

## RODNEY D. PRIESTLEY

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### EDUCATION

Northwestern University	Chemical Engineering	Ph.D.	June 2008
Northwestern University	Chemical Engineering	M.S.	December 2004
Texas Tech University	Chemical Engineering	B.S.	May 2003

### PROFESSIONAL APPOINTMENTS

07/17 – Director of Graduate Studies, Chemical and Biological Eng., Princeton University  
06/17 – 08/17 Leverhulme Visiting Professor, Chemical Engineering, Imperial College London  
02/17 – 05/17 Solvay USA, Inc.; sabbatical leave  
04/16 – Associate Director, Princeton Center for Complex Materials, Princeton, NJ  
07/15 – Associate Professor, Princeton University, Princeton, NJ  
08/10 – Associated Faculty Member, Princeton Institute for the Science and Technology of Materials, Princeton University, Princeton, NJ  
08/09 – 06/15 Assistant Professor, Princeton University, Princeton, NJ  
06/08 – 06/09 Postdoctoral Fellow, Matière Molle et Chimie, ESPCI, Paris, FR  
09/03 – 06/08 Graduate Student, Chemical Engineering, Northwestern University, Evanston, IL  
06/06 – 08/06 NSF EASPI Fellow, Polymer Science, Kyoto Institute of Technology, Kyoto, JP  
09/02 – 05/03 B.S. Research, Chemical Engineering, Texas Tech University, Lubbock, TX  
06/02 – 08/02 REU Program, Polymer Program, University of Connecticut, Storrs, CT  
Summer 2003 Research Engineer at Rohm and Haas Chemical Company, Philadelphia, PA  
Summer 2001 Chemical Engineer at Lyondell-Citgo Refinery, Houston, TX  
Summer 1999 Chemical Engineer at the US Department of Energy, Amarillo, TX

### AWARDS

2018 World Economic Forum Young Global Scientist  
2017 Leverhulme Trust Visiting Professor Fellowship  
2017 AIChE MSED Owens Corning Early Career Award  
2015 Distinguished Lecturer of the Graduate School at Shanghai Jiao Tong University  
2015 TED Conference Invitee  
2014 NAS Kavli Frontiers of Science Japan-American Symposium Invitee  
2014 Named to The Root 100 list of most influential African Americans in 2014  
2014 Named ASEE list of 20 under 40 Inspiring Young Faculty  
2014 Duncan and Suzanne Mellichamp Lecturer in Chemical Engineering at Purdue University  
2014 NAE Frontiers of Engineering Symposium Invitee  
2014 Camille Dreyfus Teacher-Scholar Award  
2014 Alfred P. Sloan Research Fellowship in Chemistry  
2013 Presidential Early Career Award for Scientist and Engineers  
2013 UK PPG/DPOLY APS Exchange Lecturer  
2013 Diverse: Issues In Higher Education Emerging Scholar  
2012 Howard B. Wentz, Jr. Junior Faculty Award, School of Engineering and Applied Science, Princeton University  
2012 Air Force Young Investigator Award  
2011 NSF CAREER Award

2010 3M-Nontenured Faculty Grant  
 2009 American Chemical Society Doctoral New Investigator Award  
 2009 International Quadrant Award  
 2008 Chateaubriand/NSF International Research Postdoctoral Fellowships  
 2008 Frank J. Padden Jr. Award, American Physical Society – Division of Polymer Physics  
 2007 Richter Dissertation Year Fellowship, McCormick School of Engineering, Northwestern  
 2007 Distinguished Graduate Researcher, Chemical & Biological Engineering, Northwestern  
 2007 National Society of Black Engineers Board of Corporate Affiliates Fellows Scholarship  
 2006 NSF East Asia and Pacific Summer Institutes for U.S. Graduate Students Fellowship  
 2005 NSF Graduate Award to Attend 55<sup>th</sup> Meeting of Nobel Laureates and Students, Germany  
 2005 1<sup>st</sup> Place Poster Competition at the National Society of Rheology Meeting, Lubbock, TX  
 2003 PhD Graduate Engineering Minority (GEM) Fellowship  
 2002 National Society of Black Engineers Undergraduate Research Award  
 2001 Ronald E. McNair Undergraduate Research Fellowship

## PUBLICATIONS

87. W.N. Sharett, V.E. Lee., **R.D. Priestley**, J.T. Cabral, Complementarity between Flash NanoPrecipitation and Microdroplet Extraction in Polymer Particle Design, submitted
86. T. Morozova, V. Lee, A.Z. Panagiotopoulos, R.K. Prudhomme, **R.D. Priestley**, A. Nikoubashman, On the Stability of Polymeric Nanoparticles Fabricated through Rapid Solvent Mixing, submitted
85. J. Zhao, V.E. Lee, R. Liu, **R.D. Priestley**, Responsive Polymers as Smart Nanomaterials Enable Diverse Applications, submitted
84. J.H. Yang, S-H Jang, J.H. Lee, S.H. Jang, S. Akn, Y.C. Jung, **R.D. Priestley**, J.W. Chung, Controlling and Understanding the Self-Healing Behavior of 2-Ureido-4-Pyrimidinone-Functionalized Cluster and Dendritic Dual Dynamics Supramolecular Network, submitted
83. B. Zuo, H. Zhou, M.J.B. Davis, X. Wang, **R.D. Priestley**, Tailoring the Interfacial Effects of Nanoconfined Polymers by Molecular Designing the Local Conformation of Chains in Adsorbed Nanolayers, submitted
82. D. Christie, R.A. Register, **R.D. Priestley**, The Role of Chain Connectivity Across an Interface on the Dynamics of a Nanostructured Block Copolymer, *Physical Review Letters*, accepted
81. E. Kang, H. Kim, L.A.G. Gray, D. Christie, U. Jonas, B. Graczykowski, E.M. Furst, **R.D. Priestley**, G. Fytas, Ultrathin Shell Layers Dramatically Influence Polymer Nanoparticle Surface Mobility, *Macromolecules*, 51, 8522 (2018)
80. M.J.B. Davis, B. Zuo, **R.D. Priestley**, Competing Polymer-Substrate Interactions Mitigate Random Copolymer Adsorption, *Soft Matter*, 14, 7204 (2018)
79. Y. Wang, H. Jeong, M. Chowdhury, **R.D. Priestley**, Exploiting Physical Vapor Deposition for Morphological Control in Semi-Crystalline Polymer Films, *Polymer Crystallization*, DOI:10.1002/pcr2.1002 (2018)
78. M. Liu, C. Chi, J. Li, Z. Zhou, **R.D. Priestley**, W. Teng, R. Liu, Flash nanoprecipitation of poly(styrene-co-acrylonitrile) colloids in the presence of hydrophobic organoplatinum and

their derived Pt-carbon nanocomposites for oxygen reduction reaction, *Colloid and Surface Science A*, 552, 118 (2018)

