### ELENA E. DORMIDONTOVA - CURRICULUM VITAE

### PRESENT AFFILIATION:

The Institute for Materials Science and Physics Department University of Connecticut 97 North Eagleville Road Storrs, CT 06269-3136 Phone: (860)-486-3542 Email: elena.dormidontova@uconn.edu

#### EDUCATION AND SCIENTIFIC DEGREES:

- 1994 Ph. D in Physics and Mathematics, Physics Department, Moscow State University (Supervisor Prof. A.R. Khokhlov). The title of the thesis (theoretical study) is "Conformational Behavior of Complex Polymer Systems"
- 1991 B.A., M.S. in Physics, Physics Department Moscow State University

#### ACADEMIC POSITIONS:

2012-present Associate Professor

The Institute for Materials Science and Physics Department, University of Connecticut

2008-2012 Associate Professor

Department of Macromolecular Science & Engineering, Case Western Reserve University

2002-2008 Assistant Professor

Department of Macromolecular Science & Engineering, Case Western Reserve University

1999-2002Postdoctoral Associate

Department of Chemistry, Chemical Engineering and Materials Science, University of Minnesota, USA

1996-1999Postdoctoral Researcher

Department of Polymer Chemistry, University of Groningen,

1994-1996 Researcher

Physics Department Moscow State University, Chair of Polymer and Crystal Physics

#### AWARDS AND RECOGNITION

- 2007 2010 Climo Professorship. Case Western University School of Engineering
- 2004 2010 National Science Foundation (NSF) CAREER Award
- 2016 Directors Award for Faculty Excellence of the Polymer Program of the Institute of Materials Science, University of Connecticut

### **PROFESSIONAL ACTIVITIES:**

Symposium organizer: Co-organizer (with T. Kuhl, UC Davis) *Biofunctional Architectures - Re-versible Interactions and Surface Recognition* as a part of Colloids and Surfaces Division, Spring 2010 ACS meeting (San Francisco)

NIH Challenge grants reviewer 2009; NIH panel review (Gene and Drug Delivery Panel, 2008) NSF CAREER panel review 2005; NSF NRT panel review 2014, NSF DMR Biomaterials panel review 2016

NSF, NIH proposal reviewer

NWO (Netherlands National Science Foundation), Katholieke Universiteit Leuven (Belgium) proposal reviewer

Reviewer for Biophysical Journal, Physical Review Letters, Nature Communications, Biomaterials, Biomacromolecules, ACS Nano, Soft Matter, Journal of American Chemical Society, Macromolecules, Journal of Chemical Physics, Journal of Polymer Science: Polymer Physics, Biomaterials Science, Journal of Physical Chemistry B, Polymer, Chemistry of Materials, Journal of Controlled Release, International Journal of Molecular Sciences, European Polymer Journal, Nanomedicine (Future Medicine), Chemical Communications, Physical Chemistry Chemical Physics, Macromolecular Rapid Communications, Nanomedicine: Nanotechnology, Biology, and Medicine, Journal of Molecular Modeling, ACS Macro Letters, Wiley books, CRC Press/Taylor & Francis Group books

### RESEARCH INTERESTS KEY WORDS

Analytical theory and computer simulations (MC, MD, DPD) of macromolecules, polymers, surfactants, associating and supramolecular polymers, solution and surfaces properties, thermodynamics and kinetics of self-assembly, reversible interactions, hydrogen bonding, hydration, donoracceptor, ligand-receptor interactions, micelles, nanoparticles, targeting, drug delivery, drug encapsulation and release, receptor clustering, bio-recognition, polyelectrolytes, gels, phase behavior, oil encapsulation, ordering, rheology, glass transition.

