# KAREN I. WINEY
## TOWERBROOK FOUNDATION FACULTY FELLOW AND DEPARTMENT CHAIR

Materials Science and Engineering Department, Chemical and Biomolecular Engineering
University of Pennsylvania
3231 Walnut Street, Philadelphia, PA 19104-6272
Office: 215.898.0593; winey@seas.upenn.edu; Website: winey.seas.upenn.edu/

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### EDUCATION

| | |
|---|---|
| Ph.D. Polymer Science and Engineering, University of Massachusetts, Amherst, MA | 1991 |
| M.S. Polymer Science and Engineering, University of Massachusetts, Amherst, MA | 1989 |
| B.S. Materials Science and Engineering, Cornell University, Ithaca, NY | 1985 |

### WORK EXPERIENCE

**University of Pennsylvania, Philadelphia, PA**

| | |
|---|---|
| Chair, Materials Science and Engineering | 7/16 – |
| TowerBrook Foundation Faculty Fellow | 10/13 - |
| Professor, Materials Science and Engineering | 7/05 - |
| Secondary appointment in Chemical and Biomolecular Engineering | 1992 - |
| Penn Director, Nanotechnology Institute and Energy Commercialization Institute | 12/11 – 6/14 |
| Associate Professor, Materials Science and Engineering | 7/00 - 6/05 |
| Assistant Professor, Materials Science and Engineering | 7/92 - 6/00 |

**Visiting Scholar**

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|---|---|
| Materials Research Laboratory, University of California, Santa Barbara | 1/15 – 5/15 |

**Visiting Miller Research Professor**

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|---|---|
| Miller Institute, University of California, Berkeley | 9/14 – 12/14 |

**Macromolecules**

| | |
|---|---|
| Associate Editor | 7/10 – 6/14 |

**E. I. du Pont de Nemours and Company, Experimental Station, Wilmington, DE**

| | |
|---|---|
| Visiting Scientist | 9/05 - 12/05 |
| Visiting Scientist | 9/04 - 12/04 |

**AT&T Bell Laboratories, Murray Hill, NJ**

| | |
|---|---|
| Postdoctoral Member of Technical Staff with Dr. R. G. Larson | 2/91 - 6/92 |

**University of Massachusetts, Amherst, MA**

| | |
|---|---|
| Research Assistant, NSF Graduate Student Fellow | 9/86 - 1/91 |

"*Morphologies and Morphological Transitions in Binary Blends of Diblock Copolymer and Homopolymer*" with Prof. E. L. Thomas, Polymer Science and Engineering

**Eastman Kodak Research Laboratories, Rochester, NY**

| | |
|---|---|
| Research Scientist | 8/85 - 8/86 |

**Cornell University, Ithaca, NY**

| | |
|---|---|
| Undergraduate Research Assistant, various laboratories | 10/81 - 5/85 |

**AT&T Bell Laboratories, Murray Hill, NJ**
Undergraduate Research Experience Summer 1984

## HONORS AND AWARDS

Trustees Council of PennWomen Award for Undergraduate Advising 2017
IUPAC Lecture, Chemistry Department, University of Montreal 2017
Fellow, Polymeric Material Science and Engineering, American Chemical Society 2016
"For outstanding contributions to the understanding of polymer nanocomposites and ion-containing polymers through quantitative scattering and microscopy studies."
Visiting Miller Research Professor, University of California, Berkeley 9 – 12/2014
Dow Lecture, Northwestern University 2013
Fellow, Materials Research Society 2013
"For outstanding contributions to the understanding of polymer nanocomposites and ion-containing polymers through rigorous and insightful experiments; distinguished leadership in the materials community."
George H. Heilmeier Faculty Award for Excellence in Research 2012
"For innovative methods in the fabrication & processing of polymer-based nanotube composites"
Chair, Polymer Physics, Gordon Research Conference 2010
Special Creativity Award, National Science Foundation 2009-2011
Fellow, American Physical Society 2003
Cosslett Award, Best Invited Paper, Microscopy and Microanalysis Meeting 2000
National Science Foundation Young Investigator Award 1994-1999
Materials Research Society Graduate Student Award 1989
National Science Foundation Graduate Student Fellowship 1987-1990
Lockheed Fellowship, University of Massachusetts Fellowship 1987
Tau Beta Pi 1984
Alpha Sigma Mu (honor society for materials science and engineering) 1984
McMullen Scholar, Cornell University (merit) 1981-1985

## MEMBERSHIPS

American Chemical Society: Division of Polymer Chemistry and Division of Polymeric Materials Science and Engineering
American Institute of Chemical Engineers
American Physical Society: Division of Polymer Physics, Soft Matter Topical Group
Materials Research Society

## FUNDING SUMMARY

The Winey Research Group has been supported by various governmental agencies, as well as private foundations and industry. Highlights include continual single-investigator funding from NSF since 1993, member of the NSF-MRSEC at the University of Pennsylvania since 1992, and co-director of an Army-sponsored MURI (2007-2013).

Federal Agencies (cumulative number of grants): ARO (7), DOE (3), NIH/NIMH (2), NSF (24), ONR (3), other (3).
Non-Federal Sources: Dupont (3), Kraton Polymers (5), Nanotechnology Institute (4), Petroleum Research Foundation (3), University Research Foundation (6), other (9).
User Grants: Argonne National Laboratory, Brookhaven National Laboratory, Lawrence Berkeley National Lab, National Institute of Standards and Technology (2 current), Sandia National Laboratory (2 current)

As of August 2017, the group is currently supported by the following:

Department of Energy – Basic Energy Sciences – Materials Science – Neutron Scattering
National Science Foundation – MRSEC
National Science Foundation – DMR – Polymers Program
National Science Foundation – ENG – Chemical, Bioengineering, Environmental, and Transport Systems
National Science Foundation – MRI (Yodh, PI)
Petroleum Research Foundation
U.S. Army Research Office – Chemistry Division
U.S. Army Research Office – Defense University Research Instrumentation Program

