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US Citizen

EDUCATION

Ph.D., 1993, Boston University, in Physics. Advisor: H. Eugene Stanley (NAS).

B.S. cum laude, 1987, University of California, Los Angeles, in Physics.

PROFESSIONAL EXPERIENCE

- Stuart W. Churchill Collegiate Professor of Chemical Engineering, U Michigan, Ann Arbor, MI, October 1, 2009 – present.
 - Professor, Department of Materials Science and Engineering, 2005 - present. (25% appointment)
 - Professor, Department of Physics, 2005 - present. (0% appointment); Macromolecular Science and Engineering, 2005 - present. (0% appointment); Applied Physics Program, 2006 - present. (0% appointment)
 - Director of Research Computing, College of Engineering, September 1, 2009 – August 30, 2012 (25% appointment)
 - Additional affiliations:
 - Associate Faculty, UM Center for the Study of Complex Systems
 - Senior faculty, UM Institute for Theoretical Physics
 - Faculty, UM Institute for Complex Adaptive Matter
 - Affiliate Faculty, Center for Computational Medicine and Biology
 - Sabbatical affiliations for September 2008 – May 2009:
 - Faculty Fellow, National Center for Supercomputing Applications, Champaign, IL and Director, Virtual School of Computational Science & Engineering, Great Lakes Consortium for Petascale Computation and Blue Waters
 - Visiting Professor, Université du Luxembourg, Faculté des Sciences de la Technologie et de la Communication, Campus Kirchberg, Luxembourg
- Co-founding Director, Virtual School of Computational Science and Engineering, Great Lakes Consortium for Petascale Computation (A consortium of NCSA and the Big 10+), 2008 – present.
- Professor (with tenure), Department of Chemical Engineering, U Michigan, Ann Arbor, MI, Sept 2005 – Oct 2009. Also Professor of Materials Science and Engineering (25%), and Physics (0%), with add'l affiliations in Macromolecular Science and Engineering, and Applied Physics.
- Associate Professor (with tenure), Department of Chemical Engineering, U Michigan, Ann Arbor, MI, January 2001 – August 2005. Associate Professor, Department of Materials Science and

Engineering, January 2001 – August 2005; Macromolecular Science and Engineering, 2001 – August 2005; Department of Physics, 2002 – August 2005.

- Director, Center for Theoretical and Computational Materials Science (CTCMS), Materials Science and Engineering Laboratory (MSEL), National Institute of Standards and Technology (NIST), February 1997–December 2000. Deputy Director, January 1995–February 1997. Acting Deputy Director, August 1994–January 1995. Co-founded CTCMS, August 1994.
- Physicist, Polymers Division, MSEL, NIST, Gaithersburg, MD, January 1995 – December 2000.
- Adjunct Professor, Institute for Physical Science and Technology (IPST), University of Maryland College Park, MD, 1999 – 2000. PhD Advisor, Chemical Physics Program, 1995 – 2004.
- National Research Council Postdoctoral Research Associate, Polymers Division, Materials Science and Engineering Laboratory, National Institute of Standards and Technology, Gaithersburg, MD, January 1993 - January 1995. Supervisor: E.A. DiMarzio.
- Member of Technical Staff, TRW Space and Technology Group, Redondo Beach, CA, 1986-1987.

HONORS & AWARDS

- 2014 MRS Medal, Co-recipient with Nicholas Kotov. Citation: *“For foundational work elucidating processes of nanoparticle self-assembly.”*
- National Academy of Sciences, elected Member 2014.
- Elected Fellow, American Association for the Advancement of Science, 2014.
- Finalist, World Technology Awards 2014.
- Simons Investigator, named July 2012 to inaugural class. Funded 2012 – 2017.
- American Academy of Arts and Sciences, elected Member 2011.
- Stuart W. Churchill Collegiate Professorship, College of Engineering, U Michigan, 2009 – present.
- National Security Science and Engineering Faculty Fellow, Department of Defense, 2009-2014. Provides \$4.3M for unclassified, basic research by the PI over five years.
- Charles M.A. Stine Award, American Institute of Chemical Engineers, Materials Engineering & Sciences Division, 2008. Citation: *“For her pioneering simulations of glass-forming liquids and self-assembled nanomaterials, and for her leadership and service to the materials community.”*
- Fellow, American Physical Society, 2006. Citation: *“For her pioneering simulations of glass-forming liquids, self-assembled nanomaterials and complex fluids, and for her leadership and service to the computational science community.”*
- Monroe-Brown Foundation Research Excellence Award, U Michigan College of Engineering, 2006.
- Horace H. Rackham School of Graduate Studies 2006-2007 Faculty Recognition Award, U Michigan.
- W.F. James Chair of Pure and Applied Sciences, St. Francis Xavier Univ., Nova Scotia, 2004-06.
- Departmental Award for Outstanding Accomplishment, Dept. of Chemical Engin., U Michigan, 2004.
- American Physical Society Maria Goeppert-Mayer Award, 2000. Citation: *“For her ingenious use of computational physics to probe a wide range of novel materials under different conditions, and for demonstrating the existence and nature of spatially-correlated dynamic heterogeneities in glass-forming liquids.”*

- Presidential Early Career Award for Scientists and Engineers (PECASE), 1998. Citation: *“For broad contributions to the theory of complex materials, and for co-founding the NIST Center for Theoretical and Computational Materials Science.”*
- Department of Commerce Bronze Medal Award for Superior Federal Service, December 1997. Citation: *“For major contributions to the creation of the MSEL Center for Theoretical and Computational Materials Science.”*
- Senior Visiting Fellowship Award, Centre for Chemical Physics, U Western Ontario, 1996, for *“research related to pattern formation in complex fluids, and frustration in glass-forming systems.”*
- National Research Council Postdoctoral Fellowship, 1993-1995.
- TRW Space and Technology Group Graduate School Fellowship Award, 1987-1992.
- Article voted *“One of AJP's Most Memorable Papers,”* American Journal of Physics, March, 1991.
- Boston University Graduate School Award for Excellence in Teaching, 1988.
- TRW Scholarship Award, 1986.

NAMED OR OTHERWISE DISTINGUISHED LECTURES

1. MRS Medal Lecture, with Nicholas Kotov, Materials Research Society Fall Meeting, December 2014.
2. Texas Distinguished Faculty Lectureship, McKetta Department of Chemical Engineering, UT Austin, November 2014.
3. BP Lecturer, Cambridge University, November 2014.
4. HERMES 2014 Masterclass, UK, July 26, 2014.
5. Thomas Young Center Highlight Lecture, London, UK July 24, 2014.
6. Whitby Memorial Lecture, University of Akron, March 10-11, 2014.
7. Northwestern International Institute for Nanotechnology Lecturer, Feb. 13, 2014.
8. Keynote Lecture, Texas Academy of Medicine, Science and Technology, January 17, 2014.
9. Fields Institute Lecturer, University of Toronto, October 2013.
10. Danckwerts Lecture, 2013. Presented at European Federation of Chemical Engineers (EFCE/AIChE) (awarded by Chemical Engineering Progress)
11. Douglas G. Hill Memorial Lecture, Duke University, Department of Chemistry, April 12, 2013.
12. Maddin Lecturer, University of Pennsylvania, April 23, 2012.
13. TEDxUofM Lecture, University of Michigan, March 29, 2012.
14. Liquid Matter Conference, Vienna, Austria, Sept. 6-10, 2011. (Opening Plenary Keynote Lecture)
15. IBM Distinguished Lecturer, Rensselaer Polytechnic Institute Department of Materials Science and Engineering, April 20, 2011.
16. Henry Eyring Lecture, University of Utah Department of Chemistry, November 12, 2010.
17. ISTECDistinguished Lecturer, Colorado State University, May 3, 2010.
18. Charles M.A. Stine Award Plenary Lecture, AIChE Annual Fall Meeting, Philadelphia, PA 2008.

19. Jerome B. Cohen Memorial Lecturer, Northwestern University Department of Materials Science & Engineering, November 2007.
20. Bernard T. Bertman Memorial Lecturer, Wesleyan University Dept. of Physics, May 3, 2007.
21. Invited lecturer and session chair, NAS Frontiers of Science Symposium, Irvine, CA, 2004.
22. Allan P. Colburn Memorial Lecturer, Dept. of Chemical Engineering, U Delaware, 2004.
23. James Chair Honorary Lecturer, St. Francis Xavier University, Department of Physics, 2006.
24. Sigma Xi Distinguished Lecturer, 2001-2003.
25. Invited lecturer, NAE Frontiers of Engineering Symposium, Irvine, CA, 1998.

ELECTED AND OTHER POSITIONS OF DISTINCTION

- Elected Vice-Chair, 2014 AAAS Section on Industry and Technology.
- Elected Co-Chair, 2013 Gordon Conference on Supramolecular Assembly.
- Elected Vice Chair, American Physical Society Division of Condensed Matter Physics (DCMP) 2012, (serve as Vice-Chair from 3/13-3/14, Chair-Elect from 3/14-3/15, Chair from 3/15-3/16, and Past Chair from 3/16-3/17)
- Elected Member, Electorate Nominating Committee, AAAS Section B (Physics), 2013 – 2016.
- Elected Member, Electorate Nominating Committee, AAAS Section P (Industrial Science and Technology), 2011 – 2014.
- Elected member, Nominating Committee, American Physical Society, 2012 –
- Jury Chair, Heinz Award for Technology, Economy and Employment, 2012. Member, 2002 - 2006.
- Elected Director, Materials Engineering and Sciences Division, AIChE, 2007-2009.
- Elected Vice-Chair, Forum on Industrial and Applied Physics, American Physical Society (APS), 2003 (Served as vice-chair, 2004-2005, chair-elect 2005-2006, and chair, 2006-2007).
- Elected first vice chair, Nanoscale Science and Engineering Forum (NSEF), American Institute of Chemical Engineers (AIChE), 2003 (Served as vice-chair 2003-2004, chair 2004-2005, past-chair 2005-2006).
- Elected Member of Area 1a Executive Committee, American Institute of Chemical Engineers (AIChE), 2000 – 2003. Re-elected for 2003-2006.

GLOTZER GROUP HONORS AND AWARDS AT PROFESSIONAL SOCIETY MEETINGS

- Matthew Spellings, Sharon Glotzer, Best Poster Award “*Collective Behavior in Rotationally-driven Active Matter,*” IROS 2014 Workshop on Modular and Swarm Systems – From Nature to Robotics, Chicago IL, September 2014.
- Ryan Marson, Carolyn Phillips, Joshua Anderson, Sharon Glotzer, Best Oral Presentation Award “*Complex Crystal Structures in Tethered Nanoparticle Telechelics,*” Symposium A: Modeling and Theory-Driven Design of Soft Materials, MRS Meeting November 2013.
- Pablo Damasceno, M. Engel, S.C. Glotzer, “*Assembling Complex Structures from Simple Building Blocks*” Third place, Berkeley Mini Stat Mech Meeting, San Francisco CA, January 2013.
- Pablo Damasceno, M. Engel, S.C. Glotzer, “*Predictive Self-Assembly of Polyhedra into Complex Structures,*” International School of Physics ‘Enrico Fermi’, Varenna, Italy (2012). 2nd Place.

- Ryan Marson, C.L. Phillips and S.C. Glotzer, Best Student Oral Presentation Award, MRS Meeting Symposium CC, April 2012.
- A.S. Keys, L.O. Hedges, J.P. Garrahan, S.C. Glotzer, and D. Chandler, "Structure of Localized Excitations and Relaxation in Supercooled Glass-Forming Liquids," Mini Stat. Mech. Meeting, Berkeley CA (2011) (1st place prize)
- Third place, Berkeley Mini Stat Mech Meeting January 2010, M. Engel et al., *Disordered, Quasicrystalline, and Crystalline Phases of Hard Tetrahedra*.
- First place, Materials Research Society Fall Meeting Poster Session, December 4, 2003, Boston, MA. X. Zhang, E.R. Chan, J. Zhou, F. Qi, L. Ho, M.H. Lamm, M. Durandu, M. Neurock, J. Kieffer and S.C. Glotzer, *Self Assembly of Tethered Silsesquioxane "Nanocubes" into Nanostructured Materials: A Molecular Simulation Study*, Poster L11.37.
- Second place, Materials Science and Engineering Division Poster Session, AIChE Fall 2003, San Francisco, CA. Z.L. Zhang, M.A. Horsch, M.H. Lamm, S. Shah, and S.C. Glotzer, *Self-Assembly of Tethered Nano Building Blocks*, Poster 369ac.
- Third place, Materials Science and Engineering Division Poster Session, AIChE Fall 2002, Indianapolis, IN. M. Horsch, T. Chen, M.H. Lamm and S.C. Glotzer, *Simulations of DNA-Directed Nanoparticle Assembly*, Poster 188q.
- Finalist, MRS Science as Art Competition, C.R. Iacovella and S.C. Glotzer, 2005.

