NIST Macromolecular Separations-by-Design Workshop
Oct. 10-11, 2012
Gaithersburg, MD

October 10 – Statement of the Problem and State-of-the-Art

8:00-8:15   Arrive/Check-in

8:15-8:30   Welcoming Remarks

8:30-9:00   Kate Beers, NIST. Introduction & Goals.

9:00-9:40   Jimmy Mays, University of Tennessee. "Polymer Synthesis At and Beyond the Limits of Characterization: Limitations of SEC."
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9:40-10:20   Timothy Lodge, University of Minnesota. "Multiblock polymers: New opportunities and new challenges."

10:20-10:35   Break

10:35-11:15   Peter Schoenmakers, University of Amsterdam. "Towards HYPERformance polymer separations."

11:15-11:55   Harald Pasch, Stellenbosch University. "Chemical composition and microstructure analysis of complex polymers by multidimensional liquid chromatography."

11:55-1:00   Lunch

1:05-1:45   Patricia Cotts, DuPont. "Characterization of functionalized nanoparticles for nanocomposite applications."

1:45-2:25   Willem deGroot, Dow Chemical. TBA.

2:25-2:55   Catherine Rimmer, NIST. "Design, Synthesis, and Characterization of Novel Hydrocarbon and Fluorocarbon Stationary Phases for Molecular Recognition in Liquid Chromatography."

2:55-3:10   Break

3:10-3:50   Karl Freed, University of Chicago. "Polymers in confinement."

3:50-4:30   Ilja Siepmann, University of Minnesota. "Understanding retention in reversed-phase liquid chromatography and size exclusion chromatography: Insights from molecular simulations."

4:30-5:00   William Krekelberg, NIST. "A fundamental study of the conformational phase behavior of chain molecules at interfaces."

6:30   Reception/Banquet

October 11 – Defining Challenges & Needs, Establishing Approaches

8:30-9:00	Ming Zheng, NIST. "Structure-based Separation of Carbon Nanotubes."
9:00-9:15	André Striegel, NIST. Breakout Session instructions.
9:15-10:30	Breakout Sessions
10:30-10:45	Break
10:45-11:45	Check-in and preliminary report from session
11:45-12:14	Breakout Sessions, continued
12:15-1:15	Lunch
1:20-2:00	Present session results
2:00-3:30	Panel/general discussion
3:45	Workshop Ends