# **RESEARCH FUNDING**

NSF (DMR) "Curvature-dependent polymer hydration in biomaterials" 2014-2017, role PI

Petroleum Research Fund by ACS "Computer modeling of threaded surfactant aggregates" 2016-2018, role: PI

NSF (CBET) "(NANO)<sup>2</sup>: gold nanoclusters in lipid nanodiscoidal bicelles as a potential nanodiagnostic platform: experiment and computer modeling" 2016-2019, role co-PI with Mu-Ping Nieh (Chemical & Biomolecular Engineering)

2016 Research Excellence Program Storrs (REP-Storrs) award "Scalable One-Pot Theranostic Nanodiscs Formulations for Cancer Targeting" 2016-2017, role: co-PI with Mu-Ping Nieh (Chemical & Biomolecular Engineering) and Sangamesh G. Kumbar, (Orthopedic Surgery, UConn Health)

2016 Level 1 Uconn Academic Plan grant "Next-Generation Materials Discovery" (Uconn-Storrs), member of "Polymer Brush Materials" team.

Some past funding:

NSF CAREER AWARD: "CAREER: Theoretical Modeling of Head-to-Tail Reversibly Associated Polymers in Solution and at Surfaces", 2004-2010, role PI

NIH "Design of Targeting Enhancement for Drug Delivery, 2005-2008, role: PI

### PUBLICATION AND PRESENTATION HIGHLIGHTS:

Hirsch Index (Web of Science) - 20.

48 published peer-reviewed articles cited 1382 times (citation rate 29)

The highest number of citations by a singly-authored paper 236

19 papers with  $\geq$ 25 citations; 14 papers with  $\geq$ 40 citations, 9 papers with  $\geq$ 50 citations

9 non-peer-reviewed articles including one article in popular science press

35 invited lectures at academic institutions or national/international meetings

76 contributed lectures and 44 posters presented by E. Dormidontova or members of her group at national/international meetings

#### PEER-REVIEWED PUBLICATIONS

1. E.E. Dormidontova, A.Yu. Grosberg, A.R. Khokhlov Intramolecular Phase Separation of a Polymer Chain with Mobile Ligands *Vysokomolek. Soedin. (Polymer Science - USSR)* v34, 126, 1992.

2. E.E. Dormidontova, A.Yu. Grosberg, A.R. Khokhlov Intramolecular Phase Separation of a Polymer Chain with Mobile Primary Structure *Makromol.Chem. Theory. Simul.* v.1, 375, 1992

3. E.E. Dormidontova, I.Ya. Erukhimovich, A.R. Khokhlov Microphase Separation in Poor Solvent Polyelectrolyte Solutions: Phase Diagram *Macromol.Theory Simul.* v.3, 661-675, 1994

4. E.E. Dormidontova, I.Ya. Erukhimovich, A.R. Khokhlov Phase Diagram for Microphase Separation Transition in Poor Solvent Polymer Solutions *Colloid Polym.Sci.* v.272, 1486-1497, 1994

5. E.E. Dormidontova, I.Ya. Erukhimovich, A.R. Khokhlov Nano-Structures in Poor Solvent Polymer Solutions Near Glass Transition Temperature *Macromol. Symp.* v.106, 103-117, 1996

6. E.E. Dormidontova, A.R. Khokhlov Complex Spherical Micelles in A-B-C Block Copolymer Melts *Macromolecules* v.30, 1980-1991, 1997

7. K.B. Zeldovich, E.E Dormidontova, A.R. Khokhlov, T.A. Vilgis Microphase Separation Transition for Polyelectrolyte Gels in Poor Solvents *J. Phys. II* v.7, 627-635, 1997

8. A.R. Khokhlov, E.E. Dormidontova Self-Assembly in Ion-containing Polymer Systems *Physics-Uspekhi (Uspekhi Phisicheskix Nauk)* (review) v.40,109-124, 1997

9. E.E. Dormidontova, G. ten Brinke Phase Behaviour of Hydrogen Bonding Polymer-Oligomer Mixtures *Macromolecules* v.31, 2649-2660, 1998 10. F.J. Esselink, E.E. Dormidontova, G. Hadziioannou Evolution of Block Copolymer Micellar Size and Structure Evidenced with Cryo Electron Microscopy

Macromolecules v.31, 2925-2932, 1998

11. F.J. Esselink, E.E. Dormidontova, G. Hadziioannou Redistribution of Block Copolymer Chains between Mixed Micelles in Solution *Macromolecules* v.31, 4873-4878, 1998