77. L.S. Grundy, V.E. Lee, N. Li, C. Sosa, W.D. Mulhearn, R. Liu, R.A. Register, A. Nikoubashman, R.K. Prudhomme, A.Z. Panagiotopoulos, **R.D. Priestley**, Rapid Production of Internally Structured Colloids by Flash NanoPrecipitation of Block Copolymer Blends, *ACS Nano*, 12, 4660 (2018); see commentary in *Science*: 360, 978 (2018)
76. J. Chung, J.W. Chung, **R.D. Priestley**, S-Y. Kwak, Confinement-Induced Change in Chain Morphology of Ultra-Thin Polymer Fibers, *Macromolecules*, 51, 4229 (2018)
75. C. Li, Z. Zhao, **R. D. Priestley**, R. Liu, Constrained-Volume Assembly of Organometal Confined in Polymer to Fabricate Multi-Heteratom Doped Carbon for Oxygen Reduction Reaction, *Science China Materials*, DOI:10.1007/s40843-018-9269-x (2018)
74. H. Kim, Y. Cang, E. Kang, B. Graczykowski, M. Secchi, M. Montagna, **R.D. Priestley**, E.M. Furst, G. Fytas, Direct Observation of Polymer Surface Mobility via Nanoparticle Vibrations, *Nature Communication*, 9, 2918 (2018)
73. D. Christie, R.A. Register, **R.D. Priestley**, Direct Measurement of the Local Glass Transition in Self-Assembled Copolymers with One Nanometer Resolution, *ACS Central Science*, 4, 504 (2018); see accompanying commentary T.M. Lodge, Nanoscopic Resolution of the Glass Transition with Spatially Inhomogeneous Polymer Mixtures, *ACS Central Science*, 4, 431 (2018)
72. H. Jeong, M. Chowdhury, Y. Wang, M. Sezen-Edmonds, Y-L. Loo, R.A. Register, C.B. Arnold, **R.D. Priestley**, Tuning Morphology and Melting Temperature in Polyethylene Films by MAPLE, *Macromolecules*, 52, 512 (2018) (*selected as cover art*)
71. M.J. Burroughs, D.A. Christie, L.A. Gray, M. Chowdhury, **R.D. Priestley**, Twenty-First Century Advances in Fluorescence Techniques to Characterize Glass-Forming Polymers at the Nanoscale, *Macromolecular Chemistry and Physics*, 219, 1700368 (2018)
70. G. Li, J. Li, M. Liu, Z. Zhou, C. Cai, B. Guo, **R.D. Priestley**, L. Han, R. Liu, Silica-Polydopamine Core-Shell Self-Confined Templates for Ultra-Stable Hollow Pt Anchored N-Doped Carbon Electrocatalyst, *Dalton Transactions*, 46, 16419 (2017)
69. C. Sosa, V. Lee, L. Grundy, R. Liu, R.K. Prudhomme, **R.D. Priestley**, Combining Precipitation and Vitrification to Control the Number of Surface Patches on Polymer Nanocolloids, *Langmuir*, 33, 5835 (2017)
68. T. Gu, J. Gao, E.E. Ostoumov, H. Jeong, F. Wu, R. Fardel, N. Yao, **R.D. Priestley**, G. D. Scholes, Y-L. Loo, C.B. Arnold, Photoluminescence of Functionalized Germanium Nanocrystals Embedded in Arsenic Sulfide Glass, *ACS Applied Materials and Interfaces*, 9, 18911 (2017)
67. M.T. Wei, S. Elbaum-Garfinkle, A.S. Holehouse, C. C.-H Chen, M. Feric, C.B. Arnold, **R.D. Priestley**, R.V. Pappu, C.P. Brangwynne, Phase Behavior of Disordered Proteins Underlying Low Density and High Permeability of Liquid Organelles, *Nature Chemistry*, 9, 1118 (2017)

66. M. Chowdhury, **R.D. Priestley**, Discrete Mobility on the Surface of Glasses, *Proceedings of the National Academy of Sciences*, 114, 4854 (2017)
65. V. E. Lee, C. Sosa, R. Liu, R.K. Prudhomme, **R.D. Priestley**, A Scalable Platform for Hybrid Functional Polymer Nanocolloids via Continuous Flash NanoPrecipitation, *Langmuir*, 33, 3444 (2017)
64. Y. He, B. Wang, X. Hu, Z. Zhang, L. Sun, **R.D. Priestley**, R. Liu, One-Step Constrained-Volume Synthesis of Silver Decorated Polymer Colloids with Antimicrobial and Sensing Properties, *Colloid and Poly. Sci.*, 295, 521 (2017)
63. M. Chowdhury, Y. Guo, Y. Wang, W.L. Merling, J.H. Mangalala, D.S. Simmons, **R.D. Priestley**, Spatially-Distributed Rheological Properties in Confined Polymer by Non-Contact Shear, *Journal of Physical Chemistry Letter*, 8, 1229 (2017)
62. T. Gu, H. Jeong, K. Yang, F. Wu, N. Yao, **R.D. Priestley**, C. White, C.B. Arnold, Anisotropic Crystallization in Solution Processed Chalcogenide Thin Film by Linearly Polarized Laser, *Applied Physics Letters*, 110, 041904 (2017).
61. H. Jeong, S. Napolitano, C.B. Arnold, **R.D. Priestley**, Irreversible Adsorption Controls Crystallization in Vapor Deposited Polymer Thin Films, *Journal of Physical Chemistry Letters*, 8, 229 (2017)
60. V. Tam, C. Sosa, N. Yao, **R.D. Priestley**, Nanomedicine as a Non-Invasive Strategy for Drug Delivery Across the Blood Brain Barrier, *Inter. J. Pharm.*, 515, 331 (2016)
59. Y. He, **R.D. Priestley**, R. Liu, A One-Step and Scalable Continuous-Flow Nanoprecipitation for Catalytic Reduction of Organic Pollutants in Water, *Ind. Eng. Chem. Res.*, 55, 9851, (2016)
58. D. Christie, C. Zhang, J. Fu, B. Koel, **R.D. Priestley**, Glass Transition Temperature of Colloidal Polystyrene Dispersed in Various Liquids, *Journal of Polymer Science Polymer Physics*, 54, 1776 (2016)
57. C. Tang, C. Sosa, R.F. Pagels, **R.D. Priestley**, R.K. Prudhomme, Efficient Preparation of Size Tunable PEGylated Gold Nanoparticles, *Journal of Materials Chemistry B*, 4, 4813 (2016)
56. M.J. Burroughs, S. Napolitano, D. Cangialosi, **R.D. Priestley**, Direct Measurement of Interfacial Effects on Exposed and Buried Adsorbed Nanolayer Glass Transition Temperature in Polymer Thin Films, *Macromolecules*, 49, 4647 (2016)
55. H. Jeong, K. Shepard, G. Purdum, Y-L. Loo, C.B. Arnold, **R.D. Priestley**, Additive Growth and Crystallization of Polymer Films, *Macromolecules*, 49, 2860 (2016)
54. C. Sosa, R. Liu, C. Tang, F. Qu, M. Bazant, R.K. Prudhomme, **R.D. Priestley**, Soft-Multi-faced Colloids by Constrained Volume Self-Assembly, *Macromolecules*, 49, 3580 (2016)
53. R. Liu, **R.D. Priestley**, Rational Design and Fabrication of Core-Shell Nanoparticles

