This workshop will focus on nanoparticle-based composites including their preparation, structure and properties. Appropriately tailored nanocomposite systems can exhibit significant enhancements in thermal and electrical conductivity, mechanical properties, transport properties and optical performance compared to their neat polymer counterparts. As a result, this important class of materials impacts a broad range of application areas.

**Tuesday afternoon, May 29**

**KELLER HALL 3-210**

1:15 Arthi Jayaraman, Depts. of Chemical Engineering and Materials Science and Engineering, University of Delaware  
*Tailoring Polymer Grafted Nanoparticles to Control Structure and Thermodynamics in Polymer Nanocomposites*

1:55 Brett Beiermann, 3M CRML  
*Nano-Inorganic Modified Polymers for Mechanical Benefit*

2:15 YuanQiao Rao, Dow Chemical  
*Nanoparticles in Polymers: Rheology, Assembly, and Properties*

2:55 Break

3:15 Sam Dahman, RTP  
*Strategies to Impart Electrical Conductivity to Polymer Composites*

3:55 Chris Ellison, Dept. of Chemical Engineering and Materials Science, University of Minnesota  
*Elastic Reduced Graphene Oxide Aerogels: Processing and Applications*

4:35 Adjourn (Student/Industry Meet & Greet starts at 5:00 with the Poster Session following in McNamara Alumni Ctr, Memorial Hall)

**Wednesday morning, May 30**

**KELLER HALL 3-210**

9:00 Sanat Kumar, Dept. of Chemical Engineering, Columbia University  
*Gas Transport through Mixed Matrix Membranes*

9:40 Sanjay Misra, Henkel  
*Polymeric Composites for Electronics Thermal Management*

10:20 Break
10:40  Meredith Wiseman, DSM
   Processable Multiple Network Composite Design Using Insights from Sequential IPNs

11:20  Jun Xu, Dept. of Chemical Engineering, University of Minnesota
   Soft “Nanoparticle” Toughened Thermoplastics

11:50  Adjourn  (Program reviews start at 1:15)