12. E.E. Dormidontova, G. ten Brinke Microphase Separation in Hydrogen Bonding Polymer/Surfactant Melts *Colloids and Surfaces A*. v.147, 249-262, 1999

13. E.E. Dormidontova Micellization Kinetics in Block Copolymer Solutions: Scaling Model *Macromolecules*, v.32, 7630-7644, 1999

14. E.E. Dormidontova, G. ten Brinke The Influence of Elongational Flow on Association Rate and Phase Behaviour of Binary Polymer Blends *Macromolecular Symposia*, v.149, 23-30, 2000 (IF 0.913)

15. V. Grayer, E.E. Dormidontova, G. Hadziioannou, C. Tsitsilianis A Comparative Experimental and Theoretical Study between Heteroarm Star and Diblock Copolymers in the Microphase Separated State *Macromolecules* v. 33, 6330-6339, 2000

16. E.E. Dormidontova, G. ten BrinkeThe Influence of Elongational Flow on Hydrogen Bond Formation and Stability of the Homogeneous Phase of Binary Hydrogen-Bonded Polymer Blends*Macromolecular Symposia* v.158, 125-136, 2000

17. E.E. Dormidontova, G. ten Brinke Association Behavior of Binary Polymer Mixtures under Elongational Flow *J Chem. Phys.* v.113 (11), 4814-4826, 2000

 E.E. Dormidontova, T.P. Lodge
 The Order-Disorder Transition and the Disordered Micelle Phase in Sphere-Forming Block Copolymer Melts
 Macromolecules v.34 (26), 9143-9155, 2001

19. E.E. Dormidontova
The Role of Competitive PEO-Water and Water-Water Hydrogen Bonding in Aqueous Solutions of PEO *Macromolecules* v.35 (3), 987-1001, 2002

20. X. Wang, E.E. Dormidontova, T.P. Lodge The Order-Disorder Transition and the Disordered Micelle Regime for Poly(ethylenepropylene-bdimethylsiloxane) Spheres *Macromolecules* v.35, 9687-9697, 2002

21. M.M. Feldstein, A. Roos, C. Chevallier, C. Creton, E. E. Dormidontova Relation of Glass Transition Temperature to the Hydrogen Bonding Degree and Energy in Poly(N-Vinyl Pyrrolidone) Blends with Hydroxyl - Containing Plasticizers: 3. Analysis of Two Glass Transition Temperatures Featured for PVP Solutions in Liquid Poly(ethylene glycol) *Polymer*, 44(6), 1819-1834, 2003

22. C.-C. Chen, E.E. Dormidontova Ring-Chain Equilibrium in Reversibly Associated Polymer Solutions: Monte Carlo Simulations *Macromolecules*, 37 (10), 3905-3917, 2004

23. E.E. Dormidontova The Influence of Terminal Groups on Phase Behavior and Properties of PEO in Aqueous Solutions *Macromolecules*, 37, 7747-7761, 2004

24. C.-C .Chen, E.E. Dormidontova Supramolecular Polymer Formation by Metal-Ligand Complexation: Monte Carlo Simulations and Analytical Modeling *JACS*, 126, 14972-14978, 2004

25. C.-C .Chen, E.E. Dormidontova Architectural and Structural Optimization of Protective Polymer Layer for Enhanced Targeting *Langmuir*, 21, 5605-5615, 2005

26. Reidar Lund; Lutz Willner, Dieter Richter, E.E. Dormidontova Equilibrium Chain Exchange Kinetics of Diblock Copolymer Micelles: Tuning and Logarithmic Relaxation *Macromolecules*, 39, 4566-4575, 2006

27. C.-C .Chen, E.E. Dormidontova Monte Carlo Simulations of End-Adsorption of Head-to-Tail Reversibly Associated Polymers *Macromolecules*, 39, 9528-9538, 2006

28. M. Hagy, C.-C .Chen, E.E. Dormidontova The Effect of Orientational Specificity of Complexation on the Behavior of Supramolecular Polymers: Theory and Simulation *Macromolecules*, 40, 3408 – 3421, 2007