52. Through One-Step/Pot Strategy, *Journal Materials Chemistry A*, 4, 6680 (2016) (Selected Cover Article)
51. Nikoubashman, V.E. Lee, C. Sosa, R.K. Prudhomme, **R.D. Priestley**, A.Z. Panagiotopoulos, Directed Assembly of Soft Colloids Through Rapid Solvent Exchange, *ACS Nano*, 10, 1425 (2016)
50. Zhao, L. Ma, J. You, F. Qu, **R.D. Priestley**, EDTA- and Amine-Functionalized Graphene Oxide as Sorbents for Ni (II) Removal, *Desalination and Water Treatment*, 47, 8942 (2015)
49. C.M. Evans, S. Kim, C.B. Roth, **R.D. Priestley**, L.J. Broadbelt, J.M. Torkelson, Role of Neighboring Domains in Determining the Magnitude and Direction of Tg-Confinement Effects in Binary, Immiscible Polymer Systems, *Polymer*, 80, 180 (2015)
48. C.N. Neikirk, J.W. Chung, **R.D. Priestley**, Modification of Mechanical Properties in Polymer Nanocomposites by the Incorporation of Specific Self-Complementary Hydrogen Bonding Interactions, *Polymer*, 79, 212 (2015).
47. K.B. Shepard, D.A. Christie, C.L. Sosa, C.B. Arnold and **R.D. Priestley**, Patchy Janus Particles with Tunable Roughness and Composition via Vapor-Assisted Deposition of Macromolecules, *Appl. Phys. Lett.*, 106, 093104 (2015)
46. **R.D. Priestley**, D. Cangialosi, S. Napolitano, On the Equivalence Between the Thermodynamic and Dynamic Measurement of the Glass Transition of Confined Polymer, *J. Non-Crystalline Solids*, 407, 288 (2015)
45. K.B. Shepard, C.B. Arnold, **R.D. Priestley**, Transport and Stability of Laser-Deposited Amorphous Polymer Nanoglobules, *ACS Macro Letters*, 3, 1046 (2014)
44. R. Liu, C. Sosa, Y. Yeh, F. Qu, N Yao, R.K. Prudhomme, **R.D. Priestley**, A One-step and Scalable Route to Metal Nanocatalyst Supported Polymer Nanospheres via Flash NanoPrecipitation, *J. Mater. Chem. A*, 2, 17286 (2014)
43. Y. Guo, Z. Zhang, **R.D. Priestley**, Polymer Thin Film Instability from a Patterned Edge, *Applied Physics Letters*, 105, 041603 (2014)
42. R. Liu, Y. Yeh, V.H. Tam, F. Qu, N. Yao, **R.D. Priestley**, One-Pot Stober Route Yields Template for Ag@Carbon Yolk-Shell Nanostructures, *ChemComm*, 50, 9056 (2014) (Cover Article)
41. Zhang, Y. Guo, **R.D. Priestley**, Characteristic Length of the Glass Transition in Isochorically Confined Polymer Glasses, *ACS Macro Letters*, 3, 501 (2014)
40. R. Liu, F. Qu, Y. Guo, N. Yao, **R.D. Priestley**, Au@Carbon Yolk-Shell Nanostructures via One-Step Core-Shell-Shell Template, *ChemComm*, 50, 478 (2014)
39. K. Shepard, C.B. Arnold, **R.D. Priestley**, Origins of Nanostructure in Amorphous Polymer Coatings via Matrix Assisted Pulsed Laser Evaporation, *Applied Physics Letters*, 103, 123105 (2013)

38. R. Liu, Y. Guo, G. Odusote, F. Qu, **R.D. Priestley**, Core-Shell Fe<sub>2</sub>O<sub>3</sub> Polydopamine Nanoparticles Serve Multipurpose as Drug Carrier, Catalyst Support and Carbon Adsorbent, *ACS Applied Materials and Interfaces*, 5, 9167 (2013) (Highlighted as “Most Read” Article)
37. C. Neikirk, J.W. Chung, **R.D. Priestley**, Thermomechanical Behavior of Hydrogen-bond based Supramolecular Poly( $\epsilon$ -Caprolactone)-Silica Nanocomposites, *RSC Advances*, 3, 16686 (2013)
36. Zhang, **R.D. Priestley**, Fragility and Glass Transition Temperature of Polymer Confined Under Isobaric and Isochoric Conditions, *Soft Matter*, 9, 7076 (2013)
35. J.W. Chung, C. Neikirk, **R.D. Priestley**, Investigation of Coumarin Functionality on the Formation of Polymeric Nanoparticles, *Journal of Colloid and Interface Science*, 396, 16 (2013)
34. C. Zhang, Y. Guo, **R.D. Priestley**, Confined Glassy Properties of Polymer Nanoparticles, *Journal of Polymer Science Polymer Physics*, 51, 574 (2013)
33. K. Shepard, **R.D. Priestley**, MAPLE Deposition of Macromolecules, *Macromolecular Chemistry and Physics*, 214, 862 (2013)(Cover Article)
32. Zhang, V. M. Boucher, D. Cangialosi, **R. D. Priestley**, Mobility and Glass Transition Temperature of Polymer Nanospheres, *Polymer*, 54, 230 (2013)
31. K. Shepard, Y. Guo, C.B. Arnold, **R.D. Priestley**, Nanostructured Morphology of Polymer Films Prepared by Matrix Assisted Pulsed Laser Evaporation, *Applied Physics A*, 110, 771 (2013)
30. C. Zhang, Y. Guo, **R.D. Priestley**, Fragility of an Isochorically Confined Polymer Glass, *Journal of Physical Chemistry Letters*, 4, 431 (2013)
29. S.H. Choi, J.W. Chung, **R.D. Priestley**, S.W. Swak, Functionalization of Polysulfone Hollow Fiber Membranes with Amphiphilic  $\beta$ -Cyclodextrin and Their Applications for the Removal of Endocrine Disrupting Plasticizer, *Journal of Membrane Science*, 409, 75 (2012)
28. C. Zhang, J.W. Chung, **R.D. Priestley**, Dialysis Nanoprecipitation of Polystyrene Nanoparticles, *Macromolecular Rapid Communications*, 33, 1798 (2012)
27. J.W. Chung, K. Lee, C. Neikirk, C. Nelson, **R.D. Priestley**, Photo-Responsive Coumarin Stabilized Polymeric Nanoparticles as a Detectable Drug Carrier, *Small*, 8, 1693 (2012)
26. J.W. Chung, Y. Guo, S-Y. Kwak, **R.D. Priestley**, Understanding and Controlling Gold Nanoparticle Formation from a Robust Self-Assembled Cyclodextrin Solid Template, *Journal of Materials Chemistry*, 22, 6017 (2012)
25. Y. Guo, A. Morozov, D. Schneider, J. W. Chung, C. Zhang, M. Waldmann, N. Yao, G. Fytas, C. B. Arnold, **R. D. Priestley**, Ultra-Stable Nanostructured Polymer Glasses, *Nature Materials*, 11, 337 (2012) (Commentary: M.D. Ediger, Lian Yu, *Nature Materials*, 11, 267 (2012))
24. Zhang, V. Pansare, R.K. Prudhomme, **R.D. Priestley**, Flash NanoPrecipitation of Polystyrene Nanoparticles, *Soft Matter*, 8, 86 (2012)
23. S.Y. Park, J.W. Chung, **R.D. Priestley**, S.Y. Kwak, Covalent Assembly of Metal