EDITORIAL AND EDITORIAL ADVISORY BOARDS

- ACS Nano Associate Editor, 2114 – present.
- American Institute of Chemical Engineers, Associate Editor for Soft Matter, 2012 – present.
- Current Opinions in Solid State and Materials Science, 2011 – 2014. Member of Editorial Board.
- Journal of Chemical Physics, 2011 – present. Member of Editorial Advisory Board.
- Multiscale Modeling and Simulation (A SIAM Journal), 2010 – present. Member of Editorial Board.
- ACS Nano, 2009 – present. Member of Editorial Advisory Board.
- Nanoscale (An RSC Journal), 2009 – present. Inaugural member of Editorial Board.
- AIChE Journal, 2005 – 2012. Consulting editor.
- Computers in Science and Engineering, 2002 – present. Member of Editorial Advisory Board.
- Topics in Chemical Engineering, Oxford University Press, 2002 – 2010. Member of Editorial Board.
- Nanotechnology, 2005 – 2006. Member of Editorial Board.
- PhysChemComm, 1998 – 2003.

EXTERNAL ADVISORY BOARDS AND COUNCILS

- Member, Northwestern University Department of Materials Science & Engineering Advisory Board, 2014 - .
- Member, External Advisory Board, MIT MRSEC, 2013 - .
- Member, PNNL Materials Synthesis and Simulation Across Scales Review Committee, 2013.
- Member, LBNL, Molecular Foundry Scientific Advisory Board, 2012 – .

- Member, NSF, Advisory Committee for Cyberinfrastructure (ACCI), 2012 –14.
- Member, Oak Ridge National Laboratory (ORNL) Neutron Advisory Board, 2011 - .
- Member, DOE Advanced Scientific Computing Advisory Committee (ASCAC), 2011 - .
- Member, Argonne National Laboratory Materials and Molecular Design and Discovery (M2D2) Scientific Advisory Panel, Fall 2010 – .
- Member, Marie Curie Initial Training of Researchers Network (ITN) on Physics of Complex Colloids: Equilibrium and Driven (COMPLOIDS), 2009 – .
- Member, National Science Foundation Mathematical and Physical Sciences Directorate Advisory Council (MPSAC), 2009 – 12.
- Member, External Advisory Board, NCSU Institute for Computational Science & Engineering, Fall 2010.
- NSF Network for Computational Nanotechnology, External Advisory Board, 2007 – 2009.
- University of Pennsylvania MRSEC External Advisory Committee, 2007 - 08.
- NSF Science and Technology Center for Advanced Liquid Crystal Optical Materials (ALCOM) External Advisory Board, 1995-2002.

SELECTED NATIONAL AND INTERNATIONAL SERVICE ACTIVITIES

SERVICE TO NATIONAL ACADEMIES AND NATIONAL RESEARCH COUNCIL

➤ Standing Committees

- Technology Insight: Gauge, Evaluate, and Review (TIGER) Standing Committee for Defense Intelligence, Air Force Studies Board, 2005-present. Member of executive committee. Term renewed; ends May 2011.
- Solid State Sciences Committee, Board on Physics and Astronomy, 2004-2007.

➤ Study and other Committees

- Convergence NRC Study Committee, 2013 – 2015. The committee's 2014 report *Convergence: Facilitating Transdisciplinary Integration of Life Sciences, Physical Sciences, Engineering and Beyond* circulated to national delegations across 40+ countries. The Organization for Economic Co-operation and Development (OECD) Secretariat and national delegations included Convergence as key thematic priority for the work of the new OECD Working Party during its new "Program of Work and Budget" that will cover 2015 and 2016.
- Chair, Adaptive Structural Matter and Technology Surprise Workshop/Report, 2012.
- High Performance Computing and Technology Surprise Workshop and Report, 2011; co-chair with Jack Dongarra.
- Modeling, Simulation and Games NRC Study Committee, 2008-10, report co-author.
- Biomolecular Materials and Processes Study Committee, 2006-07, report co-author.
- Defense Intelligence Agency (DIA) Threat Analysis NRC Study Committee, 2004-05 and report co-author.

➤ Reviewer

- National Academies Report on Integrated Computational Materials Engineering, National Materials Advisory Board, 2008.
 - National Academies Report on Nanophotonics Accessibility and Applicability, sponsored by Defense Intelligence Agency, TIGER standing committee, 2007.
 - National Academies Report on Information and Communications: Challenges for the Chemical Sciences in the 21st Century, Chemical Sciences and Tech. Board, 2003.
- **SERVICE TO FEDERAL AGENCIES**
 - Member, DOE Basic Energy Sciences Grand Challenges Committee, 2014 –.
 - Member, NSF Search Committee for Director, Office of Cyberinfrastructure, 2013.
 - Member, NSF Advisory Committee for Cyberinfrastructure (ACCI), 2012 – 14.
 - Member, National Science Foundation Search Committee for Assistant Director for Mathematical and Physical Sciences, 2012.
 - Member, DOE Office of Science, Advanced Scientific Computing Research Advisory Council (ASCAC), 2011 - .
 - Member, Oak Ridge National Laboratory (ORNL) Neutron Advisory Board (NAB), 2011 - .
 - Member, Scientific Advisory Panel, Argonne National Laboratory Materials and Molecular Design and Discovery (M2D2) Scientific Advisory Panel, Fall 2010 – .
 - Co-Chair, with G. Crabtree, W. McCurdy and J. Roberto, *DOE Office of Science Workshop on Computational Materials and Chemistry*, Bethesda, MD July 26-28, 2010 and coauthor of subsequent report. This report formed the foundation of the Office of Science part of the Materials Genome Initiative, and FY12 White House Initiative.
 - Member, National Science Foundation Mathematical and Physical Sciences Directorate Advisory Council (MPSAC), 2009 – 12.
 - Member, NSF Office of Cyberinfrastructure Cyber Task Force, 2010-11.
 - Co-Chair, with P.T. Cummings, Research Directions Workshop on Simulation-Based Engineering and Science, 2009. Sponsored by NSF, DOE, NASA, DoD, NIH, NIST.
 - Chair, WTEC International Assessment of Simulation-Based Engineering and Science, 2007-2008. Sponsored by NSF, DOE, NASA, DoD, NIH, NIST.
 - Member of Visiting Committee, Office of Advanced Scientific Computing Research, Office of Science, US Department of Energy, 2004.
 - Member, Scientific Review Committee, Center for Nanoscale Materials Science, Oak Ridge National Lab, 2003 - 06.
 - Invited participant and/or speaker in federal agency roadmapping and strategic planning workshops and projects, and contributor to follow-up reports:
 - Panelist, A Computation-based Engineering Summit: Transforming Engineering Through Computational Simulation, National Academies, September 16-17, 2008. Sponsored by Sandia National Labs, National Academy of Engineering, and NSF.
 - Member, Steering Committee, NSF Workshop on Complexity, Sept. 23-24, 2008 and co-author of final report. Identifying strategic directions in complexity research.
 - NSF Workshop on New Directions in Polymer Science, August, 2007. Participated in theory, modeling and simulation breakout session and contributed to final report.

- Member, Workshop Planning Committee, DOE Workshop on Basic Research Needs for Energy Storage, April 2007, Bethesda, MD. Planning for new agency initiative.
- NSF Workshop on Cyberinfrastructure for Materials Research, August 4-6, 2006. Planning for new funding program in cyberinfrastructure research for materials science.
- DOE Workshop on Basic Research Needs for Solar Energy Utilization, April 19-21, 2005, Bethesda, MD. Panelist: Crosscutting themes. Planning for new agency initiative.
- Member, Steering Committee, NSF Chemistry Division Cyber-Enabled Chemistry Workshop, Oct. 4-5, 2004. Planning for new funding program in cyberinfrastructure.
- National Science Foundation/European Commission Workshop: *Methods in Computational Materials Science*, April 2004. Planning for joint NSF/EC initiative in collaborative research in computational materials science.
- *National Nanotechnology Initiative Interagency Grand Challenge Workshop on Instrumentation and Metrology*, NIST, Gaithersburg, MD, January 27-29, 2004.
- Department of Energy *SCALeS (Scientific Case for Large Scale Computing) Initiative Planning Workshop*, Arlington, VA, June 2003.
- Department of Energy *Initiative Planning Workshop on Computational Nanoscience*, San Francisco, CA May 10-11, 2002.
- National Materials Advisory Board Meeting, National Academy of Sciences, Washington, DC, March 27, 2002.
- Sponsor panel member, NSF/WTEC *International Comparative Study of Applications of Molecular and Materials Modeling*, 1999-2000.
- Organizer, *Vision 20/20 Materials Technology Roadmap Workshop on Materials Modeling and Prediction*, sponsored by DOE/OIT, Colorado, September 1999.
- First joint meeting on NSF/EC Collaborations in *Frontiers of Materials Research*, Stuttgart, Germany, 1998.

- **SERVICE TO PROFESSIONAL SOCIETIES**

- Elected Vice Chair, AAAS Section P (Industrial Science and Technology), 2014.
- Founding Past-Chair, Topical Group on Soft Matter, American Physical Society, 2013-2014.
- Chair, Soft Matter Organizing Committee, American Physical Society, 2013-2014.
- Elected Vice Chair, American Physical Society Division of Condensed Matter Physics (DCMP) 2012, (serve as Vice-Chair from 3/13-3/14, Chair-Elect from 3/14-3/15, Chair from 3/15-3/16, and Past Chair from 3/16-3/17)
- Elected Member, Electorate Nominating Comm. AAAS Section B (Physics), 2013 – 2016.
- Elected Member, Electorate Nominating Committee, AAAS Section P (Industrial Science and Technology), 2011 – present.
- Elected member, Nominating Committee, American Physical Society, 2012 – .
- Member, Fellowship Committee, APS Division of Computational Physics, 2009 – 12.
- Member, Stine Award Comm., Materials Engineering and Science Div., AIChE, 2009 - 11.
- Chair, George Pake Prize Committee, APS, 2008. Member, Pake Prize Committee, 2007.

- Elected Director, Materials Engineering and Sciences Division, AIChE, 2007-09.
 - Member, Rahman Prize Committee, APS Division of Computational Physics, 2005 – 07.
 - Chair, Nanoscale Science and Engineering Forum Awards Committee, AIChE, 2007.
 - Member, AIChE Centennial Committee, 2005-08.
 - Elected Vice-Chair, Forum on Industrial and Applied Physics, American Physical Society (APS), 2003 (Served as vice-chair, 2004-2005, chair-elect 2005-2006, and chair, 2006-2007).
 - Elected first vice chair, Nanoscale Science and Engineering Forum (NSEF), AIChE, 2003 (Served as vice-chair 2003-2004, chair 2004-2005, past-chair 2005-2006).
 - Elected Member of Area 1a Executive Committee, AIChE 2000 – 03. Re-elected 2003-06.
 - Member of judges panel, Maria Goeppert-Mayer Award, American Physical Society, 2002.
 - Member of Publicity Committee, APS Division of Polymer Physics, 2001 – 02.
 - Member of organizing committee to establish new AIChE Forum on Computational Molecular Science and Engineering (CoMSEF), 2000 – 01.
 - Member of Education Committee and judge, Padden Award, APS Division of Polymer Physics, 2000-01.
 - Member of judges panel, vice chair, and chair, American Physical Society Division of Computational Physics Nicholas Metropolis Award, 1998-01.
 - Member of Nominating Committee, American Physical Society Division of Computational Physics, 1999-2000.
- Professional societies: American Institute of Chemical Engineers (AIChE), Materials Research Society (MRS), American Physical Society (APS; Divisions of Polymer Physics; Computational Physics; Condensed Matter Physics; Materials Physics; Forum on Industrial and Applied Physics, and Statistical and Nonlinear Physics Topical Group), American Chemical Society (ACS), and American Association for the Advancement of Science (AAAS).

