## DPOLY Short Course on "Polymer Nanocomposites: Challenges and Opportunities"

Structure, Dynamics, and Processing of Polymer Nanocomposites March 12-13, 2016, Baltimore, MD

## **Topics**

- Preparation of functional materials for polymer nanocomposites
- Fundamentals: Dispersion & dynamics
- Structural Characterization
- Processing

## **Speakers & Talk Titles**

Brian Benicewicz, University of South Carolina

"Emerging synthetic tools for new designs of functional polymer nanocomposites"

Eugenia Kumacheva, University of Toronto

"Self-assembly of polymer-functionalized nanoparticles"

Karim Alamgir, University of Akron

"Particle-polymer interfaces, polymer blends and functional surfaces"

Gary S. Grest, Sandia National Laboratory

"Nanoparticle diffusion in a polymer matrix"

Michael Rubinstein, University of North Carolina

"Dynamics of nanoparticles in polymer matrices"

Sudhin Datta, ExxonMobil

"Industrial perspective and challenges for polymer nanocomposites"

Alexander Hexemer, Lawrence Berkeley National Laboratory

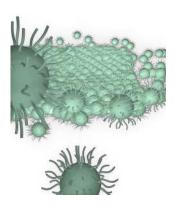
"SAXS/GISAXS of hybrid materials"

Chris Macosko, University of Minnesota

"Effect of processing and functionalization on properties of graphene/polymer nanocomposites"

Marc Couty, Michelin

"Processing and multi-scale structure of polymer nanocomposites"



## **Organizers:**

**Pinar Akcora**, Stevens Institute of Technology **Russell Composto**, University of Pennsylvania **Rohan Hule**, ExxonMobil