## RESPONSIBILITIES AT THE UNIVERSITY OF PENNSYLVANIA

### Department of Materials Science and Engineering

| | |
|---|---|
| Department Chair | 7/16 – |
| Chair, Hiring Committee for Materials Science and Engineering | 8/15 – 5/16 |
| Chair, Hiring Committee for Materials Science and Engineering | 7/11 – 6/14 |
| Chair, JackFest, A Symposium in Celebration of Prof. John E. Fischer | 9/08 - 5/09 |
| Chair, ABET Committee | 1/05 - 1/07 |
| Chair, Graduate Admissions, Materials Science and Engineering | 9/00 - 10/03 |
| Chair, Graduate Recruiting, Materials Science and Engineering | 9/98 - 10/03 |
| Chair, MSE Departmental Website | 9/01 - 7/03 |
| | |
| Member, Consultative Committee for Vice Provost for Research | 2/13 – 7/13 |
| Member, University Nano Advisory Council | 11/11 – 7/13 |
| Member, Hearing Panel for Student Disciplinary System | 9/11 – 8/13 |
| Member, ABET Committee | 7/10 - 12/11 |
| Member, Faculty Hiring Committee | 10/06 - 6/10 |
| Member, Consultative Committee for New Department Chair | 4/07 - 6/07 |
| Member, MSE Departmental Seminars | 1/06 to 12/06 |
| Member, Graduate Admissions, Materials Science and Engineering | 7/96 - 6/99 |
| Member, Graduate Recruiting, Materials Science and Engineering | 9/92 - 6/98 |
| Member, MSE Consultative Committee for New Department Chair | 5-9/97; 9-11/00, 12/01 - 3/02 |
| Member, MSE Research and Centers Planning Committee | 9/95 - 5/96 |
| Member, Biomaterials Curriculum Committee | 9/94 - 6/96 |
| | |
| Faculty Advisor, Undergraduate Student Advisor | 9/92 - |
| Faculty Advisor, Materials Engineering and Research Society (MERS) | 1/07 - 12/11 |
| Faculty Advisor, initiated Alpha Sigma Mu, honor society for materials science | 9/97 - 4/05 |
| | |
| Founder, MSE Undergraduate Laboratory in Polymer Science | 6/93 - 6/98 |
| Coordinator, MSE Departmental Seminar Series | 9/92 - 5/93 |

### School of Engineering and Applied Science

| | |
|---|---|
| Chair, Bioengineering Chair Search Committee | 5/12 - 9/12 |
| Chair, Oversight Committee, Engineering Management & Technology Masters' Pgm | 10/09 - 6/11 |
| Chair, Faculty Council | 7/03 – 6/04 |
| Chair, Academic Performance Committee | 1-6/96; 7/97 - 6/99 |
| Co-Faculty Advisor, Society of Women Engineers | 11/98 - 6/04 |
| | |
| Penn Engineering Wellness Ambassador, | 10/15 - |
| | |
| Member, SEAS Faculty Awards Committee | 9/12 – 6/14 |
| Member, Faculty Personnel Committee | 7/11 - 6/12 |
| Member, Chemical and Biomolecular Engineering Chair Search Committee | 04/12 - 5/12 |
| Member, Steering Committee, Advancing Women in Engineering (AWE) | 3/07 - 12/11 |
| Member, Faculty Personnel Committee | 9/07 - 6/09 |
| Member, Faculty Council | 7/02 - 6/06 |
| Member, Academic Performance Committee | 9/92 - 6/99 |

### University

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|---|---|
| Penn Director, Nanotechnology Institute | 12/11 – 6/14 |
| Penn Director, Energy Commercialization Institute | 12/11 – 3/14 |

Co-Chair with Paul Heiney, Structural Tools Workshop, LRSM full-day workshop 1/10
Co-Chair with Ray Gorte, Public Symp., Fuel Cells: Materials, Challenges & Breakthroughs 9/09

Member, Pennergy Advisory Board 1/10 -
Member, Laboratory for Research on the Structure of Matter 9/92 -
Member, Vice Provost for Research's Faculty Innovation Council 12/13 - 6/17
Member, Nano-Bio Interface Center Education Committee 7/06 - 6/09
Member, Institute for Medicine and Engineering 4/03 - 6/09
Member, University Committee on Communications 9/02 - 7/03
Member, University Safety and Security Committee 9/96 - 6/99
Co-Instructor, X-ray Scattering Mini-Course sponsored by LRSM 6/01
Instructor, Advanced Materials Characterization sponsored by LRSM 4/00
Faculty Associate, Ware College House 9/98 - 5/99

**Courses**
Nano-Scale Materials Laboratory (MSE 250; substantially revised undergraduate laboratory class)
Experimental Methods in Materials Science (MSE 500; new course; graduate level laboratory class)
Introduction to Materials Science (EMTM 665; masters level course for management program)
Introduction to Nanotechnology (EAS 210; new course; interdisciplinary course for engineers)
Introduction to Polymers (MSE 430 / MSE 580; first level course in polymers)
Nano-Scale Materials Lab (MSE250; substantially revised; required sophomore laboratory)
Senior Design (MSE 495 & 496; one or two small group projects per year)
Structural Materials (MSE 220; first required course within the department)
Topics in Polymer Physics (MSE 790; graduate elective)

## PROFESSIONAL ACTIVITIES BEYOND PENN

Co-Organizer, NSF-Sponsored Frontiers in Polymer Science and Engineering Workshop (decadal report; workshop in August 2016) 9/15 – 7/17

**Advisory Positions**
Member, Technical Advisory Board, Center for Hierarchical Materials Design (CHiMaD), Northwestern University, University of Chicago, Argonne National Laboratory 3/14 -
Member (elected), Center for Integrated Nanotechnologies Users Executive Committee, Sandia National Laboratories 6/12 -
Member, International Advisory Board, Department of Materials Science and Engineering, Tel Aviv University 12/13 -
Member (& Chair), Advisory Board, Materials Science and Engineering, Cornell University 4/10 -

