

Abstract Submitted  
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**Multicompartment micelles from ABC copolymers** TIM LODGE,  
University of Minnesota — We have prepared a variety of novel compartmentalized micelles from ABC terpolymers in water. The three blocks were chosen to be mutually incompatible, with one being water-soluble (polyethylene oxide), one lipophilic (poly ethyl ethylene), and one both hydrophobic and lipophobic (poly perfluoropropylene oxide). The resulting morphologies were characterized by cryogenic transmission electron microscopy. The various structures can be understood, at least qualitatively, in terms of the relative interfacial tensions and block lengths. Mixing copolymers and mixing solvents (THF and water) can also be used to tune micellar morphology.

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