29. D. Sutton, S. Wang, N. Nasongkla, J. Gao, E.E. Dormidontova Doxorubicin and β-lapachone Release and Interaction with Micelles Core Materials: Experiment and Modeling *Experimental Biology and Medicine*, 232, 1090-1099, 2007 30. S. Wang, C.-C .Chen, E.E. Dormidontova Reversible Association and Gelation in 3:1 Ligand-Metal Polymer Solutions *Soft Matter*, 4, 2039–2053, 2008

 M. Hagy, S. Wang, E. E. Dormidontova Optimization of Functionalized Polymer Layers for Specific Targeting of Mobile Receptors on Cell Surfaces *Langmuir*, 24, 13037-13047, 2008

32. S. Wang; E. E. Dormidontova, Cis-Trans Switchable Metallo-Supramolecular Polymers *J. Chem. Phys.(Communication)*, 131, 061102, 2009

33. H. Djohari, E. E. Dormidontova Kinetics of Nanoparticle Targeting by Dissipative Particle Dynamics Simulations *Biomacromolecules*, 10, 3089–3097, 2009

34. S. Wang; E. E. Dormidontova, Switchable Metallo-Supramolecular Networks Through *cis- trans-* Isomerization, *Soft Matter*, 6, 1004 -1014, 2010

35. S. Wang; E. E. Dormidontova Monte Carlo Simulations of Metallo-Supramolecular micelles *Macromolecular Rapid Communications*, 31, 897 – 903, 2010

36. Z. Li, E.E. Dormidontova Kinetics of Diblock Copolymer Micellization by Dissipative Particle Dynamics *Macromolecules*, 43, 3521-3531, 2010

37. S. Wang; E. E. Dormidontova Nanoparticle Design Optimization for Enhanced Targeting: Monte Carlo Simulations *Biomacromolecules*, 11, 1785–1795, 2010

38. Z. Li, H. Djohari E.E. Dormidontova

Molecular Dynamics Simulations of Supramolecular Polymer Rheology J. Chem. Phys., 133, 184904, 2010 - selected for the November 15, 2010 issue of Virtual Journal of Biological Physics Research and November 22, 2010 issue of Virtual Journal of Nanoscale Science & Technology

39. S. Wang; E. E. Dormidontova "Nanoparticle Targeting using Multivalent Ligands: Computer Modeling" *Soft Matter*, 2011, 7, 4435-4445, 2011

40. Z. Li, E. E. Dormidontova "Equilibrium Chain Exchange Kinetics in Block Copolymer Micelle Solutions by Dissipative Particle Dynamics Simulations" *Soft Matter*, 7, 4179-4188, 2011

41. S. Wang; E. E. Dormidontova "Selectivity of Ligand-Receptor Interactions between Nanoparticle and Cell Surfaces" *Physical Review Letters*, 109, 238102-4, 2012 42. A. V. Shibaev, M. V. Tamm, V. S. Molchanov, A. V. Rogachev, A. I. Kuklin, E. E. Dormidontova, O. E. Philippova "How a Viscoelastic Solution of Wormlike Micelles Transforms into a Microemulsion upon Absorption of Hydrocarbon: New Insight" *Langmuir*, 30, 3705–3714, 2014

43. Mikhail M. Feldstein, Kermen A. Bovaldinova, Eugenia V. Bermesheva, Alexander P. Moscalets, Elena E. Dormidontova, Valery Y. Grinberg, Alexei R. Khokhlov "Thermo-Switchable Pressure-Sensitive Adhesives Based on Poly(N-vinyl caprolactam) Non-Covalently Crosslinked by Poly(ethylene glycol)" *Macromolecules*, 47 (16), 5759-5767, 2014

44. Mikhail M. Feldstein, Elena E. Dormidontova, Alexei R. Khokhlov Pressure sensitive adhesives based on interpolymer complexes Progress in Polymer Science 42, 79–153, 2015

45. Udaya R. Dahal, Elena E. Dormidontova, Spontaneous insertion, helix formation and hydration of polyethylene oxide in carbon nanotubes, *Physical Review Letters, chosen as "Editor's suggestion, Physical Review Letters,* 117, 027801, 2016