U MICHIGAN SERVICE AND LEADERSHIP

- Member, Advanced Research Computing Advisory Team (ARCAT), W14 - .
- Member, Search Committee, Director of Office of Research Cyberinfrastructure, W12 - .
- Chair, Department of Chemical Engineering Honors and Awards Committee, F11 - .
- Member, Provost's Committee on Foundations and Development, W12 - .
- Member, University Library Council, F10 – S13 (a SACUA-appointed council).
- Member, College of Engineering Nominations Committee, F10-W11.
- Member, Department of Chemical Engineering Honors and Awards Committee, F09-W11.
- Member, College of Engineering Reappointment Casebook Committee (V. Gavini, ME dept.), W10.
- Member, College of Engineering Promotion Casebook Committee (J. Millunchick, MSE dept.), F09.
- Member, Research Cyberinfrastructure Executive Steering Committee, Office of Research Cyberinfrastructure, UM Office of the Vice President for Research, F09 – present.
- Member, U-M Search Advisory Committee for Director, Michigan Energy Institute, F07 – F09.

- Chair, Research Computing Executive Committee, College of Engineering, F06-F09.
- Co-chair, U-M Cyberinfrastructure Committee, Office of the Vice President for Research and Office of the Vice Provost, F06-W08.
- Elected member, Executive Board, Rackham Graduate School, F06-S09.
- Member, College of Engineering Promotion Casebook Committee (N. Kotov, ChE dept.), F07.
- Member, College of Engineering Reappointment Casebook Committee (P. Woolf, ChE dept.), W07.
- Member, Energy Symposium Planning Committee, W06-W07 and session chair.
- Member, Nanotechnology Search Comm., Department of Mat. Sci. and Eng. and OVPR, W06-W07.
- Member, Exec. Board, Michigan Nano Institute for Medicine and Biological Science, F05-present.
- Member, Executive Committee, Applied Physics Program, W06-present.
- Member, Steering Committee, U-M Branch of Institute for Complex Adaptive Matter (ICAM), F05-.
- Member, Planning Committee, Provost's Seminar on Teaching, F05-W06.
- Member, Search Committee, Department of Chemical Engineering, F05-W06.
- Chair, College of Engineering Tenure Casebook Committee (M.L. Falk, MSE Dept.), S05-F05.
- Member, Search Advisory Committee, U-M Vice President for Research, F04-S05.
- Member, Steering Committee, Nanoscale Science and Engineering Initiative, Office of the Vice President of Research, F04- F06.
- Leader, CoE Initiative in Nanoscience and Nanotechnology, 2004-05.
- Member, Advisory Committee, Nanoscale Science and Engineering Initiative, Office of the Vice President of Research, F03-W04.
- Member, Materials Science and Engineering Department Faculty Search Committee, F03-W04.
- Member, Exec. Advisory Board, U-M College of Eng. Center for Advanced Computing, W02-W04.
- Member, College of Engineering Strategic Plan steering committee, F02 - W03.
- Member, ChemE Department Casebook Committee (M.J. Solomon), F02.
- Chair, Macromolecular Science and Engineering Symposium Organizing Committee, W02-F02.
- Member, ChemE Departmental Review Committee, W02.
- Elected Member, Dept. of Chemical Eng. Executive Advisory Committee (ChEAC), F01 – W05.
- Chapter Advisor, U-Michigan Chapter of AIChE, F01-W04.
- Member, Graduate Admissions Committee, Department of Chemical Engineering, F01-W05.
- Member, Graduate Committee, Dept. of Materials Science and Engineering, F01-W04.
- Member, Faculty Search Committee, Department of Chemical Engineering, F01-W03.
- Member, CoE Information Technology Working Group, F01-W02.
- Member, prelim, doctoral and/or checkpoint committees for (non-Glotzer Group students): J. Hendrickson (ChemE), T. Solomon (ChemE), S. Holleran (ChemE), M. Kogan (ChemE), W. Li (ChemE), F. Qi (MSE), J. Zhou (MSE), Y. Shi (MSE), A. Mecke (Applied Physics), C-C Hsieh

(ChemE), R. Rogers (ChemE), N. Licata (Physics), G. Strycker (Physics), C. Dibble (ChemE), K. Roh (ChemE), A. Shah (ChemE), L. Hsiao (ChemE), T. Shu (MSE).

TEACHING EXPERIENCE

Courses taught include Undergraduate Fluid Mechanics ChE 341, Graduate Statistical and Irreversible Thermodynamics ChE 538, Computational Nanoscience of Soft Matter ChE/MSE 557, Assembly Engineering ChE 696.

PH.D. STUDENTS SUPERVISED (42 TOTAL; 22 CURRENT)

1. Naida Lacevic, PhD, Department of Physics, Johns Hopkins University, June 1999 – August 2003. *Theory and simulation of spatially heterogeneous dynamics in liquids and glasses*. **Thesis defended April 3, 2003**. PhD research conducted at NIST and U Michigan. Present position: Postdoctoral researcher @ UC Berkeley with A. Majumdar & A. Chakraborty. Postdoctoral research @ LLNL. Permanent position: NextGen Corporation.
2. Yeshitila Gebremichael, PhD, Chemical Physics Program, University of Maryland, College Park, April 1999 – present. *Spatially heterogeneous dynamics and string-like correlated motion in supercooled liquids and polymers*. **Thesis defended March 11, 2004**. PhD research conducted at NIST and U Michigan. Postdoctoral research associate with G. Voth, Department of Chemistry, University of Utah, 6/04-12/06. Permanent position: Research Triangle, NC.
3. Elaine R. Chan, PhD, Department of Chemical Engineering, U-Michigan, Spring 2001 – Winter 2006. *Multiscale simulation of self-assembly of polyhedral oligomeric silsesquioxane systems*. **Thesis defended January 23, 2006**. Postdoctoral position: National Research Council Postdoctoral Fellowship, National Institute of Standards and Technology, EEEL, Semiconductor Electronics Division. Staff position: Lawrence Berkeley National Lab.
4. Ting Chen, PhD, Department of Chemical Engineering, U-Michigan, Fall 2001-Summer 2006. *Computational studies of self-assembly of precise structures and directed assembly: from colloids to viruses*. **Thesis defended August 15, 2006**. Postdoctoral positions: Princeton University (A.Z. Panagiotopoulos) 2006-2008; University of California Berkeley (A. Bell and B. Smit), 2008 – 2009. Postdoctoral position: IBM, 2009 – 2010. Permanent position: ExxonMobil.
5. Mark A. Horsch, PhD, Department of Chemical Engineering, U-Michigan, Spring 2001 – Summer 2006. *Molecular simulation of self-assembly of tethered nanorods*. **Thesis defended August 16, 2006**. Postdoctoral position: Sandia National Lab (Center for Integrated Nanotechnologies). Permanent position: Intel Corporation.
6. Xi (Charles) Zhang, PhD, Department of Materials Science and Engineering, U-Michigan, Fall 2001 – Summer 2006. *Molecular simulation of self-assembled polymer/silsesquioxane systems*. **Thesis defended September 11, 2006**. Permanent position: Microsoft Corporation.
7. Magnus Bergroth, PhD, Department of Chemical Engineering, U-Michigan, Fall 2001-2006. *Structural precursors of spatially heterogeneous dynamics in supercooled liquids*. **Thesis defended September 12, 2006**. Permanent position: Intel Corporation.
8. Christopher R. Iacovella, PhD, Department of Chemical Engineering, U-Michigan, Fall 2003-2009. *Self-assembly of tethered nanoparticles*. Passed departmental candidacy, September 2005. **Thesis defended March 3, 2009**. Postdoctoral position: Vanderbilt University (P.T. Cummings), 2009 – 11. Current position: Research Professor, Vanderbilt University.
9. Chetana Singh, PhD, Department of Chemical Engineering, U-Michigan, Fall 2004-2009. *Surfactant self-assembly on nanostructured surfaces*. Passed departmental candidacy exam, September 2006. **Thesis defended December 7, 2009**. Permanent position: Intel Corporation.

10. Stephanie Teich-McGoldrick, PhD, Department of Chemical Engineering, U-Michigan, Fall 2003-2010. *Computational design of nanoparticle and ionic colloidal crystals*. Passed departmental candidacy exam, September 2006. **Thesis defended July 12, 2010**. Postdoctoral position: Sandia National Labs (Jeffrey Greathouse) August 2010 - 2013. Permanent Position, Sandia.
11. Aaron S. Keys, PhD, Department of Chemical Engineering, U-Michigan, Summer 2004-2010. *Dynamics and thermodynamics of supercooled liquids*. **Thesis defended: October 21, 2010**. Postdoctoral position: LBNL and UC Berkeley, with David Chandler. Now: Airbnb.
12. Trung Dac Nguyen, PhD, Department of Chemical Engineering, U-Michigan, Fall 2005-2011. *Computer-aided design of nanostructures from self- and directed-assembly of soft matter building blocks*. Passed departmental candidacy exam, September 2007. **Thesis defended: May 5, 2011**. Postdoctoral position: Oak Ridge National Lab, Summer 2011 - .
13. Amir Haji Akbari Balou, PhD, Department of Chemical Engineering, U-Michigan, Fall 2005-2011. *Phase transitions in systems of hard anisotropic particles*. Passed departmental candidacy exam, September 2007. **Thesis defended: November 6, 2011**. Postdoctoral position: Princeton University, with Pablo Debenedetti, February 2012 - .
14. Carolyn Phillips, PhD, Department of Applied Physics, U-Michigan, Fall 2007 – 2011. *Role of heterogeneity in self-assembled tethered and anisotropic nanoparticles*. Passed departmental candidacy exam, Fall 2008. **Thesis defended: December 6, 2011**. Postdoctoral position: Aneesur Rahman Postdoctoral Fellowship, Argonne National Lab, February 1, 2012 - .
15. Eric Jankowski, PhD, Department of Chemical Engineering, U-Michigan, Fall 2005-present. *Algorithms for assessing complexity for colloidal and nanoscale self-assembly*. Passed departmental candidacy exam, September 2007. **Thesis defended: February 13, 2012**. Postdoctoral position: UC Boulder, Department of Chemical Engineering, June 1, 2012 - .
16. Ines Pons-Siepermann, PhD, Department of Chemical Engineering, U-Michigan, Fall 2008 – May 2013. *Simulation-based design of patchy particles for catalysis and molecular recognition*. **Thesis defended: February 13, 2013**. Permanent position: Praxair, June 1, 2013 -
17. Antonio Osorio, PhD, Department of Materials Science & Engineering, U-Michigan, Fall 2008 – 2013. *Simulation-based design of self-assembled nanodevices*. **Thesis defended: August, 2013**. Permanent position: Schrodinger, Inc. September 1, 2013 -.
18. P. Nguyen Nguyen PhD Candidate, Department of Mechanical Engineering, Fall 2009 – 2014. Thesis defended: January 2014. Seeking position in Vietnam.
19. Daniel Ortiz, PhD Candidate, Department of Materials Science and Engineering, Fall 2007 – 2014. *Hierarchical self-assembly of anisotropic nanocolloids*. **Thesis defended: January 2014**. Permanent position: Chief Technology Officer, Tech startup in NY, NY. February 20, 2014 - .
20. Pablo F. Damasceno Souza, PhD Candidate, Applied Physics Program, Fall 2009 – present.
21. Jaime Andres Millan, PhD Candidate, Dept. of Materials Science and Engineering, F 2009 – present.
22. Ryan Marson, PhD Candidate, Dept. of Materials Science and Engineering, Fall 2009 – present.
23. Benjamin Schultz, PhD Candidate, Department of Physics, Fall 2009 – present.
24. Richmond Sow Newman, PhD Candidate, Department of Chemical Engineering, Fall 2009 – present.
25. Michael Eric Irrgang, PhD Candidate, Dept. of Materials Science & Engineering, F 2010 -present.
26. N. Khalid Ahmed, PhD Candidate, Department of Chemical Engineering, Fall 2010 – present.
27. Samanthule Nola, PhD Candidate, Macromolecular Science & Engineering, SS 2011 – present.

28. Eric Harper, PhD Pre-candidate, Materials Science & Engineering, Fall 2011 – present.
29. Wenbo Shen, PhD Candidate, Department of Physics, Winter 2012 – present.
30. Matthew Spellings, PhD Pre-candidate, Dept. of Chemical Engineering, Summer 2012 – present.
31. Paul Dodd, PhD Pre-candidate, Department of Chemical Engineering, Fall 2012 – present.
32. Erin Teich, PhD Pre-candidate, Applied Physics Program, Fall 2012 – present.
33. Andrew Karas, PhD Pre-candidate, Department of Chemical Engineering, Fall 2013 – present.
34. Andrew Cadotte, PhD Candidate, Department of Applied Physics, Winter 2014-present.
35. Xiyu (Chrisy) Du, PhD Pre-candidate, Department of Physics, Winter 2014 – present.
36. Yina Geng, PhD Pre-candidate, Department of Physics, Winter 2014 – present.
37. Jim Antonaglia, PhD Pre-candidate, Department of Physics, Winter 2014 – present.
38. Rose Cersonsky, PhD Pre-candidate, Macromolecular Science & Engineering, Fall 2014 – present.
39. Carl Simon Adorf, PhD Pre-candidate, Department of Physics, Fall 2014 – present.
40. Joseph Bliven, PhD Pre-candidate, Dept. of Materials Science and Engineering, Fall 2014 – present.
41. James Proctor, PhD Pre-candidate, Dept. of Materials Science and Engineering, Fall 2014 – present.
42. Mayank Agrawal, PhD Pre-candidate, Dept. of Chemical Engineering, Fall 2014 – present.

