Preparation of macroporous scaffolds with holes in pore walls and pressure driven flows through them

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# Equal contribution

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Table S1: Predicted Peclet number of each compartment obtained by fitting the experimental data with the two PFRs in parallel model.
Fig. S1: SEM images of S\textsubscript{1.6} (a, a'); S\textsubscript{3.2} (b, b'); and S\textsubscript{6.4} (c, c')
**Fig. S2:** Comparison of X-ray μ-CT result and SEM analysis of S₀. We obtain the distribution of pore volume directly from the software that is supplied with the X-ray μ-CT instrument. We obtain the number fraction of pores from SEM and convert it to a pore volume distribution by scaling the number fraction using $d^3$, where $d$ is the pore diameter.

**Fig. S3:** Comparison of X-ray μ-CT result and SEM analysis of S₆.₄. $P_n$ represents the distribution of pore sizes based on number fraction.
Fig. S4: Room temperature $^1$HNMR spectra of (a) Water/6.4 % ACN and (b) Water/6.4 %
ACN/1% PEI mixtures. In (a) a sharp peak at $\delta = 2.15$ ppm corresponds to methyl protons
of ACN can be seen. In (b) a similar sharp peak at $\delta = 2.14$ ppm of the methyl proton is
observed. Inset is a magnified version of (b) demonstrating the peaks corresponding to
PEI at $\delta = 2.83; 2.79; and 2.73$ ppm.

Fig. S5: TGA of the scaffolds under N$_2$ atmosphere.
Fig. S6: Pressure drop measurement at different flow rates with time.