

Figure SI-1. (a)Phase diagrams of the styrene(A) and MMA(B) microemulsions consisted on 20ml saline (0.1M NaCl) and 20ml monomers at room temperature(I : Three phase type ME or Middle phase ME, II: One phase type ME). The composition of the BME extracted from the middle phase in the three phase type ME is attributed to the composition at the cross point marked by red arrows. (b)Photograph of three phase type ME(a - I) composed of transparent upper styrene phase, aqua middle(bicontinuous) phase and lower transparent saline phase.

Typical compositions of the three phase type microemulsions for styrene-BME and MMA-BME

Styrene-ME: 20mL saline (1.0 mol/L NaCl) with 0.45 mol/L SDS and n-butanol (0.06 mol) and 20 mL styrene with 5 v/v% divinylbenzene.

MMA-ME: 20mL saline (1.0 mol/L NaCl) with 0.52 mol/L SDS and n-butanol (0.03 mol) and 20 mL methylmethacrylate (MMA)

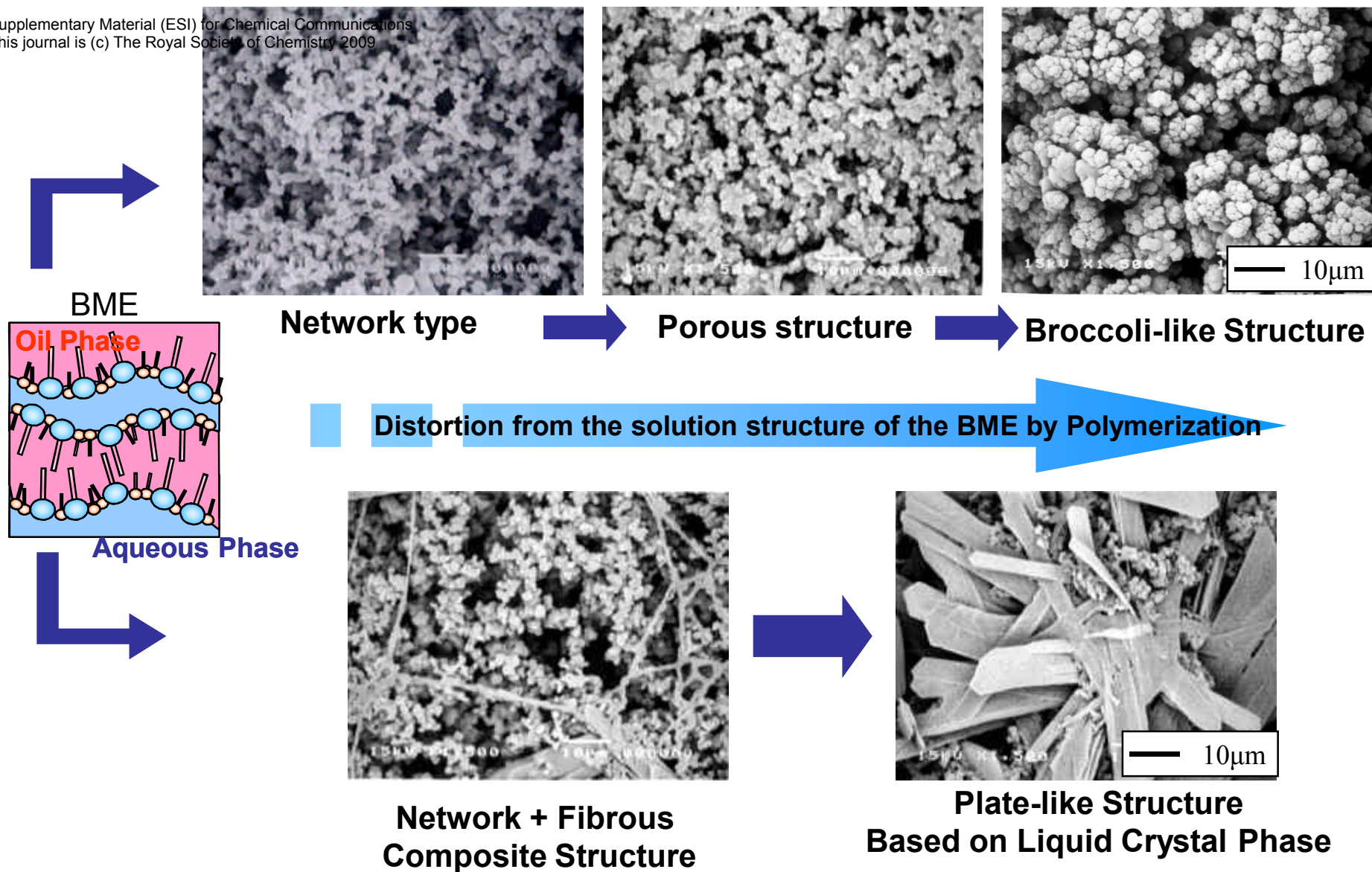


Figure SI-2. Schematic summary of continuous porous structures of the PS products prepared by thermal bulk polymerization of styrene-BME solution.