MASTERS DEGREE STUDENTS SUPERVISED (6)

43. Tao Feng, Department of Chemical Engineering, U-Michigan, Fall 2002-December 2003. Received Masters degree December 2003.
44. Tony Sheh, Department of Chemical Engineering, U-Michigan, Fall 2006-December 2008.
45. Rodney Bryan Smith, Department of Chemical Engineering, U-Michigan, Fall 2008 – December 2009. Pursuing Master's degree, Winter 2010.
46. Ross J. Smith, Masters candidate, Department of Materials Science & Engineering, Fall 2010 – 2011.
47. Thomas Grubb, Masters candidate, Dept. of Materials Science & Engineering, Fall 2011 – 2013.
48. Jared Snyder, Masters candidate, Department of Physics, Summer 2012 – 2013.

POSTDOCTORAL STUDENTS & RESEARCH STAFF SUPERVISED (20 TOTAL; 5 CURRENT)

1. Claudio Donati, NIST, 1996 – 1998. *Theoretical and computational research on dynamical heterogeneity of glass-forming liquids and polymers*. Research Scientist, Bio-informatics, Italy.
2. Paolo Allegrini, NIST, February 1998 – November 1998. *Developing and applying diagnostic theoretical and computation tools for investigating dynamics properties of dense liquids*. Present position: Research Scientist, Institute for Computational Linguistics, University of Pisa, Italy.
3. Thomas B. Schroeder, NIST, March 1999 – June 2000. *Theory and simulations of dense liquids, polymers and filled polymers*. Present position: Prof., Dept. of Physics, Roskilde University.
4. Francis W. Starr, NIST Polymers Division, August 1999 – January 2001. *Simulation of filled polymers and relation between local structure and dynamics in glass-forming polymer melts*. Former position: Deputy Director, NIST CTCMS, 2001-2003. Present position: Assoc. Prof., Dept. of Physics, Wesleyan University.

5. Nita Parekh, NIST, June 2000 – May 2001. *Object-oriented finite element simulations of mechanical properties of polymer blends*. Present position: Associate Professor, International Institute of Information Technology, Hyderabad, India.
6. Monica Hitchcock Lamm, U Michigan, April 2001 – July 2003. *Simulations of nanoscale assembly*. Present position: Professor, Dept. of Chemical Engineering, Iowa State University, 2003 – present.
7. Michael Vogel, U Michigan, April 2002 – March 2004. *Simulations of supercooled liquids and glasses*. Present position: Assoc. Prof., Department of Chemistry, University of Muenster, Germany.
8. Joydeep Mukherjee, U Michigan, July 2004 – November 2005. *Multiscale simulations of self-assembly for molecular and nanoelectronics*. Present position: Dow Chemical, Midland, TX.
9. Zhenli Zhang, U Michigan, April 2002 – present. *Development of simulation methods for nanostructured self-assembled materials*. Research Associate, 2005-07. Permanent position: EPIR.
10. Pradip Ghorai, U Michigan, January 2006 – December 2007. *Molecular simulations of self-assembled monolayers for molecular computing*. Permanent position: Assistant Professor of Chemistry, IIT Kolkata, India.
11. Aaron Santos, U Michigan, August 2007 – Summer 2010. *Mesoscale simulations of self-assembly of hierarchical structures*. Current position: Assistant professor (tenure track), Simpson College, Iowa.
12. Kevin Kohlstedt, U Michigan, August 1, 2009 - 2011. *Design and assembly of reconfigurable colloids*. Current position: Postdoctoral Fellow, Northwestern University.
13. Hao Jiang, U Michigan, August 2008 – April 2013. *Simulations of patchy particles for catalysis and molecular recognition*. Current position: Associate Analyst Programmer, Tessella Inc.
14. Michael Engel, U Michigan, February 2009 - present. Research Investigator. *Simulation studies of complex crystals and quasicrystals*.
15. Elizabeth R. Chen, U Michigan September 2011 – August 2012. Postdoctoral investigator. *Mathematics of dense packings*. Current position: Postdoctoral Fellow in Applied Mathematics, Harvard University.
16. Josh Anderson, U Michigan, June 1, 2009 - present. Research Engineer. *GPU code development*.
17. Greg van Anders, U Michigan, Summer 2010 - present. *Entropic forces in colloids*.
18. Daphne Klotsa, U Michigan, Summer 2011 - present. *Packing and assembly of hard colloids*.
19. Jens Glaser, U Michigan, September 2012 – present. *Protein crystallization*.
20. Julia Dschemuchadse, U Michigan, starting January 2015 (SNF Fellow). *Colloidal crystallography*.

UNDERGRADUATE STUDENTS SUPERVISED ON RESEARCH IN GLOTZER GROUP (31 TOTAL, 5 CURRENT)

1. Lucas Booth, U Michigan Dept. of Chemical Engineering, SS 2002 – W 2003. Eli Lilly.
2. Chitra G. Laxmanan, U Michigan Dept. of Chemical Engineering, Marian Sarah Parker Scholar Program, Spring 2002.
3. Scott M. Nunn, U Michigan Dept. of Chemical Engineering, Spring/Summer 2003.
4. Brian D. Reger, U Michigan Dept. of Chemical Engineering, Spring/Summer 2003.
5. Suchita Shah, U Michigan Dept. of Chemical Engineering, Sarah Marion Parker Scholar Program, Spring/Summer 2003.
6. Jonathan K. Snow, U Michigan Dept. of Chemical Engineering, Spring/Summer 2003.
7. Gary Chia, U Michigan Dept. of Chemical Engineering, Spring/Summer 2003. PhD from MIT.

8. Aaron Scott Keyes, U Michigan Dept. of Chemical Engineering, Winter 2003 – Winter 2004. PhD from Michigan. Now at AirBnB.
9. Lin Ho, U Michigan Dept. of Chemical Engineering, 2003 –2005. PhD from UC Irvine.
10. Eric Jankowski, U Michigan Dept. of Chemical Engineering, 2004 –2005. PhD at Michigan. Now postdoctoral fellow at UC Boulder.
11. Thomas Babinec, U Michigan Dept. of Physics, 2005 – 2007. PhD from Harvard.
12. Robert Carr, U Michigan Dept. of Chemical Engineering, W/F 2006, W 2007. PhD from Berkeley.
13. Sunny Choi, U Michigan Dept. of Chemical Engineering, F 2006-W 2007. PhD from UIUC.
14. Michelle Marval, U Michigan Dept. of Materials Science & Engineering, Fall 2010-Summer 2011.
15. Jeremy Kapala, U Michigan Dept. of Chemical Engineering, Summer 2011.
16. Benjamin Apland, U Michigan Dept. of Chemical Engineering, Summer 2011.
17. Steven Bielecki, U Michigan Dept. of Chemical Engineering, Summer 2011, Fall 2012.
18. Kosi Aroh, SROP, University of Maryland, Dept. of Chemical Engineering, Summer 2011.
19. Megan Szakasits, SROP, NC State University, Department of Chemical Engineering, Summer 2012.
20. Daniel Cunningham, SROP, University of Connecticut, Dept. of Materials Science & Eng. SS 2013
21. Belinda Chung Baek, Visiting undergraduate student, Fall 2013.
22. Erica Siimets, UROP, College of Engineering, Fall 2013 – W2014.
23. Nidhi Thite, UROP, College of Engineering, Fall 2013 – W2014.
24. Manuel Sarmiento, UROP, College of Engineering, Fall 2013 – W2014.
25. Chiedozie Okorie, UROP, College of Engineering, Fall 2013 – W2014.
26. Diamant Kurteshi, UROP, College of Engineering, W2014.
27. Matthew Dodds, SROP, College of Engineering, SS2014.
28. Mitchell Burke, SROP, College of Engineering, SS2014.
29. Rajeev Bhatt, SROP, College of Engineering, SS2014.
30. Alan Xu, SROP, College of Engineering, SS2014
31. Steven Zatzke, U Michigan, Dept. of Chemical Engineering, SS2011 – SS2014.

OTHER STUDENTS AND POSTDOCS SUPERVISED (7 TOTAL)

1. Claudio Castellano, visiting student from the University of Naples, Italy, August 1994 – December 1995, at NIST. Pinning in phase-separating polymer blends.
2. Sean MacIsaac, high school student at Thomas Jefferson high School for Science and Technology, 1996 – 1998, at NIST. Simulations of granular materials.
3. Thomas Schroeder, visiting student from Roskilde University, Department of Physics, February 1998 – August 1998, at NIST.
4. Lasse Bøhling, visiting student from Roskilde University, Department of Physics, 2012.
5. Joshua Engelman, high school student at Vista Mar HS in Los Angeles, Summer 2012 –
6. Ruggero Gabbrielli, visiting postdoctoral scholar, February – April 2013.

7. Alan Xu, high school student at Ann Arbor Huron High School, Summer 2013.

SELECTED WORKSHOPS, CONFERENCES, SYMPOSIA AND MEETINGS ORGANIZED

- Co-chair/organizer, Unifying Concepts in Glass Physics, 2015.
- Co-chair, GRC on Self-Assembly and Supramolecular Chemistry, Diablerret, Switzerland, May 2013, with S. Stupp.
- Co-organizer, New Trends in Colloidal Matter, NYU, 2013.
- Co-organizer, Symposium on The Origin of Life, U Michigan, April 5, 2013.
- Co-chair/organizer, MRS Fall 2012 Symposium on Colloidal Crystals, Quasicrystals, Assemblies, Jammings and Packings, with F. Stellacci and A. Tkachenko.
- Co-chair/organizer, Fourth Biennial Contractor's Meeting in Biomolecular Materials, Oct. 23-26, 2011, Annapolis, MD, with S. Stupp.
- Co-chair/organizer, Materials Research Society Symposium on Reconfigurable Assembly, Nashville, TN, Sept. 28-30, 2011.
- Co-chair/organizer, Conference on Horizons in Emergent Systems (HES70), March 19-20, 2011, Boston, MA, in honor of Gene Stanley's 70th Birthday.
- Co-chair/organizer, with Jack Dongarra, *High Performance Computing and Technology Surprise*, Washington, DC April 14-15, 2011.
- Co-chair/organizer, with J. Davis, P.T. Cummings, P. Westmoreland, B. Calloway, Symposium on Simulation-Based Engineering and Science, AIChE Annual Meeting, November 9, 2010, Salt Lake City, Utah.
- Co-chair, with G. Crabtree, W. McCurdy and J. Roberto, *DOE Office of Science Workshop on Computational Materials and Chemistry*, Bethesda, MD July 26-28, 2010 and coauthor of subsequent report.
- Director, Virtual School of Computational Science & Engineering Summer School 2009 Session, August 2009. 300 student and postdoc participants at four sites.
- Co-chair, Multi-agency sponsored workshop on *Research Directions in Simulation-based Engineering and Science*, April 22-24, 2009 at the National Academy of Science Building, Washington, DC. Number of participants: O(100).
- Chair, *Foundations of Molecular Modeling and Simulation (FOMMS)*, July 12-16, 2009. Number of participants: 135.
- Co-organizer, *GLCPC Virtual School of Computational Science & Engineering Summer School for Graduate Students on Multicore and GPUs*, NCSA, August 11-15, 2008. Instructors: Wen-mei Hwu (UIUC) and David Kirk (NVIDIA). 49 on-site participants.
- Co-Chair, MRS Fall 2008 Symposium on *Design, Synthesis and Self-Assembly of Patchy Particles*, Boston, MA 2008. With E. Leutjen and F. Sciortino.
- Chair, Multi-agency sponsored Workshop on *International Assessment of Simulation-based Engineering and Science*, National Science Foundation, April 25, 2008. Number of participants: 85
- Chair, Multi-agency sponsored *US Baseline Workshop on Simulation-based Engineering and Science*, National Science Foundation, Nov. 1-2, 2007. Number of participants: 75