Member, Search Committee for Editors of *Macromolecules* and *ACS Macro Letters* 3/17 – 8/17
Member, External Review Committee, Materials Science and Eng., Cornell University 11/13
Member, European Research Council's Consolidator Grant Evaluation Panel 3/13 – 10/13
Member, EPSRC Peer Review College 1/10 - 9/12
Member, Committee of Visitors, Materials Science and Engineering Division, Basic Energy Sciences, Department of Energy 3/09
Invited Participant, NSF Workshop on Polymer Science and Engineering 8/07
Member, External Review Committee, Polymer Sci. and Engineering, Univ. of Massachusetts 2/07
Invited Participant, Institute for Theoretical Physics, University of California, Santa Barbara, "Dynamics of Complex and Macromolecular Fluids" 5/02
Trustee, Alpha Sigma Mu, honor society for materials science 9/96 - 9/98

**American Chemical Society**

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|---|---|
| Member, ACS National Award Selection Committee | 3/15 – |
| Member, Selection Committee for PMSE Fellows | 3/15 – |
| Co-Chair, 14th Pacific Polymer Conference, Polyolefin Symposium in Kauai Hawaii | 12/15 |
| Associate Editor, *Macromolecules* | 7/10 – 6/14 |

**American Physical Society, Division of Polymer Physics**

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|---|---|
| Vice Chair, Chair Elect, **Chair**, Past Chair (elected), Division of Polymer Physics, American Physical Society | 3/11 - 3/15 |
| Co-organizer with Laura Clarke, Focus Session at March Meeting Polymer Nanocomposites: Active Particles and Dynamics | 3/13 |
| Co-organizer with Chris Soles, DPOLY Short Course, March Meeting Case Studies in Polymer Physics from the Industrial Research World | 2/12 |
| Invited Course Instructor, Physics of Polymer Nanocomposites Short Course | 3/09 |
| Member, Publicity Committee | 3/04 - 3/05 |
| Member-at-Large (elected), Executive Committee | 3/01 - 3/04 |
| Program Chair, 2002 March Meeting, Austin, TX | 4/01 - 3/02 |
| Member, Program Committee | 3/98 - 3/03 |
| Organizer, Focus Session at March Meeting, Defects in Polymers and Soft Materials, | 3/99 |
| Invited Course Instructor, Polymer Microscopy Short Course | 3/95 |

**Gordon Research Conference**

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|---|---|
| Chair, Polymer Physics<br>*Record level of external funding and record number of participants.* | 6/10 |
| Vice-Chair, Polymer Physics | 6/08, 6/14 |
| Discussion Leader, Polymer Physics | 7/98, 8/00, 7/06, (scheduled 7/16) |
| Discussion Leader, Ion-Containing Polymers | 5/05 |

**Materials Research Society**

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|---|---|
| Chair, Selection Committee for Innovation in Materials Characterization Award | 11/12 – 11/15 |
| Guest Co-Editor, *MRS Bulletin*, Polymer Nanocomposites | 4/07 |
| Member, Selection Committee for Innovation in Materials Characterization Award | 3/09 -11/12 |
| Member, Strategic Program Planning Subcommittee | 1/05 - 12/06 |
| Symposium Co-organizer | 12/04 |

**Additional Meeting and Symposia Planning**

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|---|---|
| Meeting Co-Chair, 2nd International Conference on Innovative Engineering Materials | 10/17 |
| Meeting Co-Chair, 5th International Conference on Multifunctional, Hybrid and Nanomaterials, Lisbon, Portugal | 3/17 |
| Meeting Co-Chair, Neutron Scattering Contractor Meeting, Materials Science and Engineering Division, Basic Energy Sciences, Department of Energy | 12/16 |
| Meeting Co-Chair, Synthesis and Processing Contractor Meeting, Materials Science and Engineering Division, Basic Energy Sciences, Department of Energy | 10/09 |
| Topical Conference Co-organizer, Society of Plastics Engineering TOPCON SPE | 10/08 |
| Symposium Co-organizer, Society of Rheology | 10/03 |
| Symposium Co-organizer, Polymers, Microscopy Society of America | 8/00 |
| Symposium Co-organizer, Nanophases and Nanocomposites, Microscopy Soc. of America | 8/95 |

**Editorial and Reviewing Activities**

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|---|---|
| Member, Editorial Advisory Board, *Progress in Polymer Science* | 1/17 - |

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| Member, Proposal Review Panel, Brookhaven Nat. Lab. Ctr for Functional Nanomaterials | 1/12 - |
| Member, Editorial Advisory Board, *Polymer* | 7/10 - |
| Member, Editorial Advisory Board, *Journal of Macromolecular Science Part A: Pure and Applied Chemistry* | 7/08 - |
| Member, Editorial Advisory Board, *Journal of Polymer Science B: Polymer Physics* | 1/00 – |
| Discussion Leader, Polymer Physics, Gordon Research Conference | 7/16 |
| Chair, Best Paper Award Selection Committee, *Journal of Polymer Science B* | 2003 |
| Member, Editorial Advisory Board, *Macromolecules* | 1/01 - 12/03 |

**Teaching Activities: Invited Course Instructor**

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|---|---|
| Lehigh Microscopy School, Lehigh University annually | 2003 - 2009 |
| Society of Plastics Engineering Webinar | 5/09 |
| Polymer Physics Symposium sponsored by 3M | 10/95 |
| Polymer Microscopy; Continuing Engineering Ed, University of Michigan - Ann Arbor | 6/92 |