- Nanoparticles on Cellulose Fabric and its Antimicrobial Activity, *Cellulose*, 19, 2141 (2012)
22. Y. Guo, C. Zhang, C. Lai, **R.D. Priestley**, M. D'Acuzni, G. Fytas, Structural Relaxation of Polymer Nanospheres under Soft and Hard Confinement: Isobaric versus Isochoric Glass Formation, *ACS Nano*, 5, 5365 (2011)
  21. C. Zhang, Y. Guo, **R.D. Priestley**, Glass Transition Temperature of Polymer Nanoparticles under Soft and Hard Confinement, *Macromolecules*, 44, 4001 (2011)
  20. J.W. Chung, Y. Guo, **R.D. Priestley**, S-Y. Kwak, Colloidal Gold Nanoparticle Formation Derived From Self-Assembled Supramolecular Structure of Cyclodextrin/Au Salt Complex, *Nanoscale*, 3, 1766 (2011)
  19. Y. Guo, C. Zhang, C. Lai, and **R.D. Priestley**, Glass Transition Temperature and Structural Relaxation of Polymer Nanoparticles Under Hard and Soft Confinement, *Proceedings from the 19<sup>th</sup> Annual International Conference on Composites/Nano Engineering, World Journal of Engineering*, September, 373 (2011)
  18. **R.D. Priestley**, Physical Aging of Confined Glasses, *Soft Matter*, 5, 919 (2009)
  17. J.M. Torkelson, **R.D. Priestley**, P. Rittigstein, M.K. Mundra and C.B. Roth, Novel Effects of Confinement and Interfaces on the Glass Transition Temperature and Physical Aging in Polymer Films and Nanocomposites, *Proceeding of 5<sup>th</sup> International Workshop on Complex Systems*, 192 (2008).
  16. **R.D. Priestley**, P. Rittigstein, L.J. Broadbelt, K. Fukao and J.M. Torkelson, Evidence for the Molecular-Scale Origin of the Suppression of Physical Aging in confined Polymer: Fluorescence and Dielectric Spectroscopy Studies of Polymer-Silica Nanocomposites, *J. Phys. Condens. Matter*, 19, 205120 (2007).
  15. T. Kono, Y. Hu, T. Masuda, K. Tanka, **R. D. Priestley** and B.D. Freeman, Effect of Fumed Silica Nanoparticles on Gas Permeation Properties of Substituted Polyacetylene Membranes, *Polym. Bull.*, 58, 995 (2007)
  14. P. Rittigstein, **R.D. Priestley**, L.J. Broadbelt and J.M. Torkelson, Model Polymer Nanocomposites Provide an Understanding of Confinement Effects in Real Nanocomposites, *Nature Mater.*, 6, 278 (2007).  
(News and Views of article by L. Schadler, Model interfaces, *Nature Mater.*, 6, 257 (2007)
  13. **R.D. Priestley**, L.J. Broadbelt, J.M. Torkelson and K. Fukao, Glass Transition and Alpha-Relaxation Dynamics of Thin Films of Labeled Polystyrene, *Physical Review E*, 75, 061806 (2007)
  12. **R.D. Priestley**, M. K. Mundra, N. Barnett, L. J. Broadbelt and J.M. Torkelson, Effects of Nanoscale Confinement and Interfaces on the Glass Transition Temperatures of a Series of Poly(n-methacrylate) Films, *Aust. J. of Chem.*, 60, 765 (2007)
  11. **R.D. Priestley**, L.J. Broadbelt, K. Fukao and J.M. Torkelson, Confinement and Interfacial Effects on the Dynamics and Glass Transition of Thin Polymer Films: Novel Fluorescence and Dielectric Spectroscopy Studies, *Polymer Preprints*, 48 (1), 662 (2007)
  10. J.M. Torkelson, **R.D. Priestley**, M.K. Mundra, P. Rittigstein, L.J. Broadbelt and C.J. Ellison, Perturbations by Surfaces and Interfaces to T<sub>g</sub> that Propagate Hundreds of Nanometers in Films: Implications for the Nature of the Glass Transition of Polymers, *Polymer Preprints*, 48,

745 (2007)

9. **R.D. Priestley**, L.J. Broadbelt and J.M. Torkelson, Why Nanoconfinement May Lead to the Development of Polymer Glasses that do not Physically Age, *Polymer Materials Science and Engineering*, 97, 240 (2007)
8. J.M. Torkelson, **R.D. Priestley**, P. Rittigstein, M.K. Mundra, L.J. Broadbelt, W.F. Jager and C.B. Roth, Model Studies of the Effects of Confinement and Nanocomposite Formation on Polymer Glass Transition Temperature and Physical Aging, *Polymer Materials Science and Engineering*, 97, 782 (2007)
7. K. Fukao, A. Harada, **R.D. Priestley** and J.M. Torkelson, Glass Transition and Dielectric Relaxation of Thin Films of Labeled Polymers, *Polymer Materials Science and Engineering*, 97, 788 (2007)
6. **R.D. Priestley**, C.J. Ellison, L.J. Broadbelt and J.M. Torkelson, Structural Relaxation of Polymer Glasses at Surfaces, Interfaces and in Between, *Science*, 309, 456 (2005)
5. **R.D. Priestley**, L.J. Broadbelt and J.M. Torkelson, Physical Aging of Ultrathin Polymer Films Above and Below the Bulk Glass Transition Temperature: Effects of Polymer-Substrate Interactions Measured by Fluorescence, *Macromolecules*, 38, 654 (2005)
4. **R.D. Priestley**, P. Rittigstein, L.J. Broadbelt and J.M. Torkelson, Structural Recovery in Confined Polymer films and Nanocomposites Above and Below the Bulk Glass Transition Temperature: Novel Studies by Fluorescence and Differential Scanning Calorimetry, *Polymer Materials Science and Engineering*, 92, 229 (2005)
3. C.J. Ellison, **R.D. Priestley**, L.J. Broadbelt, M.K. Mundra, P. Rittigstein and J.M. Torkelson, On the Glass Transition and Physical Aging in Nanoconfined Polymers, *ANTEC*, 63, 262 (2005)
2. **R.D. Priestley**, C.J. Ellison, L.J. Broadbelt and J.M. Torkelson, Nanoscale Distributions of Glass Transition Temperature and Physical Aging in Confined Polymers and Polymer Nanocomposites: Fluorescence Study, *Polymer Materials Science and Engineering*, 93, 262 (2005)
1. Y. Zheng, **R.D. Priestley** and G.B. McKenna, Physical Aging of an Epoxy Subsequent to Relative Humidity Jumps Through the Glass Concentration, *J. Polym. Sci. Part B: Polym. Phys.*, 42, 2107 (2004)

## Book

Polymer Colloids, Ed: R.D. Priestley and R.K. Prudhomme, as part of Soft Matter Series, RSC, UK (2019)

## Book Chapters

V. Lee, D. Scott, R.K. Prudhomme, **R.D. Priestley**, Flash Nanoprecipitation for Polymer Colloids and Encapsulation, in Polymer Colloids, Ed: **R.D. Priestley** and R.K. Prudhomme, as part of Soft Matter Series, RSC, UK (2019)