- Co-organizer, *ACS Symposium on Colloidal Atoms and Molecules*, with D. Velegol and M.J. Solomon, Winter 2007, Chicago.
- Member of organizing committee, *International Conference on Bioengineering and Nanotechnology*, September 19-21, 2006, Santa Barbara, CA.
- Program chair, Forum on Industrial and Applied Physics, American Physical Society (APS) Annual March Meeting 2005, Los Angeles, CA.
- Member, International Advisory Committee, Symposium on Computer Modeling and Simulation of the Materials Nanoworld, Sicily, Italy, May 2004.
- Program chair, Nanoscale Science and Engineering Topical Conference, American Institute of Chemical Engineers (AIChE) Annual Fall Meeting 2004, Austin, TX. Served as program vice-chair, NSEF Topical Conference, AIChE Fall Annual Meeting, 2003.
- Member of organizing committee, *Foundations of Molecular Modeling and Simulation*, Keystone, CO, July 2003.
- Session chair/organizer for various sessions at AIChE Fall meetings 2001 – 2009, including *Theory, Modeling and Simulation at the Nanoscale*, *Amorphous Materials and Metastable Liquids*, and the Nanoscale Science and Engineering Forum plenary sessions in 2002 and 2003, and Plenary Session on Petascale Computing in 2009.
- Chair, organizing committee, *26th Annual Macromolecular Science and Engineering Symposium*, U Michigan, October 23, 2002.
- Member, Nanotechnology Committee, Nanotech 2003, 2004, 2005, 2006 Program Committees.
- Session co-chair/organizer, *Theory and Simulation of Complex Fluids and Soft Materials*, 76th ACS Symposium on Colloid and Surface Science, Ann Arbor, MI July 2002.
- Co-organizer, *Horizons in Complex Systems*, Messina, Italy, December 2001.
- Co-organizer, Symposium on *Computer Modeling of Polymers*, American Chemical Society Annual Meeting, Chicago, IL, August 2001, with S. Kumar, B. Farmer and G. Rutledge.
- Organizer, *Vision 20/20 Materials Technology Roadmap Workshop on Materials Modeling and Prediction*, sponsored by DOE/OIT, Colorado, September 1999.
- Co-organizer, Workshop on *Unifying Concepts in Glass Physics*, ICTP, Trieste, Italy, September 1999, with S. Franz and S. Sastry.
- Co-organizer, CTCMS Workshop on *Hybrid Methods for Materials Modeling*, NIST, May 1999, with F. Alexander, B. Boghosian, and A. Garcia.
- Organizer and Discussion Leader, Minisymposium on *Theory and Simulation of Glasses and Glass-forming Liquids*, at Symposium in honor of C.A. Angell, Pisa, Italy, October 1998.
- Co-organizer, CTCMS Workshop on *Simulation Methods for Multiphase Polymers: A Critical Comparison*, NIST, May 1998, with N. Martys.
- Session Organizer and Chair, *Mesoscale Modeling of Materials*, Conference on Complex Phenomena in Physics, Barbados, W.I., January 1998.
- Organizer and Chair, *Phase Transitions in Polymers: A Symposium in Honor of E.A. DiMarzio*, NIST, November 6-7, 1997.

- Co-director, CTCMS Summer School on *Phase Transitions and Pattern Formation in Fluids and Materials for Graduate Students*, July 1, 1996 - August 8, 1996, with S.A. Langer.
- Organizer and Chair, Workshop on *Glasses and the Glass Transition: Challenges in Materials Theory and Simulation*, Kent Island, MD, February 16-19, 1995.

Helped organize numerous other workshops at NIST under the auspices of the CTCMS.

SELECTED INVITED TALKS (TOTAL: 288)

GORDON RESEARCH CONFERENCES (16 INVITED TALKS @ 11 DIFFERENT GRCs)

1. *TBA*, Self-Assembly GRC, Il Ciocco, May 17-21, 2015.
2. *Colloidal Crystals and Quasicrystals*, GRC on Noble Metals, Summer 2014.
3. *Entropically Patchy Particles*, Gordon Research Conference on Colloids, Macromolecular Solutions and Polyelectrolytes, Ventura, CA, February 16-21, 2014.
4. *Entropically Driven Colloidal Crystallization*, GRC on Thin Films and Crystallization Mechanisms, University of New England, Biddeford, ME, July 2013.
5. "*Liquid crystals of hard particles*," GRC on Liquid Crystals, University of New England, Biddeford, ME, June 16-21, 2013.
6. "*Of Shape and Entropy*", GRC on Soft Condensed Matter, Colby-Sawyer, August 14-18, 2011.
7. "*Some Assembly Required*," GRC on Supramolecular Assembly, Il Ciocco, Italy, June 12, 2011.
8. "*Self-assembly of complex structures from anisotropic building blocks*," Gordon Research Conference on the Chemistry & Physics of Liquids, August 2009.
9. "*Designing Materials Building Blocks for Self-Assembly Propensity*," Gordon Research Conference on the Chemistry of Supramolecules & Assemblies, June 2009.
10. "*Relating Building Block Shape and Complexity for Assembly*," Gordon Research Conference on Physical Virology, Galveston, TX, February 2009.
11. "*Directed Self-Assembly of Nanoscale Building Blocks*," Gordon Research Conference on Colloids, Macromolecular Solutions and Polyelectrolytes, Ventura, CA, February 2004.
12. "*Funky Dynamics in Liquids and Glasses*," Gordon Research Conference on Ceramics, New Hampshire, August 2002.
13. "*Spatially Heterogeneous Dynamics in Supercooled Liquids: Insights from Simulation*," Gordon Research Conference on Theoretical Chemistry, Colby-Sawyer College, New Hampshire, July 2002.
14. "*Spatially Heterogeneous Dynamics in Supercooled Liquids and Glasses*," Gordon Research Conference on Liquids, Holderness School, NH, August 2001.
15. "*Computational Diagnostics for Nanoscale Dynamical Heterogeneity in Glass-forming Liquids and Polymers*," Gordon Research Conference on Polymer Physics, Connecticut College, July 2000.
16. "*Emergence of Nanoscale Dynamical Heterogeneity in Supercooled Liquids and Polymers*," Gordon Research Conference on Colloids, Macromolecular Solutions and Polyelectrolytes, Ventura, CA, February 2000.

DISCUSSION LEADER AT GORDON RESEARCH CONFERENCES:

- Discussion leader, Supramolecular Assembly GRC, Le Diablerett, May 5-10, 2013.
- Discussion leader, Supramolecular Assembly GRC, Il Ciocco, Italy, June 19-24, 2011.

- Discussion leader, Liquids Gordon Research Conference, New Hampshire, July 2003.
- Discussion leader, Liquids Gordon Research Conference, New Hampshire, July 1997.

NATIONAL ACADEMY BRIEFINGS & FRONTIERS SYMPOSIA (7 INVITED TALKS)

17. "*Soft Matter by Design*," Briefing to the Defense Science Research Council, Jan. 2014.
18. "*HPC Skills, Applications to SBE&S, and Workforce: Worldwide Trends*," Briefing to National Academy's workshop on HPC and Technology Surprise, April 14, 2011.
19. "*WTEC International Assessment of Simulation-based Engineering & Science*," Briefing to the TIGER Committee, October 2009.
20. "*WTEC International Assessment of Simulation-based Engineering & Science*," Briefing to the Solid State Sciences Committee, April 19, 2007.
21. "*Computational Materials in the 21st Century*," Briefing to the NRC Study Committee on Integrative Computational Materials Engineering, March 13, 2007.
22. Invited lecturer and session chair, "*From Squish to Self-Assembly: The New Science of Colloids*," National Academy of Science Beckman Frontiers of Science Symposium, Irvine, CA, November 2004.
23. Invited lecturer, "*Trends in Computational Materials Science for Materials Design and Processing*," National Academy of Engineering Frontiers of Engineering Symposium, Irvine, CA, September 1998.

NATIONAL PROFESSIONAL SOCIETY MEETINGS (60 INVITED TALKS)

24. "Towards Transparent Aluminum," **AICHE** Fall Meeting, Atlanta, GA 2014.
25. "Packing and Assembly of Particles: Nanowires and Beyond", **AICHE** Fall Meeting, Atlanta, GA 2014.
26. **ACS** Colloid Symposium, June 2014, Philadelphia, PA. Keynote talk, directed assembly session.
27. **ACS** Spring Meeting, PMSE Symposium Peppas Award Symposium, San Diego, CA 2014.
28. **ACS** Spring Meeting, Symposium on Structure for Function, San Diego, CA 2014.
29. **MRS** Spring Meeting, San Francisco, CA 2013.
30. Symposium Honoring Keith Gubbins, **AIChE** Fall Meeting, Pittsburgh, PA Fall 2012.
31. **ACS** Colloid Symposium, June 11, 2012, Baltimore, MD. Keynote talk, general session.
32. Symposium CC, **MRS** Spring Meeting, San Francisco, CA 2012.
33. Symposium GG, **MRS** Spring Meeting, San Francisco, CA 2012.
34. **APS** March Meeting, Boston, MA 2012.
35. "*Design and self-assembly of patchy particles*," **MRS** Spring Mtg, San Francisco, CA 2011.
36. "*Self-Assembly of Tethered Nanoparticles*," **ACS** Spring Meeting, Anaheim, CA 2011.
37. "*Simulation-Based Engineering & Science*," **AIChE** Annual Mtg, Salt Lake City, UT 2010.
38. "Assembly Engineering," **ACS** Fall Meeting 2010, Boston MA 2010.
39. "*GPUs for Comp. Science & Engineering*," **AIChE** Fall Mtg 2009, Nashville TN 2009.
40. "*Polymer-tethered nanoparticle shape amphiphiles: A new macromolecule for self-assembly*," **APS**

March Meeting 2009, Pittsburgh, PA 2009.

41. “*Self assembly of patchy and anisometric particles into complex structures*”, **MRS** Spring Mtg. 2009.
42. “*Design and Assembly of Anisotropic Particles: The Shapes of Things to Come (With a Little Help from Computer Simulation)*,” **Charles M.A. Stine Award Plenary Lecture**, **AIChE** Annual Fall Meeting, Philadelphia, PA 2008.
43. “*Simulation-based Design of Nanoscale Building Blocks for Self-Assembly: The Shapes of Things to Come*,” **AIChE** Fall Meeting, Salt Lake City, Fall 2007.
44. “*Cybertools for Materials Research, Education, and Collaboration*”, **AIChE** Fall Mtg, SLC 2007
45. “*Forward and Inverse Computational Design of Anisotropic Nanocolloids for Self Assembly*”, **MS&T07**, Detroit, Fall 2007.
46. “*Cybertools for Materials Research, Education, and Collaboration*”, **MS&T07**, Detroit, Fall 2007.
47. “*Forward and inverse design of hierarchically-ordered functional assemblies from anisotropic nanocolloids*” **ACS**, Boston, Fall 2007
48. “*Emergence of order in nanoparticle assemblies by exploiting building block anisotropy*”, **ACS**, Boston, Fall 2007.
49. “*New trends in colloid science*”, 81st **ACS** Colloids and Surface Science Symposium, Newark, Delaware, June 2007. **Keynote lecture.**
50. “*Self-assembly of polymer-tethered nanoparticle shape amphiphiles*,” **ACS**, Chicago, Spring 2007.
51. “*Exploiting anisotropy for self-assembly of colloidal and nanoparticle shape amphiphiles*,” **MRS** Spring 2006.
52. “*Designing nanomaterials from nanoparticle building block assembly*,” **MRS** Symposium CC: Photo-physical properties of monolayers on nanomaterials and surfaces, Boston, MA 2005.
53. “*Tutorial on mesoscale simulations for self-assembly of nanoscale systems*,” **AICHE**, Cincinnati, OH 2005.
54. “*Exploiting anisotropy for self-assembly of shape amphiphiles*,” **SIAM** Society for Industrial and Applied Mathematics, New Orleans, LA 2005.
55. “*Self-assembly of patchy particles: insights from in silico*,” **ACS** American Chemical Society Spring Meeting, Symposium on Colloidal Assembly: Fundamentals, Novel Approaches, and Emerging Applications, San Diego, CA 2005.
56. “*Self-assembly of shape amphiphiles*,” **MRS** Materials Research Society Spring Meeting, Symposium AA: Dynamic, Self-Organizing Systems in Multifunctional Nanomaterials and Nanostructures, San Francisco, CA 2005.
57. “*Computational Nanoscience for Bio-inspired Nanofabrication*,” **AIChE** Fall Mtg, Austin, TX 2004.
58. “*Mesoscale simulations of self-assembly of low-dimensional nanoparticle structures*,” **MRS** Fall Mtg, Symposium II, Boston, MA 2004.
59. “*Mesoscale simulations of self-assembly of tethered POSS*,” **MRS** Fall Mtg, Boston, MA 2004.
60. “*Tethered nanoparticles: A new class of macromolecule for bio-inspired materials assembly*,” **MRS** Materials Research Society Fall Meeting, Symposium H, Boston, MA 2003.
61. “*Langevin dynamics simulations of tethered nano building blocks*,” **MRS** Fall Mtg, Symposium KK, Boston, MA 2003.

