Questions to Groups

NSF Workshop on
Sensing and Prognostics for Scalability of Nanomanufacturinging
November 2-4, 2009, Northeastern University, Boston, MA

Note: Please make sure to address your group questions during your individual presentation, group discussion, and final report writing

GROUP 1: Process Yield and Repeatability

What are the process yield and repeatability issues in nanomanufacturing? How do they differ from those in conventional manufacturing?

What is the state-of-the-art in process yield and repeatability in nanomanufacturing?

What are the imperatives for process yield and repeatability?

What are the targets for process yield and repeatability?

What are the barriers to achieving targets for process yield and repeatability?

What are the recommendations for achieving targets for process yield and repeatability?

GROUP 2: Quality and Reliability

What are the quality and reliability issues in nanomanufacturing? How do they differ from those in conventional manufacturing?

What is the state-of-the-art in quality and reliability in nanomanufacturing?

What are the imperatives for quality and reliability?

What are the targets for quality and reliability?

What are the barriers to achieving targets for quality and reliability?

What are the recommendations for achieving targets for quality and reliability?

GROUP 3: Sensing and Prognostics

What are the sensing and prognostics issues in nanomanufacturing? How do they differ from those in conventional manufacturing?

What is the state-of-the-art in sensing and prognostics in nanomanufacturing?

What are the imperatives for sensing and prognostics?

What are the targets for sensing and prognostics?

What are the barriers to achieving targets for sensing and prognostics?

What are the recommendations for achieving targets for sensing and prognostics?

GROUP 4: Planning and Control

What are the planning and control issues in nanomanufacturing? How do they differ from those in conventional manufacturing?

What is the state-of-the-art in planning and control in nanomanufacturing?

What are the imperatives for planning and control?

What are the targets for planning and control?

What are the barriers to achieving targets for planning and control?

What are the recommendations for achieving targets for planning and control?

GROUP 5: Cost and Scale-up

What are the cost and scale-up issues in nanomanufacturing? How do they differ from those in conventional manufacturing?

What is the state-of-the-art in cost and scale-up in nanomanufacturing?

What are the imperatives for cost and scale-up?

What are the targets for cost and scale-up?

What are the barriers to achieving targets for cost and scale-up?

What are the recommendations for achieving targets for cost and scale-up?