46. Prhashanna Ammu, Elena E. Dormidontova Tadpole and Mixed Linear/Tadpole Micelles of Diblock Copolymers: Thermodynamics and Chain Exchange Kinetics *Macromolecules*, 50, 1740–1748, 2017

47. Udaya Dahal, Elena E. Dormidontova Polyethylene oxide hydration and hydrogen bonding in aqueous and isobutyric acid pure and binary solutions *Physical Chemistry Chemical Physics* 19, 9823-9832, 2017

48. Hari Sharma, Elena E. Dormidontova Lipid Nanodisc-Templated Self-Assembly of Gold Nanoparticles into Strings and Rings *ACS Nano* 11 (4), pp 3651–3661, 2017

# POPULAR SCIENCE:

R. Lund, L. Willner, P. Lindner and D. Richter, C.-C. Chen, E.E. Dormidontova; Polymer Chains Queuing inside Micellar Cores *ILL Annual Report* 2005, p.48-49.

# **INVITED LECTURES:**

- 1. Hydration of polyethylene oxide in nanostructures 252nd ACS National Meeting in Philadelphia, PA, August 21-25, 2016
- Gold Nanoparticle Lipid Nanodisk Self-Assembly: Insights from Computer Modeling (2015 Fall ACS meeting) Boston MA Aug.16-22, 2015
- 3. Supramolecular Micelle Networks: Computer Modeling of Equilibrium Properties and Dynamics (2015 Material Research Society Spring Meeting & Exhibit), San Francisco, Apr. 7, 2015
- 4. Computer Modeling of Nanoparticle Targeting to Enhance Selectivity, The European CLINAM & ETPN Summit (Clinical Nanomedicine & Targeted Medicine From Antibodies to Nanodrugs, Diagnostic Systems and Targeted Delivery), June 23-26, 2013 Basel, Switzerland

- 5. Polymer Science: from Phase Separation and Self-assembly to Nanotechnology, Leeds University, Leeds, UK, June 11, 2012
- 6. Polymer Physics of Macromolecular Phase Separation and Self-assembly Exxon Mobil, Corporate Research, Annandale, NJ, March 9, 2012
- Theoretical Insights for Nanomedicine: Nanoparticle-Cell Surface Interactions and Nanoparticle Formation by Self-assembly, Department of Physics, Worcester Polytechnic Institute, Feb. 20, 2012
- 8. Nanoparticle-Cell Surface Interactions from the Physicist's Point of View, Department of Physics, Wayne State University, Detroit, MI, February 2, 2012
- 9. Macromolecular Physics: from Self-Assembly to Nanoparticle-Cell Surface Interactions, Department of Physics, Michigan Tech University, Houghton, MI, Dec. 13, 2012
- 10. Self-Assembly in Macromolecular Systems: Analytical Considerations and Computer Modeling Institute for Theoretical Physics, University of Utrecht, November 28, 2011
- 11. Dissipative Particle Dynamic Simulations of Kinetics of Block Copolymer Self-Assembly, ACS National Meeting, Boston, MA, August 22-26, 2010
- 12. Nanoparticle Targeting Design Optimization by Computer Simulations, Particles 2010, Lake Buena Vista, FL May 22-25, 2010
- 13. Design Optimization of Polymeric Nanoparticles for Specific Targeting, ACS National Meeting, San Francisco, CA, March 21-25, 2010
- Computer Modeling of Stimuli-Responsive Metallo-Supramolecular Networks, presented at the International Symposium on Stimuli-Responsive Materials, University of Southern Mississippi, Hattiesburg, MS October 27 - 29, 2009
- 15. Computer Simulations of Self-Assembly of Metallo-Supramolecular Networks, Department of Physics, CWRU, Aug. 31, 2009
- 16. Modeling of Switchable Metallo-Supramolecular Polymers, Fall 2009 ACS meeting, Washington DC
- 17. Computer Simulations of Functionalized Polymer Surfaces for Specific Targeting, presented at Wayne State University, April 2009
- 18. Optimization of Nanoparticle Design for Enhanced Targeting presented at University of South Florida, June 2008
- Theoretical Modeling of Equilibrium Metallo-Supramolecular Gels, at the Symposium on Metal-Containing and Metallo-Supramolecular Polymers and Materials, ACS meeting, August 2007, Boston, USA