Y. Guo, **R.D. Priestley**, Structural Relaxation of Confined Glassy Polymers, in Non-Equilibrium Phenomena in Confined Soft Matter, Ed: Simone Napolitano, Springer, Heidelberg (2015)



## INVITED PRESENTATIONS

89. 2019 APS March Meeting, Boston, MA
88. 2019 257<sup>th</sup> ACS National Meeting, Orlando, FL
87. 2019 Telluride Science and Research Conference on Polymer Physics, Telluride, CO
86. 2019 CWRU, Macromolecular Science and Engineering, Cleveland, OH
85. 2018 Texas Tech University, Chemical Engineering, Lubbock, TX
84. 2018 FFW, University of Delaware
83. 2018 North American Thermal Analysis Society, Philadelphia, PA
82. 2018 Zhejiang Science and Technology University, Hangzhou, China
81. 2018 Rice University, Chemical and Biomolecular Engineering
80. 2018 10<sup>th</sup> ECNP International Conference on Nanostructured Polymer and Nanocomposites, San Sebastian, Spain
79. 2018 PENN Polymer Seminar Series, Philadelphia, PA
78. 2018 255<sup>th</sup> ACS National Meeting, New Orleans, LA
77. 2018 University of Kentucky, Chemical Engineering, Lexington, KY
76. 2018 Times of Polymers Conference, Ischia, Italy
75. 2018 High Power Laser Ablation and Beamed Energy Propulsion, Santa Fe, NM
74. 2017 Mettler-Toledo Flash-DSC Conference, Zurich, Switzerland
73. 2017 University of Massachusetts, Chemical Engineering, Amherst, MA
72. 2017 American Institute of Chemical Engineers, Minneapolis, MN
71. 2017 Imperial College/University of College London Workshop, Girona, Spain
70. 2017 University of Surrey, Guildford, UK
69. 2017 Imperial College London, Chemical Engineering, London, UK
68. 2017 Mid-Atlantic Soft Matter Workshop, University of Delaware
67. 2017 ACS Pan American Polymer Science Conference, Guarujá, Brazil
66. 2016 Delaware State University, RISE Institute, Dover, DE
65. 2016 NYU Polytechnic Institute, Brooklyn, NY
64. 2016 Wanhua Chemical Group, Yantai, China
63. 2016 Shandong University, Colloids Institute, Jinan, China
62. 2016 Tongji University, Materials Science, Shanghai, China
61. 2016 American Physical Society March Meeting, Baltimore, MD
60. 2016 Northwestern University, Chemical and Biological Engineering, Evanston, IL
59. 2016 Time of Polymer Conference, Ischia, Italy
58. 2015 ACS Symposium Honoring Henry Hill, Boston, MA
57. 2015 Arkema Company, King of Prussia, PA
56. 2015 Tulane University, Chemical Engineering, New Orleans, LA
55. 2015 Shanghai Jiao Tong University, Graduate School Distinguished Lecture, China
54. 2015 Texas A&M University, Chemical Engineering, College Station, TX
53. 2015 AFOSR Advanced Materials Characterization Conference, Dayton, OH
52. 2015 Materials Research Outreach Symposium, University of California, Santa Barbara
51. 2015 Stanford University, Materials Science and Engineering, Palo Alto, CA
50. 2015 Georgia Tech, Chemical and Biomolecular Engineering, Atlanta, GA
49. 2015 University of Washington, Chemical Engineering, Seattle, WA
48. 2014 Third US-Mexico Symposium on Advances in Polymer Science, Nayarit, Mexico
47. 2014 Northeast Complex Fluids and Soft Matter Workshop, CCNY, New York, NY
46. 2014 Shandong University, Laboratory of Colloid and Interface Science, Jinan, China
45. 2014 Gordon Polymer Physics Conference, South Hadley, MA
44. 2014 University of Akron, Polymer Engineering, Akron, OH
43. 2014 Emory University, Physics, Atlanta, GA
42. 2014 MIT, Chemical Engineering, Cambridge, MA
41. 2014 University of Wisconsin, Chemistry, Madison, WI
40. 2014 Jining Medical College, Biomedical Engineering, Jining, China
39. 2014 QuFu Normal University, Chemical Engineering, Jining, China

38. 2014 Zhejiang University, Chemical Engineering, Hangzhou, China
37. 2014 Beijing University, Chemistry, Beijing, China
36. 2014 Hangzhou International Polymer Forum, Hangzhou, China
35. 2014 Lafayette College, Chemical Engineering, Easton, PA
34. 2014 University of Illinois Urbana-Champaign, Materials Science, Urbana-Champaign, IL
33. 2014 University of Southern California, Physics, Los Angeles, CA
32. 2014 Dow Chemical Company, Spring House, PA
31. 2014 Laser-Based Micro and Nano Processing VIII, San Francisco, CA
30. 2014 High Power Laser Ablation and Beamed Energy Propulsion, Santa Fe, NM
29. 2014 University of Michigan, Materials Science, Ann Arbor, MI
28. 2013 Wesleyan College, Physics Middleton, CT
27. 2013 Chemical Heritage Foundation, Innovation Day 2013, Philadelphia, PA
26. 2013 AIChE, Nanoscale Phenomena in Polymers, San Francisco, CA
25. 2013 Rutgers University, Materials Science, New Brunswick, NJ
24. 2013 University of Pennsylvania, Chemistry, Philadelphia, PA
23. 2013 Stevens Institute of Technology, Chemical Engineering, Hoboken, NJ
22. 2013 University of Delaware, Chemical and Biomolecular Engineering, Newark, Delaware
21. 2013 7th Int. Discussion Meeting on the Relaxation of Complex System, Barcelona, Spain
20. 2013 ETH-Zurich, Materials Science, Zurich, Switzerland
19. 2013 International Symposium of Young Organic Chemist (ISYOC2013), Tsukuba, Japan
18. 2013 Quadrant Plastics, Zurich, Switzerland
17. 2013 American Physical Society March Meeting, Baltimore, MD
16. 2013 Columbia University, Chemical Engineering, New York, NY
15. 2012 City College of New York, Chemical Engineering, New York, NY
14. 2012 Penn State University, Materials Science and Engineering, State College, PA
13. 2012 AIChE, Emerging Areas in Polymer Science, Pittsburg, PA
12. 2011 Second US-Mexico Advances in Polymer Science Meeting, Cancun, Mexico
11. 2011 Case Western Reserve University, Chemical Engineering, Cleveland, OH
10. 2011 Texas Tech University, Chemical Engineering, Lubbock, TX
9. 2011 Jim West Symposium, John Hopkins University, Baltimore, MD
8. 2011 3M Corporation, Corporate Research, St. Paul, MN
7. 2011 DuPont Central Research and Development, Wilmington, DE
6. 2009 Department of Physics, Katholieke Universiteit, Leuven, Belgium
5. 2009 Laboratoire de Technologie des Composites et Polymers, EPFL, Lausanne, Switzerland
4. 2009 Materials Science and Technology, FORTH, Crete, Greece
3. 2008 Materials/Manufacturing Directorate, Air Force Research Laboratories, Dayton, OH
2. 2008 Matiere Molle et Chimie, ESPCI, Paris, France
1. 2006 Department of Physics, Kyoto University, Kyoto, Japan

