

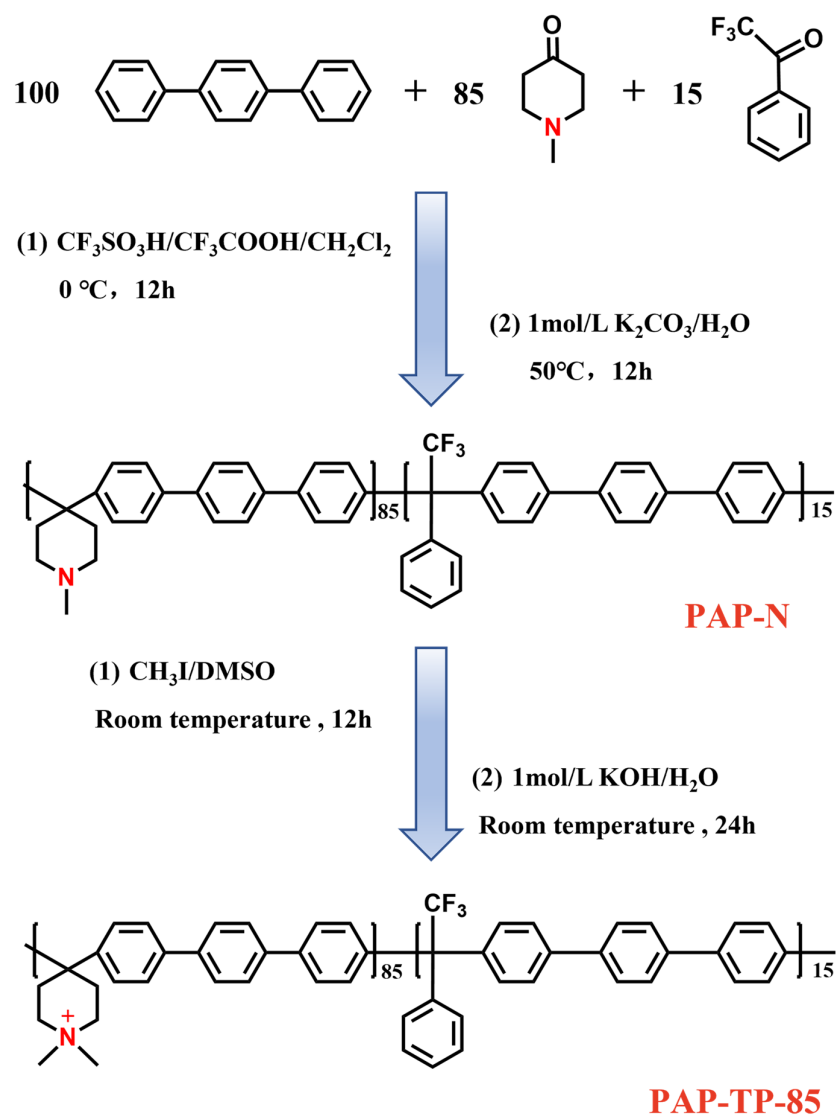
Supplementary Informations

Semi-Interpenetrating Network Anion Exchange Membranes by Thiol–Ene Coupling Reaction for Alkaline Fuel Cells and Water Electrolyzers

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Scheme S2. The synthesis route of PAP-N and PAP-TP-85.