62. "*Anatomy of a Supercooled Liquid*," ACS Fall Meeting, New York, NY 2003
63. "*Glass-forming liquids and nanostructured fluids*," APS March Meeting, Austin, TX 2003.
64. "*Simulation approaches to directed assembly of nanoscale systems*," ACS Spring Meeting, New Orleans, LA 2003.
65. "*Scale-spanning simulations of polymer-tethered silsesquioxanes*," ACS American Chemical Society Spring Meeting, New Orleans, LA 2003.
66. "*Nano-assembly of Hybrid Structures: Towards Bridging Time and Length Scales*," AIChE Fall Meeting, Indianapolis, IN, 2002.
67. "*Spatially Heterogeneous Dynamics in Liquids Near the Glass Transition*," Acers American Ceramics Society, Glasses and Optical Materials Division, Invited Symposium on *New Directions in Glasses*, Pittsburgh, PA 2002.
68. "*Computer Simulation of the Glass Transition: Tools of the Trade*" APS DPOLY Short Course Tutorial Lecture, APS March Meeting, Indianapolis, IN 2002.
69. "*New Insights on Glass-forming Liquids: Spatially Heterogeneous Dynamics*," AIChE Fall Meeting, Reno, NV 2001.
70. "*Spatially Heterogeneous Dynamics in Glass-forming Polymers*," ACS Fall Meeting, Chicago, IL, 2001.
71. "*Multiscale Simulation Of Nanostructured Filled Polymers*," ACS Rubber Division Mtg., April 2001.
72. "*Vision 2020 Roadmap for Computational Chemistry: Opportunities in Materials Science*," AIChE Fall Meeting, Los Angeles, CA 2000.
73. "*Molecular Dynamics Simulations of Filled and Nano-filled Polymers*," MRS Fall Mtg, Boston 2000.
74. "*Correlated Molecular Motion in Cold, Dense Liquids: Insights from Simulation*," ACS Fall Meeting, Washington DC, 2000.
75. "*Accelerating the Impact of Materials Simulation on US Industry*," MRS Spring Meeting, Symposium O -- Materials Computation: Progress Towards Technological Relevance, San Francisco, 2000.
76. "*Multiple Length and Time Scales in Glass-forming Polymers: New Insights from and Challenges for Simulation*," MRS Spring Meeting, Symposium on Multiscale Modeling of Organic Materials, San Francisco, CA 2000.
77. "*Computer Simulations of Soft Matter - The Complex Nature of Molecular Motion*," Maria Goeppert-Mayer Award Lecture, APS Annual Meeting, Minneapolis, MN 2000.
78. "*Spatially Heterogeneous Dynamics in Glass-forming Liquids*," ACA American Crystallographic Association Annual Meeting, Buffalo, NY 1999.
79. "*Dynamical Heterogeneity and Cooperative Motion in Glass-forming Liquids and Polymers*," APS Annual Meeting, Atlanta, GA 1999.
80. "*Anisotropic Interface Motion in Simulations of Unstable Nematic Liquid Crystal/Polymer Blends*," SIAM '96, Society for Industrial and Applied Mathematics, Pittsburgh, PA, May 1996, with S.A. Langer.
81. "*Spinodal Decomposition of Chemically-Reactive Materials*," ACS Fall Meeting, PMSE Symposium in Honor of Z. Akcasu, Washington, D.C., 1994.

82. *Interactive Simulations of Complex Fluids: Research and Teaching with Workstations,* AAAS American Association for the Advancement of Science Annual Meeting, Boston, MA 1993.
83. *A New Paradigm for Science Education,* AAS American Astronomical Society Annual Meeting, Los Angeles, CA 1989.

NATIONAL MEETINGS, WORKSHOPS AND CONFERENCES (55 INVITED TALKS)

84. Faraday Discussion, Nanoparticle Synthesis and Assembly, April 20-22, 2015
85. ICERM, March 16-21, 2015.
86. IEEE Workshop on Modular and Swarm Systems, Chicago, IL, Sept. 14, 2014.
87. Advances in Liquid Crystals, Kent State University, Kent OH, Sept. 13, 2014.
88. 3rd Multifunctional Materials for Defense Workshop, Plenary Lunch Talk, Aug. 21, 2014.
89. BESAC Workshop on Grand Challenges in Basic Energy Sciences, July 30, 2014.
90. *Materials on Demand,* Lockheed Martin Corporate Production Council Meeting, Dallas TX, July 10, 2014.
91. Rutgers Annual Meeting on Statistical Mechanics, May 11-13, 2014.
92. Frontiers in Particle Science Technology, Chicago, April 29-31, 2014.
93. LANL Mesoscale Science Frontiers Conference, May 13-16, Los Alamos, NM, 2014.
94. *Digital Discovery and Design: Toward the New Age of Materials on Demand* TAMEST, Austin, TX January 16-17, 2014.
95. NSF Nanoscale Science and Grantees Plenary Talk, December 2013.
96. EFRC Meeting, Washington, DC, July 18-19, 2013.
97. NYU Programmable Matter Workshop, NYU June 30 – July 2, 2013.
98. *Assembly Science & Engineering,* Nanotechnology Knowledge Infrastructure - NNI Signature Initiative Symposium, Washington DC, May 13, 2013. Keynote talk.
99. NSF Materials Genome Initiative Meeting, Arlington, VA Dec. 15, 2012.
100. Fluidity|Rigidity|Adaptability: Frontiers in Pure and Applied Jamming, U Chicago, October 26-28, 2012.
101. *New directions in synthetic molecular systems,* ARO Synthetic Molecular Systems Workshop, April 25, 2012.
102. TEDxUofM, March 29, 2012.
103. MRS Symposium on Reconfigurable Assembly, Nashville, TN September 28, 2011.
104. *Some assembly required,* Aspen Workshop on Materials and the Imagination, January 2011.
105. *Towards Computational Materials Design,* Department of Energy Simulation Summit, Washington DC, October 13, 2010 (organized by Secretary Chu and Undersecretary Koonin).
106. *Dense packings of hard tetrahedra.* Chandler StatMech Mini-Conference, January 2010.
107. *Designing patchy particles for self-assembly propensity,* UIUC Materials Research Laboratory Workshop on Patchy Particles, May 19, 2009.

108. “*WTEC International Assessment of Simulation-Based Engineering and Science*,” National Academy of Engineering/Sandia/Council on Competitiveness TECS Summit on Computational Engineering, September 16, 2008.
109. “*Statistical Mechanics of Self-Assembly of Nanoscale Building Blocks*,” American Conference on Theoretical Chemistry, July 19-24, 2008.
110. “*Exploiting anisotropy for assembly*,” NIST Workshop on Assembly, March 2008.
111. “*Patchy particles, surfactants on steroids, quasicrystals: A study of assembly, in three parts.*” Chandler StatMech Mini-Conference, January 2008.
112. “*Simulation-based design and assembly of nanoparticle-based materials for EM applications*,” DoD Conference on Nanomaterials for Defense, Symposium on Nanomaterials for Optical Properties, Spring 2007.
113. “*Simulations of self-assembly of patchy particles and tethered nanoparticle shape amphiphiles*,” Recent Developments in Computer Simulation Studies in Condensed Matter Physics, Athens, GA, February 2007.
114. “*Self-assembly of nanomaterials: the shape(s) of things to come*,” GE Global Research Symposium on Computational Physics for Nanoscience, January 18, 2006.
115. “*The shape(s) of things to come*,” Princeton - Rhodia Symposium, Self Assembly - Guided and Otherwise, Princeton University, Princeton, NJ November 4-5, 2005.
116. “*Ordering processes in liquids and complex materials*,” Chandler Mini-Stat-Mech Meeting, Berkeley, CA January 8, 2005.
117. Invited participant and poster, 2nd Annual National Academies Keck Futures Initiative Conference on Designing Nanostructures at the Interface between Biomedical and Physical Systems, Irvine, CA, November 2004 and pre-conference, Washington DC, September 2004.
118. “*Tethered Nano Building Blocks: A New Route to Self-Assembly*,” Tenth International Conference on Properties and Phase Equilibria for Product and Process Design (PPEPPD), Snowbird Resort, Utah, May 16-24, 2004.
119. “*Molecular and Mesoscale Simulation Methods for Bio-Inspired Nanofabrication*,” National Science Foundation/European Commission Workshop on Computational Materials Science Methods, San Francisco, CA, April 15-16, 2004.
120. “*Molecular simulations of polymer-tethered nanoparticles*,” ACS Workshop on Molecular Modeling, New Orleans, March, 2004.
121. “*Self-assembly of sheets, tubes and wires from tethered nanoparticles: insights from simulation*,” Argonne National Lab/University of Chicago Workshop Self-assembly in biology, chemistry and hard materials, Argonne, IL, June 2003.
122. “*Computational Nanoscience and the Need for Large-Scale Computing*,” DOE SCALeS Workshop, Arlington, VA, June 2003.
123. “*Conga Lines and Cages: Spatially Heterogeneous Dynamics of Glass-forming Liquids*,” Chandler Mini-Stat-Mech Meeting, Berkeley, CA Jan 10-12, 2003.
124. “*Computational Nanoscience of Soft Matter*,” DOE Roadmapping Workshop on Computational Nanoscience, San Francisco, CA May 10-11, 2002.
125. “*Computational Materials Science in the 21st Century: The Road Ahead*,” National Materials Advisory Board, National Academy of Sciences, Washington, DC, March 27, 2002.

126. *"Nanoengineering Polymer/Nanoparticle Systems: Simulations on Multiple Scales,"* Knowledge Foundation Conference on Multiscale Modeling of Materials, Boston, MA, August 12-13, 2001.
127. *"Spatially Heterogeneous Dynamics in Liquids,"* STATPHYS Satellite Meeting on Challenges in Statistical Mechanics for the 21st Century, Athens, GA, July 2001.
128. *"The Cooperative Nature of Molecular Motion in Soft Materials: Finding Order in Disorder,"* National Science Foundation Workshop on Materials Theory, Arlington, VA, October 2000.
129. *"Molecular and Mesoscale Simulations of Filled and Nano-filled Polymers,"* First Annual Meeting on Foundations of Molecular Modeling, Keystone, Colorado, July 2000.
130. *"Simulations of Soft Matter - The Complex Nature of Molecular Motion,"* Fifth Annual Maria Goeppert-Mayer Symposium, San Diego, March 4, 2000.
131. *"Growing Dynamical Correlations in Supercooled Liquids,"* XI International Meeting on Physics of Noncrystalline Materials, Tuscon, AZ, October 1999.
132. *"Trends in Computational Materials Science for Polymer Interfaces and Interphases,"* Workshop on Polymer Interfaces and Interphases, NIST, Gaithersburg, MD, December 1998.
133. *"From Atoms to LCDs: Designing Materials with Computers,"* PECASE Award Symposium, National Oceanographic and Atmospheric Association, Silver Spring, MD, December 1998.
134. *"Dynamics of Glass-forming Materials from Computer Simulation,"* Conference on Computer Simulations in Physics, University of Georgia, Feb. 1998.
135. *"Cooperative Motion and Dynamical Heterogeneity in Glass-forming Materials: New Results from Simulation,"* ITP Workshop on Jamming in Frustrated Systems, UC Santa Barbara, October 1997.
136. *"Theory and Simulation of Pattern Formation in Polymer-Dispersed Liquid Crystals,"* Applied Mathematics Workshop for Materials Studies and Industrial Applications, Penn State University, College Park, PA, October 26, 1996.
137. *"Controlling Pattern Formation in Polymer Blends,"* CTCMS Workshop on Pattern Formation in Liquid Crystals, Polymers, and their Mixtures, Gaithersburg, MD June 26-28, 1995.
138. *"On Growth and Form: Teaching Concepts of Probability by Doing Science,"* PIMMS Physics Workshop, Connecticut, March 1991.