**RESEARCH GROUP**

**1.) POSTDOCTORAL RESEARCHERS (WITH CURRENT POSITION)**

| | | |
|---|---|---|
| Mohan Sikka | 3/94 - 7/96 | |
| Jonathan H. Laurer | 1/98 - 4/99 | IRC, Inc. |
| Andreas H. Taubert | 8/00 - 12/02 | Chemistry, University of Potsdam, Germany |
| Hansoo Kim | 2/04 - 1/06 | |
| Mohammad Moniruzzaman | 4/05 - 1/08 | SABIC Innovative Plastics |
| Arun Kota | 2/08 - 6/08 | Ass't Professor, Colorado State University |
| Michelle Seitz | 9/09 - 11/10 | DSM |
| T. Jamie Ford | 4/11 - 1/12 | University of Pennsylvania |
| Philip J. Griffin | 8/14 – 5/17 | University of Chicago |

**2.) DOCTORAL STUDENTS (WITH CURRENT POSITION)**

| | | | | |
|---|---|---|---|---|
| 1. | B. Scott Pinheiro | MSE | 1996 | |
| 2. | Daniel L. Polis | MSE | 1999 | Principal Engineer, Sierra Nevada Corporation, CO |
| 3. | Nicole N. Pellegrini | ChE | 1999 | |
| 4. | Lei Qiao | MSE | 2001 | Axalta Coating Systems, Shanghai, China |
| 5. | Brian P. Kirkmeyer | MSE | 2003 | Assistant Dean, Miami University, Oxford, OH |
| 6. | Reto Haggenmueller | MSE | 2005 | Freightliner, Portland, OR |
| 7. | Fangming Du | CBE | 2005 | GE Lighting, Willoughby, OH |
| 8. | Avinash Budhian | CBE | 2006 | Reckitt Benckise, NJ |
| 9. | Nicholas M. Benetatos | MSE | 2006 | Johson and Johnson, Diabetes Solutions Companies |
| 10. | Nancy C. Zhou | CBE | 2007 | Booz Allen Hamilton Inc. |
| 11. | Christopher Chan | CBE | 2008 | Dupont Experimental Station, Wilmington, DE |
| 12. | Minfang Mu | MSE | 2009 | Dupont, Shanghai, China |
| 13. | Sadie I. White | MSE | 2010 | United States Patent and Trademark Office |
| 14. | Wenqin "Sunny" Wang | MSE | 2010 | Dow Chemical, Spring House, PA |
| 15. | David Salas-de la Cruz | CBE | 2011 | Asst Prof., Chemistry, Rutgers University - Camden |
| 16. | Jae-Hong Choi | MSE | 2012 | Samsung SDI, Korea |
| 17. | C. Francisco Buitrago | CBE | 2013 | Sucroal, Argentina |
| 18. | Rose M. Mutiso | MSE | 2013 | Department of Energy |
| 19. | Michael O'Reilly | MSE | 2014 | Merck |
| 20. | Wei-Shao "Walter" Tung | MSE | 2015 | Topkey Corporation |
| 21. | Tsen-Shan Sharon Sharick | MSE | 2015 | W. L. Gore & Associates |
| 22. | L. Robert Middleton | MSE | 2106 | Exponent |
| 23. | Edward "Ted" Trigg | MSE | started Fall 2013 | |
| 24. | James F. Pressly | MSE | started Fall 2014 | |
| 25. | Lu Yan | CBE | started Fall 2015 | |
| 26. | Eric Bailey | MSE | started Fall 2015 | |
| 27. | Benjamin Paren | MSE | started Fall 2016 | |
| 28. | Tianren Zhang | CBE | started Spring 2017 (co-advised with Rob Riggleman) | |

**3.) MASTERS STUDENTS (WITH CURRENT POSITION)**

| | | | | |
|---|---|---|---|---|
| 1. | Theresa E. Derderian | MSE | 1994 | |
| 2. | Maria L. Berba | MSE | 1994 | Johnson and Johnson Philippines, Manila, Philippines |
| 3. | Micheala Tymichova | MSE | 1996 | |
| 4. | Joyce J. Espiritu | MSE | 1997 | R. J. Composto co-advisor. |
| 5. | Oyekunbi Delano | CBE | 2001 | |
| 6. | Forrest Pilgrim | CBE | 2002 | |
| 7. | Marcus Hsu | MSE | 2003 | Intel |

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|---|---|---|---|---|
| 8. | Yongsoo Kim | CBE | 2004 | |
| 9. | Naiffer Romero | MSE | 2005 | Dow |
| 10. | Amod Saxena | CBE | 2006 | |
| 11. | Tsung-Ta "Ethan" Chan | MSE | 2007 | Doctoral program |
| 12. | Lai-Ching Chou | MSE | 2007 | DuPont Taiwan |
| 13. | Thomas Acchione | MSE | 2008 | |
| 14. | Kristin Metkus | MSE | 2009 | Nova Research Inc. |
| 15. | Xiang "Tracy" Hao | MSE | 2010 | |
| 16. | Kun Sun | MSE | worked in group Fall 2012 | |
| 17. | Steven T. Szewczyk | MSE | 2014 | University of Pennsylvania |
| 18. | William Kyei-Manu | MSE | 2013 | Schlumberger, Houston TX |
| 19. | James Borchert | MSE | 2013 | Innovo Dynamics |
| 20. | Devdatt Maganty | MSE | 2014 | |
| 21. | Han-Chang "Cathy" Yang | MSE | 2015 | |
| 22. | Clark Shurtleff | MSE | 2016 | |