- 20. Mathematical Modeling of Reversibly Associated Polymers, presented at University of Akron (Department of Polymer Engineering), April 2007
- 21. End-adsorption of head-to-tail associating polymers on surfaces, presented at University of Twente, February 2007
- 22. Reversibly Associating Polymers: Versatility of Properties and Complexity of Behavior, Presented at TU Delft, February 2007
- 23. Theoretical Aspects of Nanoparticle Targeting in Drug Delivery, presented at the Nanomedicine Symposium 2006, Dallas, Texas, Dec.11, 2006
- 24. Theoretical Modeling of Hydrogen Bonded and Metal-Ligand Associating Polymers presented at the APS meeting, Baltimore, USA, March 13-17, 2006
- 25. Theoretical and Computer Modeling of Reversibly Associated Polymers, presented at Georgia Institute of Technology (School of Polymer, Textile and Fiber Engineering) October 2005.
- 26. Theoretical Modeling of Phase Separated and Reversibly Associating Polymer Systems, presented at Specialty Minerals Inc., Bethlehem, PA, July 2005
- 27. Theoretical and Computer Modeling of Complex Polymer Systems: Associating Polymers and Ligand-Receptor Interactions, presented at John Carroll University (Chemistry Department), December 2004.
- 28. Computer Modeling of Targeting Enhancement for Gene/Drug Delivery, presented at the Rolduc Polymer Meeting, Kerkrade, The Netherlands, June 27-30, 2004.
- 29. Theoretical insights on reversible associations of polyethylene oxide in aqueous solutions and blends, presented at Max-Planck-Institute for Polymer Research, Mainz, Germany, June 4, 2004
- 30. Micellization Kinetics in Diblock Copolymer Solutions, presented at the University of Juelich, Germany, July 4, 2004
- 31. Hydrogen Bonding in Aqueous Solutions of PEO: Theoretical Insights, presented at the APS meeting, Montreal, Canada, March 22-26, 2004
- 32. Reversibly Associated Polymers: Theoretical Insights, presented at the University of Akron (Physics Department) September 25, 2003.
- 33. Theoretical and computer modeling of reversibly associated polymers: new insight, presented at Eindhoven University of Technology, The Netherlands, June 2, 2003.
- 34. Theoretical insights on the behavior of reversibly associated polymers, presented at Department of Chemical Engineering, K. U. Leuven University, Leuven, Belgium, May 21, 2003

35. Theoretical insights on reversibly associating polymers: the example of poly (ethylene oxide/glycol) in aqueous solutions and blends with PVP, presented at ESPCI, Paris, France, May 22, 2003

# CONTRIBUTED ORAL PRESENTATIONS AND POSTERS

76 contributed lectures and 44 posters presented by E. Dormidontova or members of her group at the national/international meetings.

### **Recent presentations**

- Computer Modeling of diblock copolymer self-assembly in solution: from dynamics to hydration, the 80<sup>th</sup> Prague Meeting on Macromolecules "Self-Assembly in the World of Polymers", July 10-14, 2016
- 2. Lipid Self-Assembly and Interactions with charged macromolecules, 11<sup>th</sup> International Symposium on Polyelectrolytes, June 27-30, 2016, Moscow, Russia
- 3. Polyethylene oxide hydration in grafted layers, March 2016 American Physical Society
- 4. Gold nanoparticle encapsulation into a mixed lipid nanodisk: molecular dynamics simulations, March 2016 National Meeting, American Physical Society
- 5. Molecular dynamics simulations of poly (ethylene oxide) hydration and conformation in solutions, March 2016 National Meeting, American Physical Society
- 6. How nanoparticle design affects targeting selectivity: Insights from computer modeling, August 2015 National Meeting, American Chemical Society
- 7. Computer simulation of lipid/polymer nanoparticle self-assembly and targeting, November 2015, Applied Mechanics Symposium (UConn)
- 8. Gold Nanoparticle Lipid Self-Assembly and Interactions: Insights from Computer Modeling, April 2015, Material Research Society
- 9. Interaction of Biofunctionalized Nanoparticles with Receptors on Cell Surfaces: MC Simulations, March 2015 National Meeting, American Physical Society
- 10. Hierarchical assembly of block copolymer micelles into reversible networks: MC simulations, March 2015 National Meeting, American Physical Society
- 11. How does Nanoparticle Design Affect Targeting Selectivity: Computer Modeling" Tech Connect World Innovation Conference and Expo, Washington, DC, 2014
- 12. Computer Modeling of Complex Block Copolymer Micelles with Metal-Ligand Self-Assembly Tech Connect World Innovation Conference and Expo, Washington, DC, 2014

