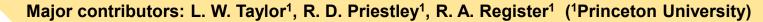
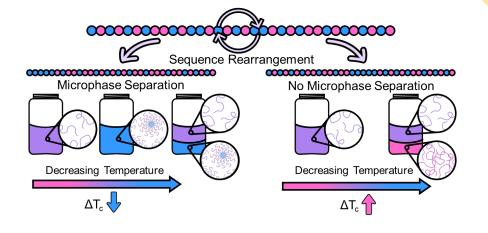
Princeton University MRSEC DMR-2011750

Control of Solution Phase Behavior through Block-Random Copolymer Sequence





- Control of phase behavior and self-assembly is important for developing new soft materials and understanding biomolecular condensate formation
- Sequence of random copolymers was altered by placing a homopolymer block at the end or middle of the polymer chain
- First experimental observations of thermoreversible crew-cut micelles, and thermotropic micro- and macrophase separation in a nonaqueous polymer solution
- Tuning the polymer sequence can raise or lower the critical temperature (T_c), or induce star-like or crew-cut micellization

L. W. Taylor¹, R. D. **Priestley**¹, R. A. **Register**¹, *Macromolecules* (2024), ASAP Article, January 16, 2024 DOI: <u>https://doi.org/10.1021/acs.macromol.3c02111</u> (¹Princeton University, USA)