**4.) UNDERGRADUATE STUDENTS**

**(**includes NSF REU students, senior design groups; **bold** indicates coauthors on peer-reviewed papers**)**

| | | | |
|---|---|---|---|
| 1992-93 | Andre Sanders | **Laura F. Cerini** | |
| 1993-94 | Y. Lynn Loo | | |
| 1994-95 | W. Loong Chen | Foo-Sing Wong | Heather M. Koehler |
| 1995-96 | Heather M. Koehler | Francis J. Gramkowski | |
| 1996-97 | John Nugent | Gregory Booker | Alison Olver |
| 1997-98 | Nikeva Brown | Robert D. Armitage | |
| 1998-99 | Michael D. Grubb | Jason R. Vollbracht | Anna K. Johnsen |
| 1999-00 | **Reto Haggenmueller** | Neel Gandhi | |
| 2000-01 | Neel Gandhi | Nakiva Showell | Jason DeGaetano |
| | Tiffany Selman | Sarah Rothman | **Karen Sohn** |
| 2001-02 | Anna H. Pilipienko | Joyce Tam | |
| 2002-03 | Joyce Tam | Anthony Barsotti | Lindsey Karpowich |
| 2003-04 | **Robert C. Scogna** | Leah Henderson | Tarin Hart |
| | **Stijn Brand** | | |
| 2004-05 | Josh Stillman | Justin Samuels | Clarinda Lim |
| | Thomas Acchione | | |
| 2005-06 | Thomas Acchione | Zachary Williams | |
| 2006-07 | Michael Purdham | Michael Young | Bruce Hilman |
| | Asli Sahin | Thomas Acchione | Henry Friedman |
| | Jena Deng | Nicholas Smeets | |
| 2007-08 | Michael DeLiso | Zachary Combs | Jason Ginsberg |
| | Nicholas Smeets | Rebecca Goldman | Patrick Curran |
| | Scott Juang | Lea Nowar | |
| 2008-09 | Layla Houshmand | Conor Donnely | Michael Frankel |
| | Samuel Hsu | David Jahnke | Tarun Vemulkar |
| | Amanda Levy | Matt Bramson | |
| 2009-10 | Matt Bramson | **Dan King** | Shaina Oake |
| | Jen Ehrich | **Michelle Sherrott** | **Jeff Denis** |
| 2010-11 | Matt Bramson | **Michelle Sherrott** | **Jeff Denis** |
| | Katharine Oleske | Alex Dolgonos | Michael Engber |
| | Jason Bernstein | Miten Mistry | Erik ReVeal |
| 2011-12 | Angeles C. Chaparro | Maria E. Vincent | **Michelle Sherrott** |
| | Sneha Deshpande | Tyler Citek | Eric Maltiel |

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|---|---|---|---|
| 2012-13 | **Michelle Sherrott** | Colleen Reynolds | Kathryn Johnson |
| | Ruben Waldman | | |
| 2013-14 | Alexa Kuenstler | Jacob Gissinger | Eric Schwartz |
| 2014-15 | Alexa Kuenstler | **Eric Schwartz** | **Grace Salmon** |
| 2015-16 | **Eric Schwartz** | Demi Moed | Noah Geller |
| | **Gracie Salmon** | Sonya Kripke | Jason Woo |
| 2016-17 | Demi Moed | Nicholas Han | Neha Goswami |
| 2017-18 | Demi Moed | Nicholas Han | Dakota Wallach |

**5.) HIGH SCHOOL STUDENTS AND TEACHER**

| | | |
|---|---|---|
| 2000-01 | Samuel Berman-Freedman | |
| 2002-03 | Caroline Reilly | |
| 2003-04 | Kerry Scholz | |
| 2004-05 | Susan Schylander | Robert Stokes |
| 2005-06 | Brenda Gelinas | |
| 2007-09 | Schuyler Patton | |
| 2011-12 | Jackson Feeny | |
| 2012-13 | Jackson Feeny | |

**6.) MISCELLANEOUS VISITORS TO PENN (WITH CURRENT POSITION)**

| | | |
|---|---|---|
| Ken Schweizer | 1/13 – 4/13 (?) | University of Illinois (LRSM Visitor) |
| Leticia Socal da Silva | 4/13 –12/13 | Visiting scientist from Braskem (Brazilian oil company) |
| Connie Roth | 5/14 | Emory University |
| Laurent Bernard | 5/17 – 8/17 | Visiting doctoral student, University of Grenoble |

**HONORS AND AWARDS OF STUDENTS AND ALUMS**

| | | |
|---|---|---|
| 1992 | L.F. Cerini | Nassau Grant, University of Pennsylvania |
| 1996 | D.L. Polis | Presidential Award, Microscopy Society of America |
| 1996 | J.J. Espiritu | Ford Foundation Fellowship |
| 1997 | R.D. Armitage | Nassau Grant, University of Pennsylvania |
| 1998 | D.L. Polis | Gold Medal for Graduate Student Paper, Materials Research Society |
| 1999 | D.L. Polis | Finalist, Padden Award, Division of Polymer Physics, Am. Physical Society |
| 2002 | L. Qiao | Finalist, Padden Award, Division of Polymer Physics, Am. Physical Society |
| 2003 | B.P. Kirkmeyer | Finalist, Padden Award, Division of Polymer Physics, Am. Physical Society |
| 2003-05 | N. Zhou | NSF-IGERT Fellow |
| 2006-08 | Moniruzzaman | NSERC Canadian Postdoctoral Fellowship |
| 2006-09 | S.I. White | NSF Graduate Student Fellowship |
| 2007 | N. Zhou | IBM's Employee Excellence Award |
| 2008 | M. Mu | Best Poster, Research Forum @ Penn Engineering |
| 2008 | Sr. Design Grp | Jason Ginsberg, Nicholas Smeets, Rebecca Goldman, Patrick Curran Third Prize, MSE Senior Design Competition |
| 2008 | L. Houshmand | REU Certificate of Merit for Student Paper Competition |
| 2009 | M. Mu | Finalist, Padden Award, Division of Polymer Physics, Am. Physical Society |
| 2009 | S.I. White | Geoffrey Belton Graduate Fellowship Award, Univ. of Pennsylvania |
| 2009 | Moniruzzaman | Most Valuable Players, SABIC Innovative Plastics (global competition) |

