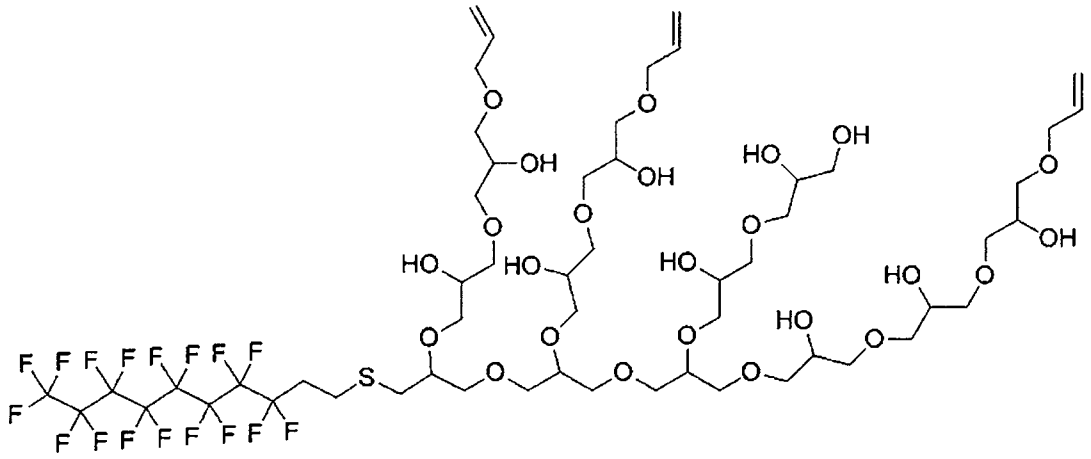
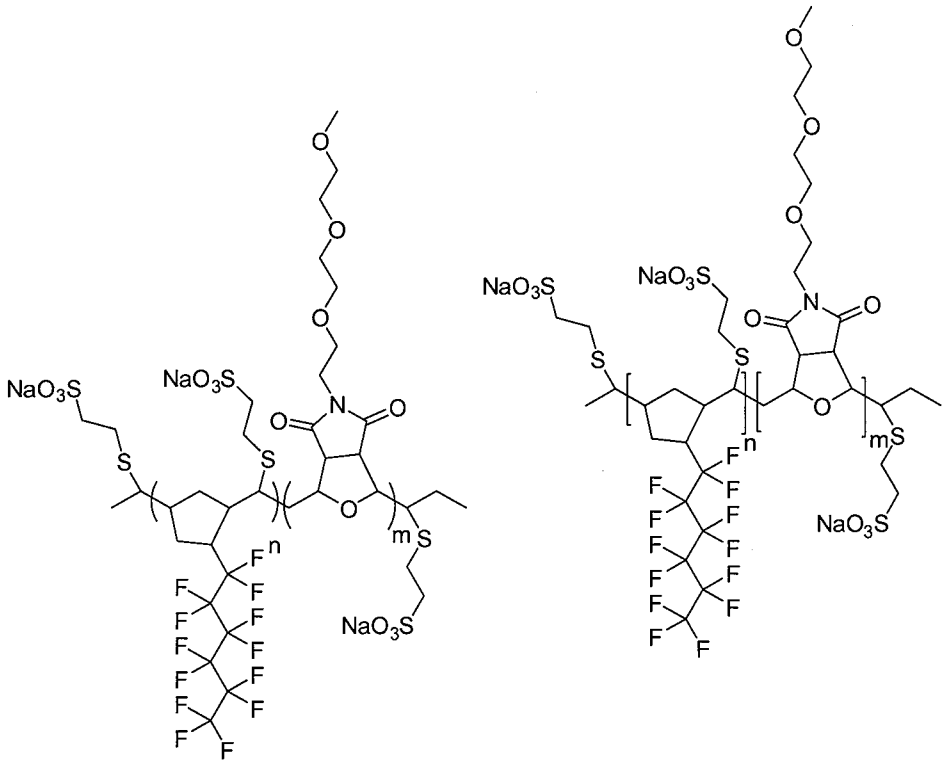
9. The method of claim 8, wherein the solution further comprises, or the porous fluoropolymer support coated with the copolymer is further coated with, a polymer of the formula C:



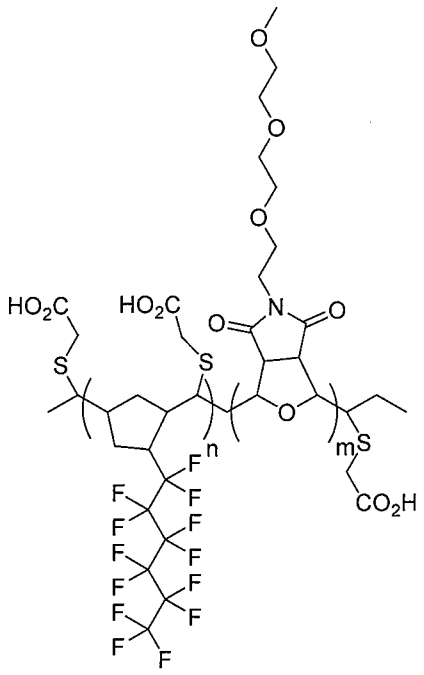
(C).

10. The method of claim 8 or 9, wherein the copolymer has chain end groups selected from aryl groups and alkoxy groups.

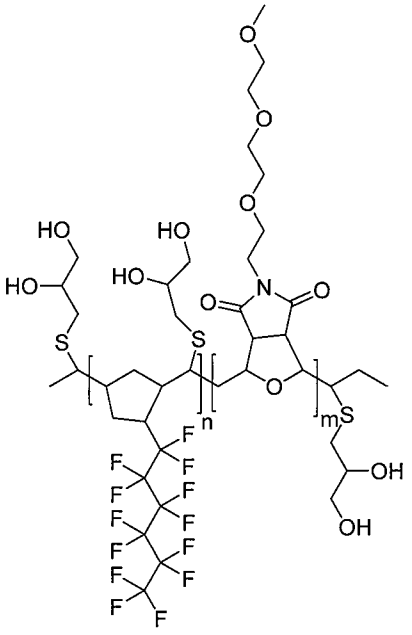
11. The method of claim 8 or 9, wherein the copolymer is:



Poly(M8-b-NPF6)-S(CH$_2$)$_2$SO$_3$Na , **Poly(M8-r-NPF6)-S(CH$_2$)$_2$SO$_3$Na**



Poly(M8-b-NPF6)-S-CH_2COOH , or



Poly(M8-r-NPF6)-S-$CH_2CH(OH)CH_2OH$.

12. The composite hydrophilic porous membrane of any one of claims 1-7 or the method of any one of claims 8-11, wherein the porous fluoropolymer support is selected from PTFE, PVDF, PVF (polyvinyl fluoride), PCTFE (polychlorotrifluoroethylene), FEP

(fluorinated ethylene-propylene), ETFE (polyethylenetetrafluoroethylene), ECTFE (poly ethylenechlorotrifluoroethylene), PFPE (perfluoropolyether), PFSA (perfluorosulfonic acid), and perfluoropolyoxetane.

13. A method of filtering a fluid, the method comprising passing the fluid through the composite hydrophilic porous membrane of any one of claims 1-7.

14. The composite hydrophilic porous membrane of any one of claims 1-7, which is configured in a planar, flat sheet, pleated, tubular, spiral, or hollow fiber configuration.