### **SELECT CONTRIBUTED ORAL PRESENTATIONS**

- 2018 V. Lee, R.K. Prudhomme, R.D. Priestley, Inter. Colloids Conference, Shanghai, China
- 2018 V. Lee, R.K. Prudhomme, R.D. Priestley, APS, Los Angeles, CA
- 2018 M. Chowdhury, R.D. Priestley, APS, Los Angeles, CA
- 2018 D. Christie, R.A. Register, R.D. Priestley, APS, Los Angeles, CA
- 2017 V. Lee, R.K. Prudhomme, R.D. Priestley, ACS Colloids, NY, NY
- 2017 V. Lee, R.K. Prudhomme, R.D. Priestley, ACS, San Francisco, CA
- 2017 L. Gray, C.B. Brangwynne, R.D. Priestley, APS, New Orleans, LA
- 2017 D. Christie, R.A. Register, R.D. Priestley, New Orleans, LA
- 2017 H. Jeong, R.D. Priestley, APS, New Orleans, LA
- 2017 M.J. Burroughs, R.D. Priestley, APS, New Orleans, LA
- 2017 V. Lee, R.K. Prudhomme, R.D. Priestley, APS, New Orleans, LA
- 2016 M. Chowdhury, Y. Guo, R.D. Priestley, APS, Baltimore, MD

2016 M.T. Wei, C.B. Arnold, R.D. Priestley, C.P. Brangwynne, APS, Baltimore, MD  
2016 C. Sosa, R.K. Prudhomme, R.D. Priestley, APS, Baltimore, MD  
2016 D. Christie, R. Register, R.D. Priestley, APS, Baltimore, MD  
2016 J. Jeong, C.B. Arnold, R.D. Priestley, APS, Baltimore, MD  
2016 M.J. Burroughs, R.D. Priestley, APS, Baltimore, MD  
2015 M.J. Burroughs, R.D. Priestley, APS, San Antonio, TX  
2015 K. Shepard, R.D. Priestley, APS, San Antonio, TX  
2015 C.S. Sosa, R.K. Prudhomme, R.D. Priestley, APS, San Antonio, TX  
2015 R. D. Priestley, ACS Pacific Chemistry, Honolulu, HA  
2014 R.D. Priestley, Hybrid Materials, Barcelona, Spain  
2014 K. Shepard, R.D. Priestley, AIChE, Atlanta, GA  
2014 R. Liu, R.D. Priestley, International Colloids Conference, Madrid, Spain  
2014 R.D. Priestley, International Colloids Conference, Madrid, Spain  
2014 C. Sosa, R.K. Prudhomme, R.D. Priestley, ACS Colloids Conference, Philadelphia, PA  
2014 R.D. Priestley, ACS Spring Meeting, Dallas, TX  
2014 C. Neikirk, R.D. Priestley, ACS Spring Meeting, Dallas, TX  
2014 K. Shepard, C.B. Arnold, R.D. Priestley, APS, Denver, CO  
2014 C. Sosa, R.K. Prudhomme, R.D. Priestley, APS, Denver, CO  
2013 C. Zhang, R.D. Priestley, AIChE, San Francisco, CA  
2013 C. Neikirk, R.D. Priestley, AIChE, San Francisco, CA  
2013 R.D. Priestley, COLA, Ischia, Italy  
2013 K. Shepard, C.B. Arnold, R.D. Priestley, APS, Baltimore, MD  
2013 C. Zhang, R.D. Priestley, APS, Baltimore, MD  
2012 C. Neikirk, J.W. Chung, R.D. Priestley, Japan Polymer Conference, Kobe, Japan  
2012 Y. Guo, R.D. Priestley, AIChE, Pittsburgh, PA  
2012 K. Shepard, Y. Guo, C.B. Arnold, R.D. Priestley, LPM, Washington, DC  
2012 C. Zhang, V. Pansare, R.K. Prudhomme, R.D. Priestley, ACS Colloids, Baltimore, MD  
2012 C. Zhang, R.D. Priestley, APS, Baltimore, MD  
2012 Y. Guo, K. Shepard, R.D. Priestley, APS Baltimore, MD  
2011 J.W. Chung, C. Neikirk, K. Lee, C. Nelson, R.D. Priestley, Marcomex, Cancun, MX  
2011 R.D. Priestley, Y. Guo, K. Dikovics, AIChE, Minneapolis, MN  
2011 C. Zhang, R.D. Priestley, AIChE, Minneapolis, MN  
2011 C. Neikirk, R.D. Priestley, AIChE, Minneapolis, MN  
2011 Y. Guo, C. Zhang, C. Lai, R.D. Priestley, ICCE Nano, Shanghai, China  
2011 Y. Guo, C. Zhang, C. Lai, R.D. Priestley, APS, Dallas, TX  
2011 C. Zhang, Y. Guo, R.D. Priestley, APS, Dallas, TX  
2011 R.D. Priestley, Y. Guo, C.B. Arnold, APS, Dallas, TX  
2010 J. W. Chung, R.D. Priestley, AIChE, Salt Lake City, UT  
2010 Y. Guo, R.D. Priestley, AIChE, Salt Lake City, UT  
2008 R.D. Priestley, L.J. Broadbelt, J.M. Torkelson, APS, New Orleans, LA  
2007 R.D. Priestley, L.J. Broadbelt, J.M. Torkelson, Annual African MRS Meeting, Tanzania  
2007 R.D. Priestley, L.J. Broadbelt, J.M. Torkelson, AIChE, Salt Lake City, UT  
2007 R.D. Priestley, L.J. Broadbelt, K. Fukao, J.M. Torkelson, AIChE, Salt Lake City, UT  
2007 R.D. Priestley, L.J. Broadbelt and J.M. Torkelson, ACS Fall, Boston, MA  
2007 R.D. Priestley, L.J. Broadbelt, K. Fukao and J.M. Torkelson, ACS Spring, Chicago, IL  
2007 R.D. Priestley, L.J. Broadbelt, K. Fukao, J.M. Torkelson, APS, Denver, CO  
2006 R.D. Priestley, L.J. Broadbelt, J.M. Torkelson, AIChE, San Francisco, CA  
2005 R.D. Priestley, L.J. Broadbelt, J.M. Torkelson, AIChE, Cincinnati, OH  
2003 R.D. Priestley, Y. Zheng, G.B. McKenna, AIChE SW Regional Meeting, Beaumont, TX

