Maria Katzarova

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Education

Illinois Institute of Technology **Chicago, IL**
Ph.D., Chemical Engineering *2016*
Adviser: Prof. Jay D. Schieber

University of California, Berkeley **Berkeley, CA**
B.Sc., Chemical Engineering *2004*

Research Interests

- Experimental rheological characterization of complex materials such as polymers and granular media
- Further applying statistical mechanics and kinetic theory models to design materials
- Using a multi-scale modeling approach by bridging atomistic and mesoscale levels

Experience

University of Delaware **Newark, DE**
Postdoctoral Researcher *2016–Present*
Adviser: Prof. Norman J. Wagner
- *"Shear Thickening Fluid (STF)-Enhanced Textiles for Durable, Cut- and Puncture-resistant Environmental Protective Garment (EPG) Materials"*

Illinois Institute of Technology **Chicago, IL**
Postdoctoral Researcher *Summer 2016*
Adviser: Prof. David C. Venerus
- *Experimental rheology of polyethylene oxide melts and gels*

Research/Teaching Assistant *2011–2016*
- *Mesoscopic stochastic theory of dense polymeric systems*
- *Graduate-level thermodynamics*

U.S. Army Research Laboratory **Aberdeen, MD**
Student Researcher *Summer 2012*
Mentor: Dr. Jan Andzelm
- *Rheological predictions of synthetic polymer cross-linked networks*

Amgen **Thousand Oaks, CA**
Systems Engineer *2005–2008*
- *Clinical drug manufacturing of biologic medicines*