## **Supporting Information**

## Preparation and characterization of click driven NVCbased anion exchange membranes with improved water uptake for fuel cells

Abhishek N. Mondal, Yubin He, Liang Ge, Liang Wu, Kamana Emmanuel, Md. Masem Hossain, Tongwen Xu<sup>\*</sup>

CAS Key Laboratory of Soft Matter Chemistry, Collaborative Innovation Center of Chemistry for Energy Materials, School of Chemistry and Material Science, University of Science and Technology of China, Hefei 230026, PR China



Figure S1. Change in colour of the reaction mixture before and after Click reaction.



Figure S2. <sup>29</sup>Si NMR spectrum of synthesized clicked monomer TESPTEC.



Figure S3. IR spectrum of synthesized clicked monomer TESPTEC.



**Figure S4.** (A) TGA thermograms of different prepared membranes & (B) DrTGA of prepared membranes.



**Figure S5.** (A) & (B) corresponds to the surface & cross-section of the NVC-10 membrane (C) & (D) represents surface & cross-section of the NVC-20 membrane whereas (E) & (F) represents surface & cross-section of the NVC-30 membrane (G) & (H) represents surface & cross-section of the NVC-40 membrane whereas (I) & (J) represents surface & cross-section of the NVC-50 membrane.



Figure S6. Optical images of the membrane NVC-50.