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| 2009 | D.L. Polis | NASA Exceptional Engineering Achievement Medal for Materials Engineering Excellence in the Implementation of Composites for Primary Structure in NASA Human Spacecraft |
| 2009 | N. Benetatos | FDA Special Recognition Award - Drug-eluting stents and drug-coated balloon team |
| 2010 | W.Q. Wang | Finalist, Padden Award, Division of Polymer Physics, Am. Physical Society |
| 2010 | D. Salas-de la Cruz | Recipient, GRC Carl Storm Underrepresented Minority Fellowship |
| 2010 | D. Salas-de la Cruz | Recipient, Fontaine Travel Award |
| 2010 | F. Buitrago | Best Poster Award, North American Thermal Analysis Society |
| 2011 | Sr. Design Grp | Alex Dolgonos, Michael Engber, Erik Reveal Third Prize, MSE Senior Design Competition |
| 2012 | R. M. Mutiso | Geoffrey Belton Graduate Fellowship Award, Univ. of Pennsylvania |
| 2012 | M. Sherrott | Wolf-Hallac Award, University of Pennsylvania |
| 2012 | T. Citek | R. M. Brick Award, University of Pennsylvania |
| 2014 | L. R. Middleton | W. L. Gore and Associate Fellow Awards recognizes Excellence in Early Graduate Studies in Science, Technology & Engineering |
| 2015 | E. Trigg | DOE Office of Science Graduate Student Research Award |
| 2015 | L. R. Middleton | NSF Fellowship, East Asia and Pacific Summer Institutes (EAPSI) with the Japan Society for the Promotion of Science Fellowship |
| 2015 | L. R. Middleton | Milliken Graduate Research Symposium, Honorable Mention |
| 2015-18 | E. Bailey | NSF Graduate Student Fellowship |
| 2016 | E. Trigg | Geoffrey Belton Graduate Fellowship Award, Univ. of Pennsylvania |
| 2016 | D. Moed | 1st Prize Poster, Thermal Analysis Forum of Delaware Valley |

**RECENT INVITED RESEARCH LECTURES (2011 - )**

**2011**

136. 2nd Int'l Conference on Multifunctional, Hybrid and Nanomaterials (March) Strasbourg, France
"Electrical conductivity and switching in polymer nanocomposites"

137. Spring Meeting, American Chemical Society (March) Anaheim, CA
"Morphology of polymerized ionic liquid polymers" in Cooperative Research Award symposium

138. Spring Meeting, American Chemical Society (March) Anaheim, CA
"Precise poly(ethylene-*co*-acid) copolymers and ionomers produced via metathesis polymerization" in Functionalized Polyolefins and ROMP Materials symposium

139. Materials Science and Engineering, University of Tennessee (April) Knoxville, TN
"Polymer Nanocomposites: Polymer Diffusion, Electrical Conductivity and Resistive Switching"

140. Milliken Chemical (May) Spartanburg, SC
"Research Overview: Polymer nanocomposites and ion-containing polymers"

141. CINT, Sandia National Laboratory (June) Albuquerque, NM
"Morphologies in Acid- and Ion-Containing Polymers"

142. Materials Science and Engineering, Pennsylvania State University (August) State College, PA
"Morphologies in Precise Acid- and Ion-Containing Polymers"

143. Composites at Lake Louise (October) Alberta, Canada
"Electrical Properties in Polymer Nanocomposites"

**2012**

144. Mechanical Engineering and Materials Science, Rice University (January) Houston, TX
"Morphologies in Precise Acid- and Ion-Containing Polymers"

145. Naval Research Laboratory (January) Washington, D.C.
"Electrical Properties in Polymer Nanocomposites"

146. DSM (January) Geleen, The Netherlands
"Structure - Property Relationships in Acid- & Ion-Containing Polymers"

147. Department of Physics and Astronomy, University of Sheffield (January) Sheffield, UK
"Electrical Properties in Polymer Nanocomposites"

148. Chemical Engineering, Yale University (February) New Haven, CT
"Electrical Properties in Polymer Nanocomposites"

149. March Meeting, American Physical Society (February - March) Boston, MA
"Morphologies in Semi-Crystalline Precise Acid-Containing Polymers"

150. Central Research and Development , Dupont (March) Wilmington, DE
"Structure - Property Relationships in Acid- & Ion-Containing Polymers"

151. Chemical and Biomolecular Engineering Dep't, University of Delaware (March) Newark, DE
"Electrical Properties in Polymer Nanocomposites"

152. **George H. Heilmeier Faculty Award for Excellence in Research** (March) Philadelphia, PA
"Electrical Properties in Polymer Nanocomposites"

153. Thermal Analysis Forum of the Delaware Valley (March) Philadelphia, PA
"Electrical Properties in Polymer Nanocomposites"

154. Spring Meeting, American Chemical Society (March) San Diego, CA
"Morphologies in Precise Acid- and Ion-Containing Polymers"

155. Chemical and Biological Department, Drexel University (April) Philadelphia, PA
"Electrical Properties in Polymer Nanocomposites"

156. IUPAC World Polymer Congress (June) Blacksburg, VA
Advanced Macromolecular Materials: Structure and Function by Design Symposium
"Correlating Morphology and Ion Transport in Polymerized Ionic Liquids"

157. Chemical Engineering, University of Texas (November) Austin, TX
"Electrical Properties in Polymer Nanocomposites"

**2013**

158. **Dow Lecture**, Materials Science and Eng., Northwestern University (February) Evanston, IL
"Electrical Properties in Polymer Nanocomposites"
159. Materials Science and Engineering, University of Michigan (March) Ann Arbor, MI
"Recent Progress in the Morphology of Precise Copolymers, Ionic Conductivity in Ionomers, and Electrical Conductivity in Polymer Nanocomposites"
160. Chemical Heritage Foundation, Joseph Priestley Society (May) Philadelphia, PA
"Nanotechnology in the Philadelphia Region"
161. Fall Meeting, American Chemical Society (September) Indianapolis, IN
"Remarkable Morphologies in Precise Acid- and Ion-Containing Copolymers"
162. Chemical Engineering, Columbia University (October) New York, NY
"Electrical Properties and Polymer Dynamics in Polymer Nanocomposites"