INTERNATIONAL CONFERENCES AND WORKSHOPS (48 INVITED TALKS)

139. Physics@FOM Veldhoven, January 20-21, 2015. **Plenary Lecture.**
140. CECAM Workshop, Vienna, Sept 24-26, 2014.
141. Theo Murphy International Meeting on Frontiers of Computer Simulation in Chemistry and Materials Science, Royal Society of Chemistry, February 6-7, 2014.
142. Frenkelfest, Coventry, England, July 12-14, 2013.
143. Danckwerts Lecture, The Hague, April 23, 2013. **Plenary Lecture.**
144. Solvay-sponsored Workshop on Macromolecules in Constrained Environments, Les Houches, March 24-29, 2013.
145. CECAM Workshop on Self-assembly: from fundamental principles to design rules for experiment, Lausanne, March 1 – 3, 2013. (Given by M. Engel)
146. Symmetry and Order Parameters/The Mathematics of Liquid Crystals, Cambridge, UK January 2013.

147. “*Self-assembly of soft matter quasicrystals*,” Aperiodic 2012, Cairns, Australia, Sept. 2-7, 2012. **Plenary Keynote.**
148. “*Entropic bonding in hard colloids*,” COMPLOIDS Annual Meeting, Edinburgh May 30 – June 2, 2012.
149. “*Hard Particle Fluids and Their Crystals and Glasses*,” Conference on Unifying Concepts in Glass Physics, Paris, France, Dec. 12-16, 2011.
150. “*Hard Particle Fluids and Their Crystals*,” Liquid Matter Conference, Vienna, Austria, Sept. 6-10, 2011. (**Opening Plenary Keynote Lecture**)
151. “*Self-Assembly of Tetrahedra and Other Shapes*,” BFFS Workshop on Self-Assembly at all Scales, Black Forest, May 25-27, 2011.
152. “*Assembly and Packing of Tetrahedra*,” Statphys Conference, Australia, July 19-24, 2010.
153. “*Assembly and Packing of Tetrahedra*,” Liblice Conference, Czech Republic, June 13-18, 2010.
154. “*Assembly and Packing of Tetrahedra*,” US/Poland Workshop on Self-Assembled Nanomaterials, Krakow, Poland, June 7-10, 2010.
155. “*Assembly and Packing of Tetrahedra*,” Particulate Matters: Dimension Matters, Max Planck Institute, Dresden, DE, May 31 – June 4, 2010.
156. “*Designing the next generation of self-assembled nanomaterials*,” French-American Young Engineering Scientist Symposium, Nov. 16-18, 2009. **Keynote plenary lecture.** (cancelled due to illness).
157. “*Dense packing and self assembly of colloidal tetrahedra and other shapes*,” IDRMACS, Rome, Italy, Aug 30 – Sept. 5, 2009.
158. “*WTEC International Assessment of R&D in Simulation-Based Engineering & Science*,” TEKES Finnish Funding Agency for Technology and Innovation Conference on Modeling and Simulation in Finland and in USA: Future Trends, Assessment and Funding, Helsinki, Finland, January 29, 2009. **Keynote lecture.**
159. “*Self- and directed assembly of nanoparticles: Opportunities and challenges for computer simulation*,” Conference on Computational Physics, Brazil, August 2008. **Keynote lecture.**
160. “*Materials Design for Self-Assembly, and Self-Assembly for Materials Design*,” NSF US-Poland Workshop on Nanoscience and Nanostructured Materials, June 4-6, 2008.
161. “*Excursions in self-assembly*,” AIMMS Workshop on Materials Modeling, St. Francis Xavier U, Nova Scotia, May 25, 2007.
162. “*Exploiting anisotropy for self assembly at the nanoscale*,” NSF US-Poland Workshop on Nanoscience and Nanostructured Materials, June 26-28, 2006.
163. “*Patchy particle self assembly*,” CECAM Workshop, Lyon, France, June 26-28, 2006.
164. “*Mesoscale Simulation for Self-Assembled Nanomaterials Design*,” Accelrys Nanotechnology Consortium Meeting, London, November 15, 2005.
165. “*Spatially Heterogeneous Dynamics in Strong and Fragile Liquids*,” Unifying Concepts in Glass Physics,” Bangalore, India, June 28-30, 2004.
166. “*Tutorial on Spatially Heterogeneous Dynamics*,” Short Course on the Glass Transition, Unifying Concepts in Glass Physics, Bangalore, India, June 25-26, 2004.

167. *"Multiscale Simulations of Soft Materials,"* Keynote Lecture at WATOC '02, Lugano Switzerland, August 5-8, 2002.
168. *"Statistical Mechanics of Glass-forming Liquids,"* Sixth Liblice Conference on the Statistical Mechanics of Liquids, Czech Republic, June 4-9, 2002.
169. *"Fourth-Order Time-Dependent Density Correlation Functions in Liquids and Glasses,"* Unifying Concepts in Glass Physics II, Rome, IT, February 2002. Presented by postdoc T.B. Schroeder.
170. *"Dynamical Heterogeneity In Supercooled Liquids And Polymers Via Higher Order Correlation Functions,"* International Workshop on Relaxation in Complex Systems, Crete, June 2001.
171. *"Molecular and Mesoscale Simulations of Filled and Nano-filled Polymers,"* Annual Meeting of the Japanese Rheological Society, September 25, 2000.
172. *"Probing Dynamical Heterogeneity Via Higher Order Correlation Functions,"* Workshop On Future Perspectives For Understanding The Unsolved Problem Of The Glass-Transition by Neutron Scattering And Computer Simulation, San Sebastian, Spain, June 2000.
173. *"Computational Materials Science: Trends and Opportunities,"* Joint NSF/EC Workshop on Collaborative Opportunities in Materials Research, Stuttgart, Germany, June 21-22, 1999.
174. *"Spatially Heterogeneous Dynamics in Glass-Forming Liquids from Simulation,"* Euroconference on Supercooled Liquids and Glasses, Pisa, Italy, September 1998.
175. *"Dynamical Heterogeneity in Glass-forming Materials: New Results from Simulation,"* Complex Phenomena in Physics CPIP '98, Barbados, January 1998.
176. *"Dynamic Heterogeneities in Computer Simulations of Glass-forming Materials,"* International Conference on Relaxation in Complex Systems, Vigo, Spain, July 1997.
177. *"Dynamic Heterogeneities in Computer Simulations of Glass-forming Materials,"* International Conference on Kinetics of Phase-Separating Complex Fluids, Messina, Italy, June 1997.
178. *"Modeling of Phase Separation and Ordering in Anisotropic Materials,"* CAMS '97, International Meeting of the Canadian Applied Math Society, Toronto, June 1997.
179. *"Microstructure and Frustration in Glass-forming Materials,"* International Symposium on Disordered Liquids, Juten '96, Kyoto, Japan, November 19, 1996.
180. *"Frustration and Heterogeneities in Glass-forming Materials,"* CECAM Workshop on Glassy Dynamics, Lyon, France, October 1996.
181. *"Theory and Simulation of Pattern Formation in Liquid-Crystal/Polymer Blends,"* Workshop on Pattern Formation, London, Ontario, Canada, June 15, 1996, with S.A. Langer.
182. *"Pattern Formation in Polymers and Liquid-Crystal / Polymer Blends: Theory and Computer Simulation,"* International Conference on Pattern Formation in Polymers, Kyoto, Japan, June 13-14, 1996.
183. *"Materials Research in the Information Age,"* Caribbean Academy of Sciences, Tobago, April 1996.
184. *"Controlling Pattern Formation in Polymer Blends: Theory and Computer Simulation,"* Future of Fractals Conference, Nagoya, Japan, July 26, 1995.
185. *"Reaction-Controlled Morphology of Phase-Separating Materials,"* International Conference on Scaling Concepts in Complex Fluids, Catanzaro, Italy, July 5, 1994.

186. *"Spinodal Decomposition in Chemically-Reactive Binary Mixtures and Polymer Blends,"* Antigonish Discussion Meeting on Statistical and Computational Physics, St. Francis Xavier University, Antigonish, Nova Scotia, Oct. 1-4, 1993.

NATIONAL AND INTERNATIONAL DEPARTMENTAL COLLOQUIA/SEMINARS (100)

187. UIUC Department of Physics, Urbana-Champaign, Spring 2015.
188. Polymer Science & Engineering Department, U Mass Amherst, Spring 2015.
189. Harvard Physical Chemistry Seminary, March 26, 2015.
190. FOM Masterclass, January 19, 2015.
191. NYU Department of Physics/Center for Soft Matter Physics Colloquium, Winter 2014.
192. Texas Distinguished Faculty Lectureship, McKetta Dept. of Chem. Eng., UT Austin, Nov 5, 2014
193. BP Lecturer, Cambridge University, November 2014.
194. HERMES 2014 Masterclass, UK, July 26, 2014.
195. Lockheed Martin Company Advanced Technology Lab, Cherry Hill, NJ, June 26, 2014.
196. Thomas Young Center Highlight Lecture, London, UK July 24, 2014
197. Whitby Memorial Lectures, University of Akron, March 10-11, 2014.
198. Northwestern International Institute for Nanotechnology Lecturer, Feb. 13, 2014.
199. NCSU, ChemE/MRSEC, Oct. 7, 2013
200. U Wisconsin, Department of Chemical Engineering, Apr. 30, 2013.
201. Columbia University, Department of Chemistry, 2013 (rescheduled)
202. Douglas G. Hill Memorial Lecture, Duke University, Department of Chemistry, April 12, 2013.
203. Columbia University, Department of Chemical Engineering, Nov. 20, 2012.
204. Georgia Tech Department of Physics Colloquium, Sept 24, 2012.
205. University of Chicago, James Frank Institute "First Tuesday" Colloquium, May 1, 2012.
206. Texas Tech University, Soft Matter Seminar, April 16, 2012.
207. University of Pennsylvania, Maddin Lecture, April 23, 2012.
208. UC Berkeley Physical Chemistry Seminar, March 20, 2012.
209. Syracuse University Department of Physics, September 22, 2011.
210. CCNY Levich Institute, May 20, 2011.
211. IBM Distinguished Lecture, RPI, Mat. Science and Engineering Dept., April 20, 2011.
212. University of Wisconsin Department of Chemistry, February 15, 2011.
213. University of Toledo, Department of Physics, November 18, 2010.
214. University of Utah Henry Eyring Lecture, Department of Chemistry, November 12, 2010.
215. University of Minnesota Department of Chemical Engineering, October 26, 2010.
216. Cornell University Department of Physics Colloquium, October 5, 2010.
217. Cornell University Department of Chemical Engineering Colloquium, October 4, 2010.

218. Center for Nano Materials Colloquium, Argonne National Lab, September 29, 2010.
219. U Penn Department of Physics Colloquium, September 22, 2010.
220. Lawrence Berkeley Lab Distinguished Lecturer, May 4, 2010.
221. ISTECDistinguished Lecturer, Colorado State University, May 3, 2010.
222. Physical Chemistry Seminar, Colorado State University, May 3, 2010.
223. Chair Installation Lecture, U Michigan, April 23, 2010.
224. University of Maryland Nano Center Distinguished Colloquia, March 31, 2010.
225. Harvard University, Dept. of Applied Physics, Feb. 5, 2010.
226. University of Rochester, Dept. of Chemical Engineering, December 2, 2009.
227. Tulane University, Dept. of Chemical Engineering, Oct. 30, 2009.
228. MIT, Department of Chemical Engineering, Oct. 16, 2009.
229. MIT, Department of Materials Science & Engineering, Oct. 15, 2009.
230. University of Colorado, Boulder, Dept. of Chemical Eng., October 6, 2009.
231. Iowa State University ADVANCE Lecturer, Dept. of Chemical Engineering, Oct. 1, 2009.
232. University of Illinois, Urbana-Champaign, Dept. of Chemical Engineering, November 4, 2008
233. University of Illinois, Urbana-Champaign, Dept. of Mat. Sci. & Eng., November 3, 2008
234. U Michigan, Dept. of Physics, October 1, 2008.
235. University of North Carolina, Polymer and Materials Sciences, May 5, 2008.
236. Jerome B. Cohen Lectures (3), Northwestern University, November 2007.
237. University of Washington, Seattle, Department of Chemical Engineering, May 15, 2007.
238. Boston University, Dept. of Physics First Annual Graduate Alumni Symposium, May 4, 2007.
239. Wesleyan University, Department of Physics Bertman Lecture, May 3, 2007.
240. University of Pittsburgh, Dept. of Chemical Engineering Colloquium, January 26, 2007.
241. University of Pittsburgh, Nano Institute Lecture, January 25, 2007.
242. Vanderbilt Institute for Nanoscale Science and Engineering, February 2007.
243. Purdue U, Dept. of Materials Science and Engineering and Nanoscience Institute, Nov. 3, 2006
244. James Chair Honorary Lecture, St. Francis Xavier University, Physics Dept., February 2006.
245. Department of Chemical Engineering, Wayne State University, February 10, 2006.
246. Dow Chemical, Midland, MI, February 14, 2006.
247. Nanotechnology Institute Lecture, Northwestern University, February 1, 2006.
248. Department of Physics and Astronomy, Ohio University, May 20, 2005.
249. Department of Chemical Engineering, University of Buffalo, February 16, 2005.
250. Department of Chemistry, U Michigan, September 2004.
251. Allan P. Colburn Memorial Lecture, Dept. of Chemical Engineering, U Delaware, Spring 2004.
252. Department of Chemical Engineering, Colorado School of Mines, Winter 2004.