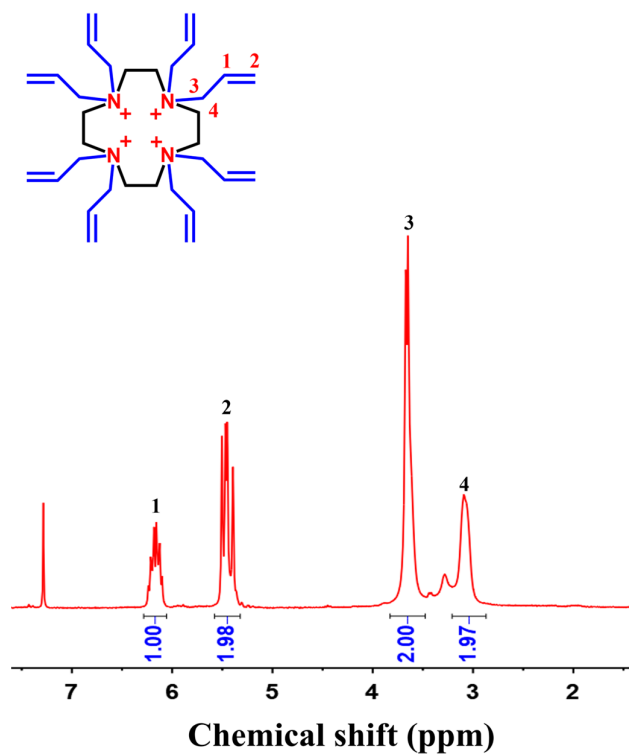


Figure S1. ^1H NMR spectra of QC using CDCl_3 as a solvent.

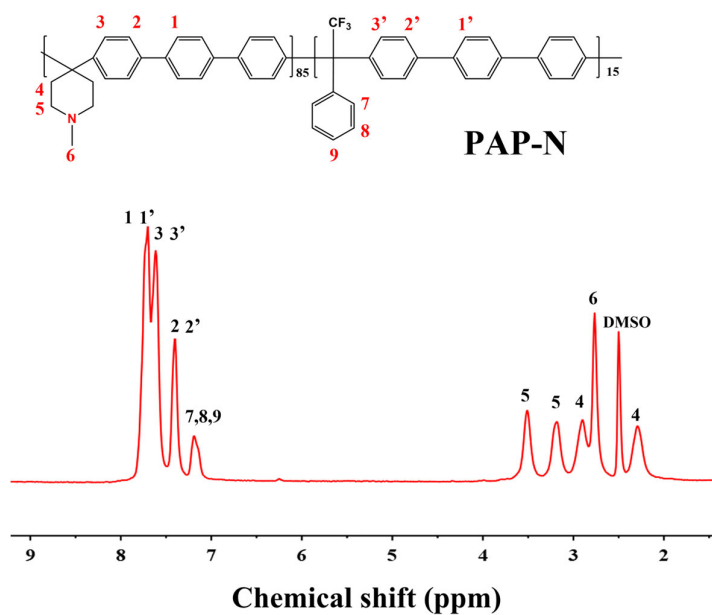


Figure S2. ^1H NMR spectra of PAP-N. The spectra were recorded with $\text{DMSO}-d_6$ solutions containing 3-6 vol% of TFA.

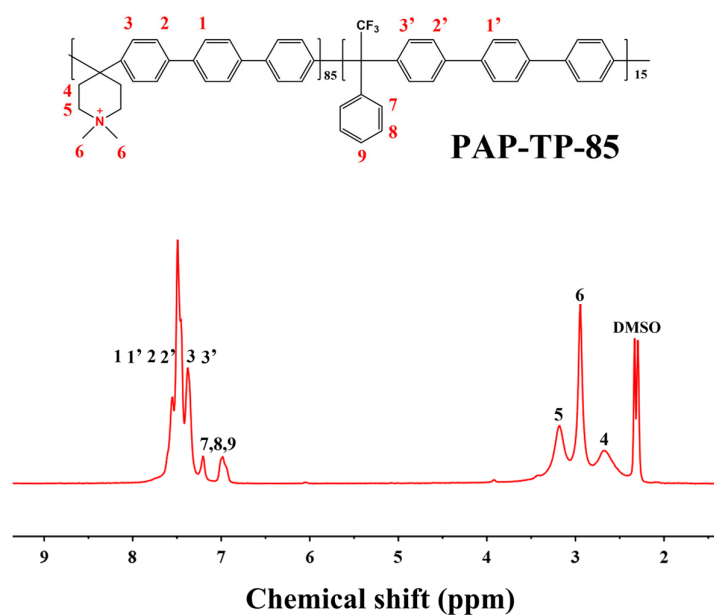


Figure S3. ¹H NMR spectra of PTP-TP-85. The spectra were recorded with DMSO-*d*₆ solutions containing 3-6 vol% of TFA.