**2014**

163. Colloidal, Macromolecular & Polyelectrolyte Solutions, Gordon Res. Conf. (Feb.) Ventura, CA
"Remarkable Morphologies in Acid- and Ion-Containing Polymers"
164. March Meeting, American Physical Society (March) Denver, CO
"Polymer Diffusion in the Presence of Immobile Nanoparticles"
165. Spring Meeting, American Chemical Society (March) Dallas, TX
"Direct Comparison of Experiments and Simulations of Precise Acid Copolymers and Ionomers"
166. ChemVet Meeting, ACS Delaware Section (May) Wilmington, DE
"Nanotechnology in the Philadelphia Region"
167. Chemical and Biomolecular Engineering, University of California, Berkeley (Sept.) Berkeley, CA
"Morphologies, Mechanical Properties and Chain Dynamics in Precise Copolymers"
168. Center for Integrated Nanotechnologies (CINT), Sandia National Lab. (Sept.) Santa Fe, NM
"Morphologies and Dynamics in Precise Copolymers"
169. Miller Institute, University of California, Berkeley (Oct.) Berkeley, CA
"Moving Ions in Plastics"

**2015**

170. Macromolecular Materials, Gordon Research Conference (Jan.) Ventura, CA
"Polymer Dynamics in Nanocomposites and Other Confined Spaces"
171. Materials Science and Engineering, Texas A&M University (Jan.) College Station, TX
"Polymer Nanocomposites: Polymer Diffusion and Electrical Conductivity "
172. Materials Research Outreach Program Symposium at the MRL (Feb.) Santa Barbara, CA
"Morphologies and Mechanical Properties in Precise Functional Copolymers"
173. Chemical Engineering, Seoul National University (Feb.) Seoul, South Korea
"The Advantages of Precision in Functional Copolymers"
174. Chemical Engineering, KAIST (Feb.) Daejeon, South Korea
"The Advantages of Precision in Functional Copolymers"
175. Chemistry and Chemical Engineering, POSTECH (Feb.) Pohang, South Korea
"The Advantages of Precision in Functional Copolymers"
176. Dillon Medal Symposium for Chinedum Osuji (Mar.) San Antonio, TX
"Polymer Dynamics under Cylindrical Nano-Confinement"
177. Chemical Engineering, Caltech (Apr.) Pasadena, CA
"The Advantages of Precision in Functional Copolymers"
178. IBM Almaden Research Center (Jun.) San Jose, CA
"Impact of Nanoconfinement on Polymer Diffusion in Polymer Nanocomposites and Cylindrical Pores"

179. Total Cray Valley (Jun.) Exton, PA
"Precise Acid- and Ion-Containing Copolymers: New Morphologies and New Insights about Mechanical Properties"
180. Structure and Dynamics of Polymer Nanocomposites (Jun.) Montpellier, France
"Polymer Melts inside Nanoscale Cylindrical Pores: Chain Conformations, Polymer Diffusion and Local Dynamics"
181. Solvay (Jun.) Lyon, France
"The Advantages of Precision in Functional Copolymers"
182. Fall Meeting, American Chemical Society; Ionic Liquids in Polymer Design (Aug.) Boston, MA
"Molecular Weight Effects on Ionic Conductivity in Diblock Copolymer/Ionic Liquid Mixtures"
183. Fall Meeting, American Chemical Society; Adv. Materials for High Performance Boston, MA
"The Advantages of Precision in Functional Copolymers: Mechanical Properties and Chain Dynamics"
184. Fall Meeting, American Chemical Society; J. Polymer Science Innovation Prize Boston, MA
"Polymer Melts inside Nanoscale Cylindrical Pores: Chain Conformations, Polymer Diffusion and Local Dynamics"
185. Fall Meeting, American Chemical Society; Celebrating 50 Years of PSE at UMass Boston, MA
"Evolution of Polymer Science – A Personal Perspective"
186. Chemical and Biomolecular Engineering, Ohio State University (Sept.) Columbus, OH
"Precise Acid- and Ion-Containing Polymers: New Morphologies and New Insights about Mechanical Properties"
187. Chemical and Biomolecular Engineering, Cornell University (Sept.) Ithaca, NY
"Precise Acid- and Ion-Containing Polymers: New Morphologies and New Insights about Mechanical Properties"
188. Neutron Scattering on Nano-Structured Soft Matter Workshop (Oct.) Starnberger See, Germany
"Morphology and dynamics in precise acid copolymers and ionomers"
189. Army Research Laboratory (October) Aberdeen, MD
"Precise Acid- and Ion-Containing Copolymers: New Morphologies and New Insights about Mechanical Properties"
190. Composites at Lake Louise (Nov.) Alberta, Canada
"Polymer Melts inside Nanoscale Cylindrical Pores: Chain Conformations, Polymer Diffusion and Local Dynamics"
191. 14$^{th}$ Pacific Polymer Conference; Hybrids Symposium (Dec.) Kauai, Hawaii
"Polymer Melts inside Nanoscale Cylindrical Pores: Chain Conformations, Polymer Diffusion and Local Dynamics"
192. 14$^{th}$ Pacific Polymer Conference; Polyolefins Symposium (Dec.) Kauai, Hawaii
"Precise Acid- and Ion-Containing Polymers: New Morphologies and New Insights about Mechanical Properties"

