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**Purification and Fractionation of PEO-PPO-PEO Triblock Copolymers** CHANG YEOL RYU, HANJIN PARK, Rensselaer Polytechnic Institute, GYOO YEOL JUNG, Pohang University of Science and Technology — PEO-PPO-PEO triblock copolymers are produced on a commercial scale for non-ionic surfactant applications. Anionic polymerization has been employed to produce the block copolymers and it is likely that the triblock copolymer contain low molecular weight contaminants that would interfere with the micellization and gelation in aqueous solution. We have taken advantages of the recent developments on the interaction chromatography (IC) technique to separate the neat triblock copolymers from the as-received triblock copolymers. Because the IC relies on the adsorption of polymers, we were able to purify and fractionate the triblock copolymers on a larger scale than the prep scale SEC. Upon purification of the triblock copolymers, the influence of contaminants in the as-received triblock copolymers will be discussed on the micellization and gelation of the triblock copolymer solution in water.

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