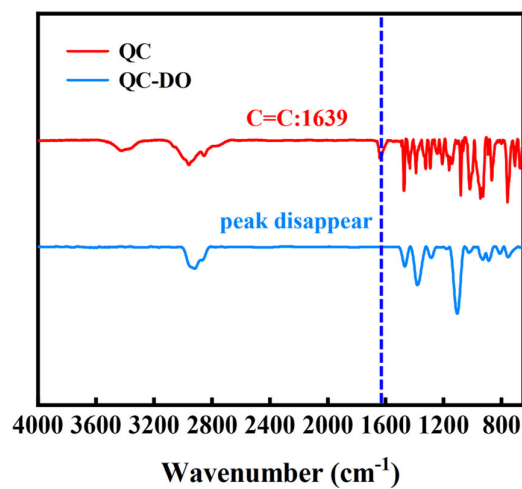


Figure S4. FT-IR spectroscopy of QC and QC-DO.

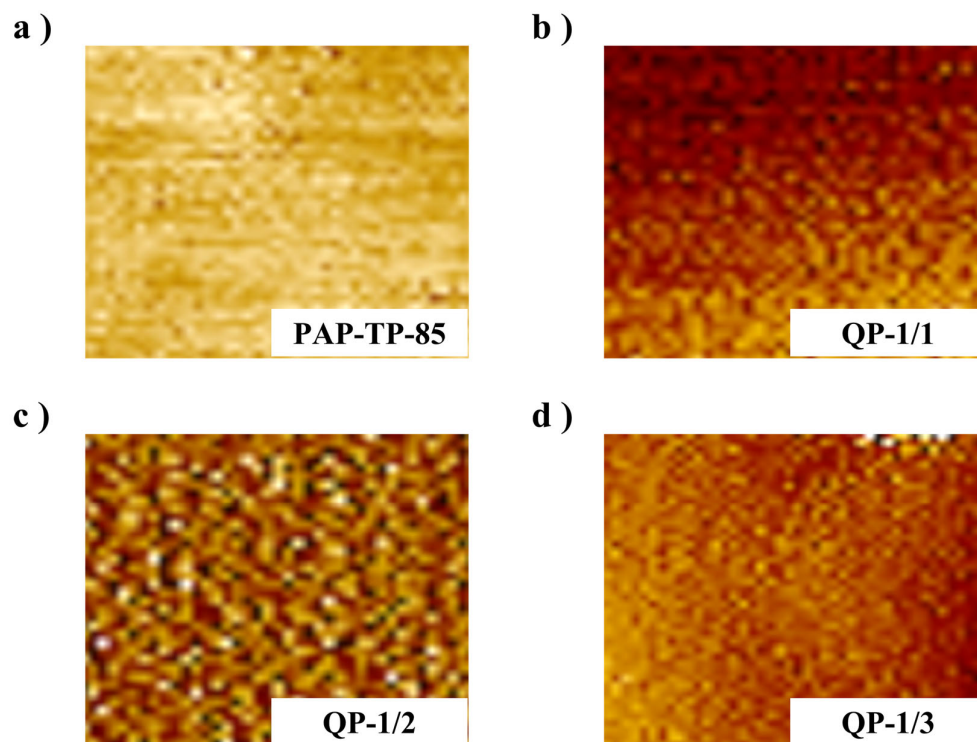


Figure S5. AFM phase images of (a) PAP-TP-85 AEM, (b) QP-1/1 AEM, (c) QP-1/2 AEM, and (d) QP-1/3 AEM.

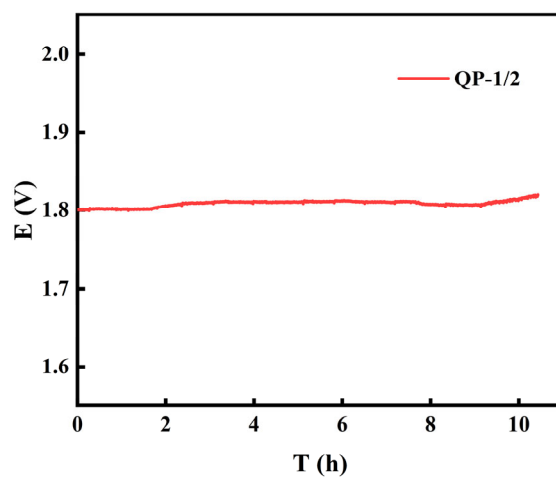


Figure S6. Long-term durability of the AEMWE voltage during galvanostatic. Experimental conditions used: circulating electrolyte in the anode and cathode 1 M KOH solution; flow rate 3 mL min⁻¹; temperature 60 °C; current density 500 mA cm⁻².