

## Supplementary Information

### Solvent-resistant Triazine-Piperazine Linked Porous Covalent Organic Polymer Thin-film Nanofiltration Membrane

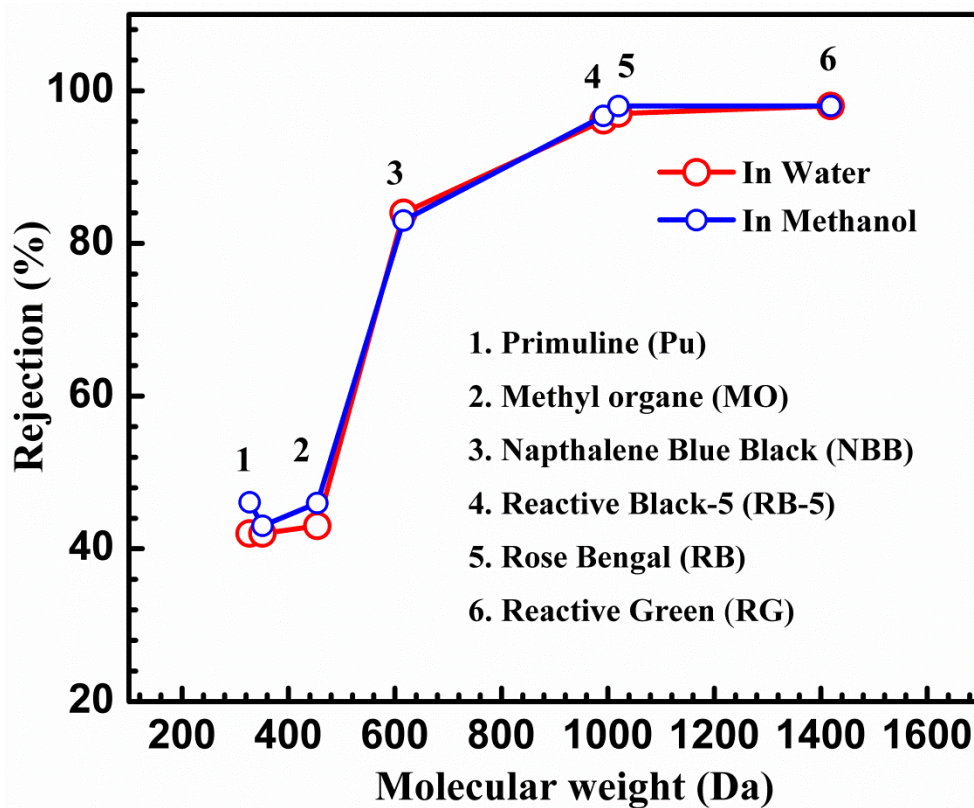
Swapan K. Das,<sup>\*a,b</sup> Priyanka Manchanda<sup>a</sup> and Klaus-Viktor Peinemann<sup>a</sup>

<sup>a</sup>*Advanced Membrane and Porous Materials Center, Division of Physical Science and Engineering, King Abdullah University of Science and Technology (KAUST), Thuwal, 23955-6900, Kingdom of Saudi Arabia.*

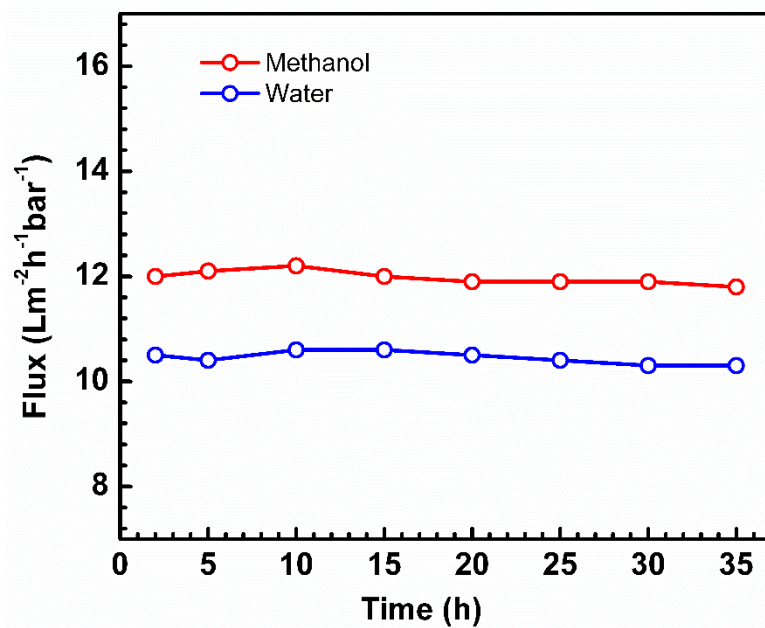
<sup>b</sup>*Department of Chemistry, Lehigh University, 6E Packer Avenue, Bethlehem, Pennsylvania, 18015, United States. E-mail: swapan.das@kaust.edu.sa*

**Table S1:** Dyes rejection performances of the CTP/PAN support membrane of the dyes solution (20 ppm) in methanol and water.

Membrane	Dyes and Molecular Weight (MW: gmol <sup>-1</sup> )	Solvents	Flux (Lm <sup>-2</sup> h <sup>-1</sup> bar <sup>-1</sup> )	Rejection (%)
CTP/PAN Support	Reactive black-5 (RB-5: 992)	Water	7.06	98
CTP/PAN Support	Naphthalene blue black (NBB: 616)	Water	7.85	86
CTP/PAN Support	Reactive black-5 (RB-5: 992)	Methanol	9.75	98
CTP/PAN Support	Naphthalene blue black (NBB: 616)	Methanol	9.85	85
CTP/PAN Support	Rose Bengal (RB: 1018)	Methanol	9.72	98
CTP/PAN Support	Rose Bengal (RB; 1018)	Water	7.60	97
CTP/PAN Support	Reactive Green (RG; 1419)	Methanol	9.65	98
CTP/PAN Support	Reactive Green (RG: 1419)	Water	7.67	98



**Figure S1:** Rejection experiment of various dyes molecules through the CTP/PAN support membrane based on their molecular weight in water and methanol.



**Figure S2.** The long-term solvent stability test based on the flux of methanol and water of the CTP/PAN support membrane.