### THESIS ADVISOR AND POSTGRADUATE SCHOLAR SPONSOR:

### Graduate students:

Udaya Raj Dahal (PhD student, Uconn Department of Physics). 2014-Hari Sharma (PhD student, Uconn Department of Physics) 2015-Michael Richter (PhD student, Uconn Department of Physics). 2014-Shihu Wang (PhD student, CWRU) graduated August, 2010, currently at Dow Corning

**Zhenlong Li** (PhD student, CWRU) graduated May,2011 currently at Weill Cornell Medical College Norased Nasongkla (joint PhD student, CWRU) graduated August 2006

### **Undergraduate students:**

Matthew Hagy (undergraduate student, CWRU) graduated May 2008 Jessica Kingsberg undergraduate student, CWRU) graduated 2006

**Postdoctoral Scholars:** 

Prhashanna Ammu (Uconn, IMS) 2016-Zilu Wang (UConn, IMS) 2013-2015 Hadrian Djohari (CWRU) 2008-2010 Chun-Chung Chen (CWRU) 2003-2006

### TEACHING EXPERIENCE SUMMARY

<u>Undergraduate level:</u> Statistical and Thermal Physics (3 years, at UConn) Physical Chemistry for Engineers (5 years, at CWRU) Undergraduate research courses: freshman research, undergraduate research for juniors/seniors, undergraduate senior project (6 years, at CWRU).

<u>Graduate level:</u> Introduction to Soft Matter Physics (2 years, at Uconn) Methods of Theoretical Physics I (1 year, at UConn) Polymer Properties (1 year, at UConn) Polymer Physics (1 year, at Uconn) Polymer Physical Chemistry (1 year, at Uconn) Fall 2016 Macromolecular Physics, and Polymer Physics (9 years, at CWRU), Polymer plus Advanced Physical Chemistry (2 years at CWRU) Independent graduate and dissertation research (8 years at CWRU, 3 years at Uconn)

## UNIVERSITY SERVICE

Physics Department at University of Connecticut:

- Chair of Diversity and Multiculturalism faculty committee 2017- (member 2016-)
- Member of nuclear/high energy theory faculty Search Committee 2016-2017
- Member of astronomy faculty Search Committee 2015-2016
- Member of faculty Search Committee 2014-2015
- Member of Departmental Computer Committee 2014 -
- Member of oral proposal and dissertation proposal committees

Polymer Program at the Institute of Materials Science, University of Connecticut:

- Member of curriculum committee or Polymer Program 2016-
- Seminar organizer Fall 2013 and Spring 2014
- Member of 9 PhD (defense or prospectus) faculty committees

Case Western Reserve University:

- Advisory Committee on Research Computing, High Performance Computing Cluster, Case Western Reserve University, 2009-2011
- Search committee member for Ohio Research Scholar endowed chair and junior faculty position in surface and interface-related physics, Case Western Reserve University, 2009;
- Active participant and contributor to the Case Western Reserve University (undergraduate research) SOURCE program.

Case Western Reserve School of Engineering:

- Research committee 2008-10 (Chairperson 2009-2010),
- Graduate committee 2004-2005;
- Smith-Thenault (undergraduate fellowship) committee 2003-2005

Department of Macromolecular Science and Engineering at CWRU:

- Macro Seminar organizer Fall 2007;
- Graduate committee 2002-present;
- Web design committee 2004-2005
- Member of 13 Ph. D defense committees and 28 Ph.D. oral proposal committees