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Amphiplex Formation SHANNON PETERSEN, Allegheny College, JENNIFER LAASER, TIMOTHY LODGE, University of Minnesota — Polymermicelle complexes are currently under heavy investigation due to their potential applications in targeted drug delivery and gene therapy, yet the dynamics of the complex formation is still relatively unstudied. By varying the ratios of poly(styrene sulfonate) chains and cationic poly(dimethylaminoethyl methacrylate)-b-poly(styrene) micelles and the ionic strength of the system, we created a variety of complex configurations of different sizes and charges. The complexes were characterized dynamic light scattering and zeta potential measurements which provided information regarding the hydrodynamic radius, distribution of sizes, and effective charge.

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