



## **Emulsion Polymers Consulting and Education, LLC**

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### **Core-Shell and Other Structured Latex Particles – Production and Characterization**

#### **Topical Outline of Tutorial**

September 2023

- 1.) Examples of complex, composite particles, including hybrid latexes
- 2.) Basic science controlling structures – thermodynamic equilibrium based on interfacial free energies
- 3.) Kinetically controlled structures – phase separation and polymer chain diffusion during and after polymerization
- 4.) Sequence of molecular events necessary to achieve final morphology – morphology matrix
- 5.) Analytical characterization of particle structures – chemical, thermal and microscopic techniques
- 6.) Commercial applications of morphologically complex latex particles