (DMF, DMAc, and THF)

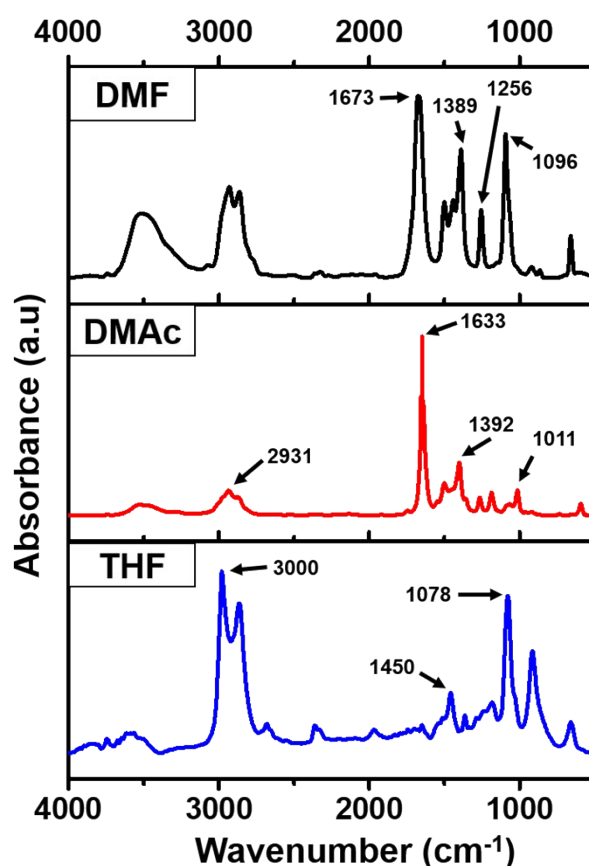


Fig. S1 The FTIR spectra of the DMF, DMAc, and THF solvents.

2. The experiment for comparing the filter lifetime

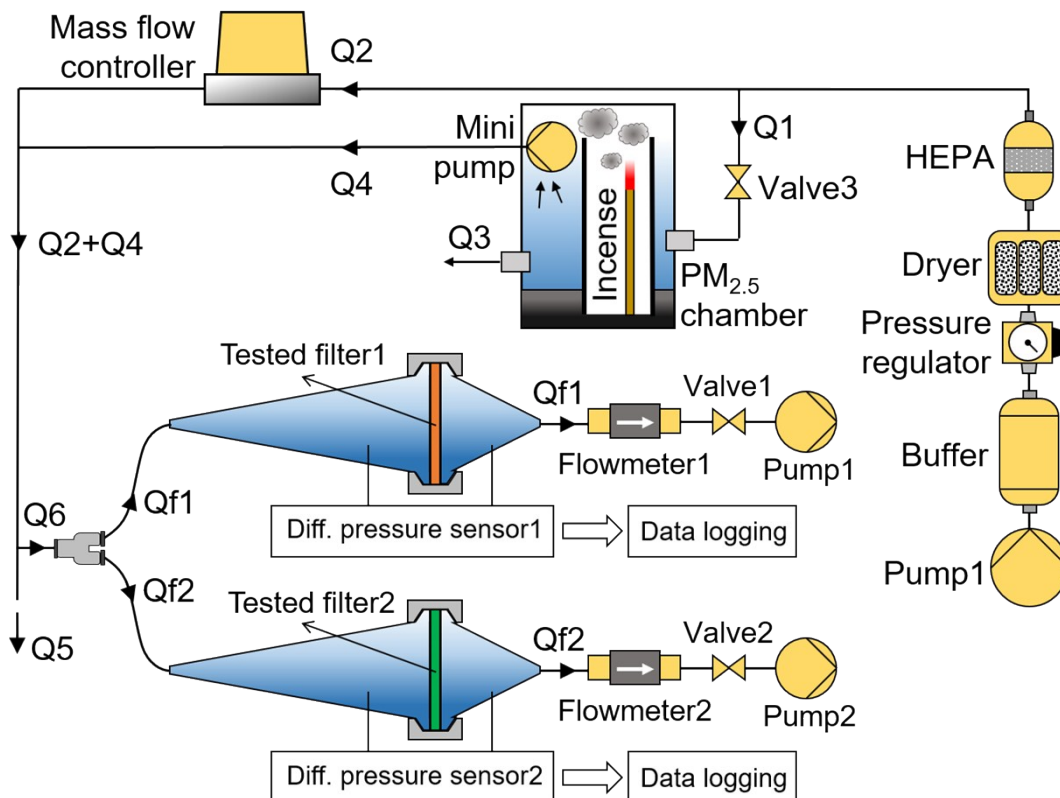


Fig. S2 The experimental setup for comparing the pressure drop of the filter with beaded fiber (Tested filter1) and pure fiber (Tested filter2).

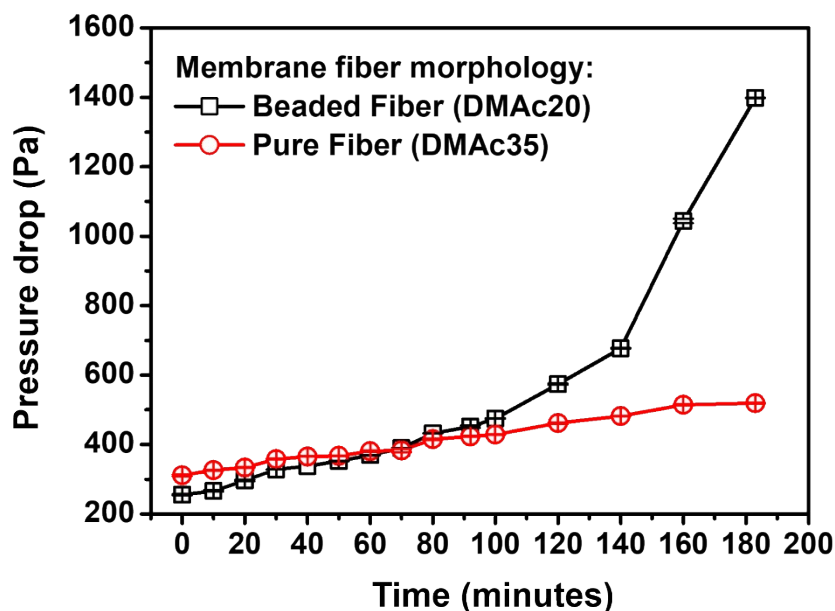


Fig. S3 The comparison of the pressure drop over time for the membrane samples with beaded fiber (DMAc20) and pure fiber (DMAc35) morphologies. The experiment was done using the setup in Fig. S2 with incense smoke as the particle source for the test.