#### **SELECT CONTRIBUTED POSTER PRESENTATIONS**

2018 Y. Wang, H. Jeong, R.D. Priestley, APS, Los Angeles, CA  
2017 M. Chowdhury, R.D. Priestley, APS, New Orleans, LA

2017 Y. Wang, R.D. Priestley, APS, New Orleans, LA  
 2016 L. Gray, C.P. Brangwynne, R.D. Priestley, APS, Baltimore, MD  
 2016 V. Lee, R.K. Prudhomme, APS, Baltimore, MD  
 2015 D. Christie, R.D. Priestley, APS, San Antonio, TX  
 2014 H. Jeong, C.B. Arnold, R.D. Priestley, APS, Denver, CO  
 2014 M. Burroughs, R.D. Priestley, APS, Denver, CO  
 2013 K. Shepard, R.D. Priestley, COLA, Ischia, Italy  
 2013 C. Zhang, R.D. Priestley, 7IDMRCS, Barcelona, Spain  
 2012 C. Zhang, R.D. Priestley, ACS Colloid Symposium, Baltimore, MD  
 2012 K. Shepard, Y. Guo, R.D. Priestley, APS, Boston, MA  
 2010 R.D. Priestley, Annual Meeting AICHE, Salt Lake City, UT  
 2008 R.D. Priestley, Polymer Physics Gordon Research Conference, Newport, RI  
 2007 R.D. Priestley, Annual Meeting AICHE, Salt Lake City, UT  
 2006 R.D. Priestley, L.J. Broadbelt, J.M. Torkelson, IV International Workshop on Non  
 Equilibrium Phenomena in Supercooled Fluids, Glasses and Amorphous Materials, Italy  
 2005 R.D. Priestley, L.J. Broadbelt, J.M. Torkelson, 5<sup>th</sup> International Discussion Meeting on  
 the Relaxation of Complex Systems, Lille, France  
 2005 R.D. Priestley, L.J. Broadbelt, J.M. Torkelson, APS, Los Angeles, CA  
 2005 R.D. Priestley, L.J. Broadbelt, J.M. Torkelson, 76<sup>th</sup> Annual Meeting SOR, Lubbock, TX  
 2003 R.D. Priestley, Y. Zheng, G.B. McKenna, APS, Austin, TX  
 2003 R.D. Priestley, M. Wei, M.T. Shaw, NSBE, Los Angeles, CA

## **ACADEMIC AND PROFESSIONAL SERVICE**

### **University Service**

2018 – 2019 Policy Committee of the Graduate School  
 2017 – 2018 Dean of the Graduate School Search Committee  
 2017 – 2019 DOF Faculty Advisory Committee on Diversity  
 2017 – 2018 Fellowship Committee of the Graduate School  
 2015 – 2018 Priorities Committee  
 2016 – 2017 Faculty Advisory Committee on Policy  
 2016 – 2017 Executive Committee of the Council of the Princeton University Community  
 2014 – 2017 Council of the Princeton University Community  
 2014 – 2017 Committee on Undergraduate Admissions and Financial Aid  
 2014 – 2015 Council on Teaching and Learning  
 2011 – 2013 Committee on Examinations and Standings

### **Departmental Service**

2018 – co-Chair Committee on the Website  
 2015 – Present CBE Graduate Committee  
 2010 – Present Freshman Advising  
 2010 – Present Senior Advising  
 2009 – 2016 AICHE Student Chapter Advisor  
 2009 – Present Energy Committee  
 2014 – CBE Faculty Search Committee (and 2013)  
 2014 – CBE Committee on Research and Balance  
 2014 – CBE Seminar Coordinator (Spring Semester)  
 2013 – 2014 ToO Committee (2016, 2018)  
 2009 – 2011 CBE Graduate Committee

### **SEAS Service**

2017 – 2020 Executive Committee of Keller Center  
 2016 – 2019 Executive Committee of PRISM

2016 – 2018 PRISM Lecturer Search Committee  
 2015 – Present NSBE Advisor  
 2015 – Present Co-Director of PRISM/PCCM REU Program  
 2014 – Present Executive Committee of Princeton Center for Complex Materials  
 2012 – 2016 PRISM/PCCM Seminar Coordinator  
 2009 – 2016 WLHSS Co-advisor  
 2014 SEAS Task Force on Faculty and Diversity  
 2013 APEC Equipment Committee

### External Service

Proposal Reviewer: Department of Energy, American Chemical Society, DTRA, NSF  
 Reviewer for Scientific Journals: Soft Matter, Journal of Non-Crystalline Solids, Physical Review E, Journal of Statistical Mechanics: Theory and Experiment, European Physical Journal B, Macromolecules, Thin Solid Films, Macromolecular Chemistry & Physics, Journal of Polymer Science Part B: Polymer Physics, Advanced Material, Journal of Chemical Physics, ACS Macro Letters, Macromolecular Theory & Simulation, Journal of Chemical Physics, PNAS, Natural Journals

2018 APS DPOLY Nominations Committee  
 2018 EPSRC UK Inclusion Matters Panel  
 2018 APS Focus Session Organizer – Polymer Glasses: The Influence of Confinement and Interfaces on Material Properties  
 2017 AAAS – Member of Electorate Naming Committee (3-year term)  
 2017 APS DPOLY Short course organizer (Polymer Colloids: Synthesis, Characterization and Applications)  
 2017 NSF Panels (2016, 15, 14)  
 2015 ACS Pacific Chemistry: Polymer Interfaces and Thin Films  
 2015 APS Session Chair: Polymer Glasses  
 2014 ACS Session Chair: General Colloids  
 2014 APS Session Chair: Polymer Glasses  
 2013 AIChE Plenary Polymer Session Organizer, Fundraiser and Co-Chair  
 2013 APS Abstract Sorter  
 2013 APS Focus Session Organizer/Chair – Supercooled Liquids and the Glass Transition  
 2012 APS Focus Session Chair – Dynamics of Confined Polymers  
 2012 AIChE Session Chair: Interfaces and Thin Films  
 2012 AIChE Session Chair: Mobility, Deformation and Stability in Solid Polymers  
 2011 AIChE Session Chair: Interfaces and Thin Films  
 2011 Member of APS Division of Polymer Physics Publications Committee  
 2010 APS Focus Session Organizer and Chair – Glass Transition in Thin Films  
 2010 APS Session Chair – Nanoparticle Polymer Interactions  
 2010 AIChE Session Chair: Interfaces and Thin Films & Thermodynamics of Polymers  
 2010 Judge for AIChE Materials Science and Engineering Division Poster Session  
 2009 AIChE Session Chair – Diffusion in Polymers II  
 2009 Judge for AIChE Materials Science and Engineering Division Poster Session (also 2010)

### TEACHING

An Introduction to Chemical Engineering Principles – CBE 245  
 Fall 2015 Enrollment: 67  
 Fall 2014 Enrollment: 78  
 Fall 2013 Enrollment: 46  
 Fall 2012 Enrollment: 80  
 Fall 2011 Enrollment: 56

Fall 2010 Enrollment: 65  
Fall 2009 Enrollment: 46  
Chemical and Biological Engineering Laboratory – CBE 346  
Spring 2011 Enrollment: 33  
Spring 2018 Enrollment: 41  
The Physics of Glassy Polymers – CBE 550  
Spring 2013 Enrollment: 12  
Polymer Viscoelasticity – CBE 542  
Spring 2015 Enrollment: 12  
Experimental Methods in Materials Science – MSE 302  
Fall 2015 Enrollment: 11  
Fall 2016 Enrollment: 11  
Fall 2017 Enrollment: 15  
Fall 2018 Enrollment: 11  
EGR 501 – Preceptor