253. Department of Chemistry, University of Wisconsin, Madison, January 2004.
254. Department of Chemical Engineering, University of Pennsylvania, December 2003.
255. Department of Physics, University of Chicago, October 2003.
256. Oakland University, Sigma Xi Public Lecture & Keynote Banquet Address, April 8, 2003.
257. Case Western Reserve University, April 2002
258. Cal State University Northridge, Sigma Xi Public Lecture, February 26, 2003.
259. Loyola Marymount University, Sigma Xi Public Lecture II, February 25, 2003
260. Loyola Marymount University, Sigma Xi Public Lecture I, February 24, 2003
261. Georgia Tech, Dept. of Chemical Engineering, January 22, 2003 (rescheduled from Fall, 2001).
262. CCP5-sponsored lecture tour of the UK: Warwick Univ., Theor. Phys. Seminar, Nov. 29, 2002.
263. CCP5-sponsored lecture tour of the UK: Cambridge Univ., Theor. Chem. Sem., Nov. 27, 2002.
264. CCP5-sponsored lecture tour of the UK: Oxford University, Chemistry Dept, Nov. 25, 2002
265. City College of New York, Levich Institute, October 8, 2002.
266. Michigan State University, Sigma Xi Lecture, *Science at the Edge* Series, September 20, 2002.
267. Princeton University, Dept. of Chemical Engineering, December 2001
268. Boston University, Dept. of Physics, "Distinguished Alumni Seminar", August 2001.
269. NCSU, Chem. Engin. and Mat. Sci. and Eng. Joint Departmental Colloquium, February 26, 2001.
270. Penn State University, Physics Department Colloquium, October 2000.
271. U Michigan, Mat. Sci. and Eng. and Chem. Eng. Joint Departmental Colloquium, September 2000.
272. University of Tennessee, Chemical Engineering Departmental Colloquium, Spring 2000.
273. UC Santa Barbara, Chemical Engineering Departmental Colloquium, Spring 2000.
274. Northwestern University, Chemical Engineering Departmental Colloquium. Winter 2000.
275. UIUC Chemical Engineering Departmental Colloquium, Winter 1999.
276. UIUC Materials Science and Engineering Departmental Colloquium, Winter 1999.
277. George Mason University, Physics Department Seminar, Spring 1998.
278. University of Pennsylvania, Complex Fluids Seminar, Spring 1998.
279. Catholic University, Physics Departmental Colloquium, Fall 1997.
280. Johns Hopkins University, Physics Department Seminar, Fall 1997.
281. University of Maryland, Institute for Physical Science and Technology Seminar, Fall 1997.
282. Max Planck Institute for Polymerforschung Seminar, Fall 1996.
283. University of Rome "La Sapienza", Physics Department Seminar, Fall 1995.
284. Brandeis University, Physics Department Colloquium, Fall 1994.
285. University of Maryland, Institute for Physical Science and Technology Seminar, Spring 1994.
286. Carnegie Mellon University/Pittsburgh Joint Statistical Physics Seminar, Spring 1994.
287. Sandia National Lab, Albuquerque, NM, Spring 1992.

288. Exxon Corporate Research, Annandale, NJ, Spring 1992.

Numerous other meetings and conferences attended and presentations given. Students and postdocs have given scores of oral and poster presentations at major national and international meetings, including annual AIChE, APS, ACS and MRS meetings and Gordon conferences.

PUBLICATIONS (As of 12/01/14: h-index = 59, total citations = 13344, according to Google Scholar)

PEER-REVIEWED JOURNAL AND/OR ARCHIVAL PUBLICATIONS (190 in print)

1. R.W. Henry and S.C. Glotzer, ``*A Squeezed State Primer*,`` American Journal of Physics **56**, 318-328 (1988). Voted ``One of AJP's Most Memorable Papers,`` American Journal of Physics, March, 1991.
2. S.C. Glotzer, D. Stauffer, and S. Sastry, ``*Damage Spreading in the Q2R Ising Model*,`` Physica A **164**, 1-11 (1990).
3. S.C. Glotzer and N. Jan, ``*Damage Spreading in the Kawasaki Ising Model*,`` Physica A **73**, 325-331 (1991).
4. S.C. Glotzer, P.H. Poole, and N. Jan, ``*Time-Dependent Thermodynamic Properties of the Ising Model from Damage Spreading*,`` J. Stat. Phys. **68**, 895--910 (1992).
5. S.C. Glotzer, P.H. Poole, and N. Jan, ``*Comment on 'Spreading of Damage: An Unexpected Disagreement Between the Sequential and Parallel Updatings in Monte Carlo Simulations'*,`` Phys. Rev. Lett. **70**, 2046 (1993).
6. S.C. Glotzer, M. F. Gyure, F. Sciortino, A. Coniglio and H.E. Stanley, ``*Kinetics of Phase Separation in the Presence of Two Disparate Energy Scales*,`` Phys. Rev. Lett. **70**, 3275 (1993).
7. S.C. Glotzer, R. Bansil, P.D. Gallagher, M.F. Gyure, F. Sciortino, H.E. Stanley, ``*Physical Gels and Microphase Separation in Multiblock Copolymers*,`` Physica A **201**, **482** (1993).
8. S.C. Glotzer, M.F. Gyure, F. Sciortino, A. Coniglio and H.E. Stanley, ``*Pinning in Phase-Separating Systems*,`` Phys. Rev. E. **49**, 247 (1994).
9. P. Ossadnik, M.F. Gyure, H.E. Stanley and S.C. Glotzer, ``*Molecular Dynamics Simulation of Spinodal Decomposition in a Two-Dimensional Binary Fluid Mixture*,`` Phys. Rev. Lett. **72**, 2498 (1994).
10. S.C. Glotzer, D. Stauffer and N. Jan, ``*Monte Carlo Simulations of Phase Separation in Chemically Reactive Binary Mixtures*,`` Phys. Rev. Lett. **72**, 4109 (1994).
11. S.C. Glotzer and A. Coniglio, ``*Self-Consistent Solution of Phase Separation with Competing Interactions*,`` Phys. Rev. E **50**, 4241 (1994).
12. S.C. Glotzer, E.A. DiMarzio and M. Muthukumar, ``*Reaction-Controlled Morphology of Phase-Separating Mixtures*,`` Phys. Rev.Lett. **74**, 2034 (1995).
13. S.C. Glotzer, E.A. DiMarzio and M. Muthukumar, ``*Chemically-Controlled Morphology of Phase-Separating Materials*,`` Il Nuovo Cimento **16 D**, 1171 (1994).
14. S.C. Glotzer and A. Coniglio, ``*Frustration, Connectivity, and the Glass Transition*,`` J. Comp. Mat. Sci. **4**(4), **325** (1995).
15. E.A. DiMarzio, A. Yang and S.C. Glotzer, ``*Mixing Plate-like and Rod-like Molecules with Solvent: A Test of Flory-Huggins Lattice Statistics*,`` J. Res. NIST, **100**, 173 (1995).
16. S.C. Glotzer, D. Stauffer, and N. Jan, ``*Reply to Lefever, et al.*,`` Phys. Rev. Lett. **75**, 1675 (1995).
17. C. Castellano and S.C. Glotzer, ``*On the Mechanism of Pinning in Phase-Separating Polymer Blends*,`` J. Chem. Phys. **103**(21), 9363 (1995).

18. S.C. Glotzer, "Computer Simulations of Spinodal Decomposition in Polymer Blends," Annual Reviews of Computational Physics, **2**, 1-47, (World Scientific, Singapore, 1995).
19. T.B. Liverpool and S.C. Glotzer, "Fixed-Cluster Acceleration Algorithm for Spin Models," Phys. Rev. E **53**, R4255 (1996).
20. N. Jan, S.C. Glotzer, P.H. Poole, and A. Coniglio, "Clusters and Fractals in the Ising Spin Glass," Fractals **3**, 465, 1995.
21. S.C. Glotzer and A. Coniglio, "Connectivity and Frustration in Glass-Forming Materials," in Non equilibrium phenomena in supercooled fluids, glasses and amorphous materials (World Scientific, Singapore, 1996), p. 381.
22. L.H. Schwartz, S.C. Glotzer, D.E. Hall, A. Roosen, and J.A. Warren, "Materials Science in the Information Age," Technology in Society, **18**, 151 (1996).
23. S.C. Glotzer, P.H. Poole, A. Coniglio and N. Jan, "Temperature Dependence of Spatial and Dynamic Heterogeneities Above the Ising Spin Glass Transition," Materials Research Society Fall '96 Proceedings, Symposium T: Structure and Dynamics of Glasses and Glass-Formers, **455**, 223 (1997).
24. S.C. Glotzer, P.H. Poole, A. Coniglio and N. Jan, "Non-Monotonic Temperature Dependence of Local Dynamics and Local Energy Upon Cooling Toward the Ising Spin Glass Transition," Prog. Theor. Phys. Supplement **126**, 383 (1997).
25. S.A. Langer and S.C. Glotzer, "Morphogenesis in Polymer/Nematic Liquid Crystal Blends," Physica A, **239**, 358-362 (1997).
26. P.H. Poole, S.C. Glotzer, A. Coniglio, and N. Jan, "Emergence of Fast Local Relaxation Upon Cooling Toward the Ising Spin Glass Transition," Phys. Rev. Lett. **78**, 3394 (1997).
27. W. Kob, C. Donati, S.J. Plimpton, P.H. Poole, and S.C. Glotzer, "Dynamical Heterogeneity in a Supercooled Lennard-Jones Mixture," Phys. Rev. Lett. **79**, 2827 (1997).
28. S.C. Glotzer, N. Jan, T. Lookman, A.B. MacIsaac, and P.H. Poole, "Dynamical Heterogeneity in the Ising Spin Glass," Phys. Rev. E **57**, 7350 (1998).
29. P.H. Poole, C. Donati and S.C. Glotzer, "Spatial Correlations of Particle Displacements," Physica A **261**, 51-59, (1998).
30. C. Donati, J. Douglas, W. Kob, S.J. Plimpton, P.H. Poole, and S.C. Glotzer, "String-like Cooperative Motion in a Supercooled Liquid," Phys. Rev. Lett. **80**, 2338 (1998).
31. Karim, J.F. Douglas, B.P. Lee, S.C. Glotzer, J.A. Rogers, R.J. Jackman, E.J. Amis and G.M. Whitesides, "Phase Separation of Ultrathin Polymer-Blend Films on Patterned Substrates," Phys. Rev. E **57**, R6273 (1998).
32. Bennemann, C. Donati, J. Baschnagel, and S.C. Glotzer, "Growing Range of Correlated Motion in a Polymer Melt On Cooling Towards the Glass Transition," Nature, **399**, 246 (1999).
33. Donati, S.C. Glotzer and P.H. Poole, "Growing Spatial Correlations of Particle Displacements in a Simulated Liquid on Cooling Toward the Glass Transition," Phys. Rev. Lett. **82**, 5064 (1999).
34. Lapena, S.C. Glotzer, S.A. Langer, and A.J. Liu, "Effect of Nematic Ordering on Phase Separation in Liquid Crystal/Polymer Blends," Phys. Rev. E **60**, RC 29 (1999)
35. Donati, S.C. Glotzer, P.H. Poole, W. Kob, and S.J. Plimpton, "Spatial Correlations of Mobility and Immobility in a Glass-forming Liquid," Phys. Rev. E **60**, 3107 (1999).
36. P. Allegrini, J. F. Douglas and S.C. Glotzer, "Dynamic Entropy as a Measure of Caging and Persistent Particle Motion in a Supercooled Liquids," Phys. Rev. E **60**, 5714 (1999).

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