## **STUDENT MENTORING**

### **Current Ph.D. Students:**

Yucheng Wang  
Dane Christie  
Vickie Lee  
Jason Liu

Nicholas Caggiano  
Katelyn Randazzo  
Douglas Scott

**Current Postdoctoral Fellow:** Laura Gray, Navid Bizmark

**Current Student Visitor:** William Sharett, Imperial College London

**Current Visiting Professor:** Dr. Biao Zuo, Zhejiang Science Technology University

### **Former Graduate Student:**

Chuan Zhang, PhD (2009 – 2014; Wanhua Chemicals)  
Kimberly Shepard (2010 – 2015; Bend Research)  
Colin Neikirk (2009 – 2015; Applied Materials)  
Hyunchoel Jeong (2012 – 2017; Intel)  
Chris Sosa (2011 – 2017; Entrepreneur)  
Mary Davis (2012 – 2018; NRC EPA postdoc)

### **Former Postdoctoral Fellows:**

Jae Woo Chung (2009 – 2012; Associate Professor, Soongsil University, Korea)  
Yunlong Guo (2009 – 2014; Associate Professor, Shanghai Jiao Tong University/U of Michigan)  
Rui Liu (2012 – 2015; Professor, Tongji University, China)  
Wenda Wang (2015; Analyst, Citi Group)  
Steven Wei (2014 – 2016; Research Associate @ Princeton University)  
Mithun Chowdhury (Assistant Professor, IIT Bombay)

### **Former Visitors:**

Christine Pappas (Graduate student at Princeton)  
Fengli Qu (Professor; QuFu Normal University)  
Daniele Parisi (Graduate student at FORTH Institute, Greece)

### **Former Undergraduate Students:**

Christine Lai'10 (Office of Accountability, US Government)

Nizette Edwards'11 (Ph.D. Candidate, CMU)  
Lindsey Brown'12 (Accenture)  
Gloria Odusote' 13 (Peace Corps)  
Ja-Mas Watson III (REU-10; graduate student at University of Missouri-Rolla)  
Steven Williams (REU-11; graduate student at Rice University)  
Jasmine Smith (MARC-11; Amplified Geochemical Imaging)  
William Tsui (REU-12; undergraduate at Copper Union)  
Jenny Diaz (REU-13; undergraduate at St. Mary's University)  
Jesse Hinricher (REU-14)  
Jose Santos (REU-15)  
Vivienne Tam'15 (Graduate student at McGill University)  
Amy Gonzalez'15  
Uyanga Tami'15 (ZA Associates)  
Sunny Niu'15 (Graduate student at Rice University)  
Megan Lydzinski' 16 (Merck Company)  
Lee Hampton (REU-16) (student)  
David Murry (REU-17) (student)  
Lorena Grundy' 17 (Graduate student at UC Berkeley)  
Quinlan Prchal' 17  
Ray Bartolucci' 17  
Stephanie Cook' 18  
Rye Anderson' 18 (Teach for America)  
Nathan Ewell (REU-18) (student)  
Julian Richardson (REU-18) (student)

**Former High school Students:**

Krystal Keese (ACS-10; student at The College of New Jersey)  
Dayron Proctor (ACS-10; student at Mercer County Community College)  
Paul-Anne Robbs (ACS-11; student at Dickerson University)  
Aquil Highsmith (ACS-11; student at Montclair State University)  
De'Andre Allan (ACS-12; student at New Jersey Institute of Technology)  
Barry Johnson (ACS-12; student at University of Pennsylvania)  
Luis Calderon (ACS-13; student at The College of New Jersey)  
Lisa Burton (ACS-13; student at Kean University)  
Arshan Hejazi (High School Laboratory Learning Program-18)

**OUTREACH ACTIVITIES AND PRESENTATIONS**

2018 NSBE Zone Meeting Presentation on Graduate School  
2018 Gear Up/Upward Bound Speaker  
2018 McGraw Center Panel on Teaching Graduate Students (2017)  
2018 Graduate School Success Panel (2017)  
2018 Future Faculty Workshop Participant and Keynote Speaker, U. of Delaware, Newark, DE  
2017 Future Faculty Workshop Participant, CWRU, Cleveland, OH  
2017 Diversity in STEM, Imperial College, London, UK  
2017 UK EPSRC Diversity Presentation, London UK  
2017 Provost Pipeline School Visits  
2017 Several SEAS/University Meeting to Discuss Diversity (2018)  
2017 Stars of Materials Science Lecturer (with C.P. Brangwynne)  
2016 Princeton Graduate School High Table Talk and Discussion  
2016 Harlem Prep Speaker  
2015 AICHE MAC-MFF Committee (2014, 2013, 2016)  
2015 MRSEC Teacher Prep Presentation (2014, 2013)  
2015 Harlem Prep Speaker (2014, 2013)

2014 Princeton Community House Presentation  
2012 Hopps Scholar Conference, Morehouse University, Atlanta, GA  
2012 PUMA Presentation to Princeton University (also in 2013, 14, 15, 16, 18)  
2012 IVY Plus STEM Symposium, University at Pennsylvania, PA  
2012 MRSEC REU Speaker (also in 2013, 14, 15, 16, 18)  
2012 Participation in NSF-MRSEC NanoDays (also 2013, 14, 15, 16)  
2012 Participation in NSF-MRSEC Making Stuff Fair  
2011 AIChE Speaker, Texas Tech University, Lubbock, TX  
2011 MRSEC REU Seminar, Princeton University  
2011 Keynote Speaker to Learn Inc. Trio Programs, Lubbock, TX  
2011 Kids at College Presentation at Princeton  
2011 Science/Materials Presentation at Princeton Making Stuff  
2011 Participation in NSF-MRSEC Making Stuff Fair  
2010 Present: Coordinator ACS PROJECT SEED Program at Princeton  
2010 Participation in NSF-MRSEC Materials Science Academy  
2010 Science/Motivation Presentation at Voorhees Elementary School  
2010 Science/Motivation Presentation at Hedgepath/Williams Middle School  
2009 Motivation Presentation to Princeton Commit Students

## **INTELLECTUAL PROPERTY**

Emulsion Stabilizing Biocompatible Polymer Janus Colloids (Provisional Filed)  
Janus Particle and Janus Micelles for Surfactant Free Cleansing (Provisional Filed)  
US61-944,834: Metal@Polymer Nanoparticles by Simultaneous Precipitation and Reduction  
US61-910,721: Yolk-Shell Nanostructures via One-Step Core-Shell-Shell Template  
US61-944/784: Polymer Nanoparticles and Janus Nanoparticles (PCT/US2015/017590  
International Patent)  
Invention Disclosure filed on Vapor assisted approach for forming Janus particles - expired  
Invention Disclosure filed on Ultra-stable polymer glasses – expired  
Invention Disclosure filed on Linear translation stage for MAPLE deposition - expired

2013 – 2015 Sphera Materials – Cofounder  
2017 – Present Prasili - Cofounder

## **EXTERNAL ADVISORY BOARDS**

Leader Nano, LLC – Jining City, Shandong China  
Lutai Holding Group, Jinan, Shandong, China  
University of Colorado, Boulder MRSEC Soft Matter Research Center  
Texas Tech University Chemical Engineering

## **PROFESSIONAL MEMBERSHIPS**

American Chemical Society, American Physical Society, American Institute of Chemical Engineers, National Society of Black Engineers, National Organization of Black Chemists and Chemical Engineers, American Association for the Advancement of Science, American Association of Engineering Education