**2016**

193. Kramer Memorial Conference, University of California (Jan.) Santa Barbara, CA
"Precise Polymers that Control Nanoscale Morphologies & Properties"
194. ExxonMobil (Jan.) Clinton, NJ
"Precise Polyethylenes: New Morphologies and Mechanical Properties"
195. Technical Community Organization Lecture, Dow (Jan.) Collegeville, PA
"Using Polymer Structure to Control Nanoscale Morphologies, But What About Properties?"
196. Kraton Polymers (Feb.) Houston, TX
"NEXAR: A Literature Review"
197. Dep't of Chemical & Biomolecular Engineering, University of Houston (Feb.) Houston, TX
"Precise Polymers that Control Nanoscale Morphologies & Properties"

198. NIST Materials Science and Engineering Colloquium (Mar.) Gaithersburg, MD
"Precise Polymers that Control Nanoscale Morphologies & Properties"

199. Spring Meeting, American Chemical Society; 6th Joint Symposium on Polymers with the Chinese Chemical Society, Polymer Division (Mar.) San Diego, CA
"Chain Dynamics in Polymer Nanocomposites"

200. March Meeting, American Physical Society (Mar.) Baltimore, MD
"Polymer Melt Diffusion inside Nanoscale Cylindrical Pores"

201. Milliken (Apr.) Spartanburg, SC
"Precise Polyethylenes that Control Nanoscale Morphologies and Properties"

202. Penn Engineers without Borders (Apr.) Philadelphia, PA
"New Materials for Next Generation Batteries"

203. Philadelphia Science Festival, Science 2066 (Apr.) Philadelphia, PA
"New Materials for Next Generation Batteries"

204. ExxonMobil (May) Baytown, TX
"Precise Polyethylenes that Control Nanoscale Morphologies & Properties"

205. Fall Meeting, American Chemical Society, PMSE Division (Aug) Philadelphia, PA
"Direct Comparisons of Experiments & Atomistic Molecular Dynamics of Precise Polyethylenes"

206. **Plenary Speaker**, ECNP Internat'l Conf. on Nanostructured Polymers & Nanocomposites (Sep.)
"Polymer Melts in Nanoscale Confinement: Polymer Nanocomposites and Cylindrical Nanopores" Rome, Italy

207. Dep't of Chemical and Biomolecular Engineering, Tulane University (Oct.) New Orleans, LA
*Faculty Networking Seminar Program*
"Precise Polyethylenes that Control Nanoscale Morphologies & Properties"

208. **Plenary Speaker**, Macromolecular Innovation Institute Conference (Oct.) Blacksburg, VA
"Precise Polyethylenes that Control Nanoscale Morphologies & Properties"

**2017**

209. **Featured Speaker** (Mar.) Lisbon, Portugal
5th International Conference on Multifunctional, Hybrid and Nanomaterials
"Polymer Melts in Nanoscale Confinement: Polymer Nanocomposites & Cylindrical Nanopores"

210. Dillon Medal Symposium for Moon Jeong Park (Mar.) New Orleans, LA
"Unusual Semi-Crystalline Morphology of a Precise Carboxylic Acid Polyethylene"

211. Spring Meeting, Am. Chem. Soc. 50th Anniversary of Macromolecules (Apr.) San Francisco, CA
"How Advances in Polymer Synthesis have Enabled Advances in Polymer Physics"

212. Polymer Science and Engineering, University of Massachusetts (April) Amherst, MA
"Precise Polymers that Control Nanoscale Morphologies & Properties"

213. Penn Polymer Program, University of Pennsylvania (April) Philadelphia, PA
"Precise Polyethylenes that Control Nanoscale Morphologies & Properties"

214. High Polymer Research Group Conference (Apr.) Pott Shrigley, United Kingdom
"Precise Functional Polymers: New Morphologies and New Insights to Properties"

215. **IUPAC Lecture in Chemistry**, Universite de Montreal (May) Montreal, Canada
"Precise Associating Polyethylenes that Control Nanoscale Morphologies & Properties"

216. **Plenary Lecture** (May) Seville, Spain
5th International Symposium Frontiers in Polymer Science
"Precise Associating Polymers: New Insights and Strategies for Designing Advanced Materials"

217. Ned Thomas's 70th Birthday Symposium, Rice University (June) Houston, TX
"First Model Materials and Structure, Then…"

218. **Plenary Speaker,** 2017 Joint CNMS-SNS User Meeting (Aug.) Oak Ridge, TN
"tbd"

219. Dep't of Chemistry & Biochemistry, University of South Carolina (Sept.) Columbia, SC
"Precise Associating Polyethylenes that Control Nanoscale Morphologies & Properties"

220. **DBR Distinguished Lecture Series,** University of Alberta (Oct.) Alberta, Canada
"tbd"

221. **Keynote Speaker**, ICIEM Conference (Oct.) Philadelphia, PA
"tbd"

222. **Plenary Speaker**, American Institute of Chemical Engineers (Nov.) Minneapolis, MN
"Layered Morphologies in Precise Acid-Containing Polyethylenes: Hierarchical Structures and the Implications on Properties"

223. Polymer College Seminar, University of Akron (Nov.) Akron, OH
"tbd"

224. Materials Science and Engineering Department, Georgia Tech (Dec.) Atlanta, GA
"tbd"

225. Materials Science and Engineering Department, Univ. of Illinois (Dec.) Urbana-Champagne, IL
"tbd"

**2018**

226. March Meeting, American Physical Society (Mar.) Los Angeles, CA
"tbd"

227. Conference on Deformation, Yield and Fraction in Polymers (Mar.) The Netherlands
"tbd"

228. Department of Chemical & Biomolecular Engineering (Apr.) Notre Dame, IN
"tbd"

**SCIENTIFIC PUBLICATIONS**
**BOOK CHAPTERS AND OTHER PUBLICATIONS**
**PUBLICATIONS IN REFEREED JOURNALS**
**PATENTS**

**BOOK CHAPTERS AND OTHER PUBLICATIONS** (+ invited publication; * corresponding author)

1.+ K. I. Winey, Physics News in 1995, American Institute of Physics, 64-65, 1996.
"Polymer dynamics in thin films."

2.+ K. I. Winey, L. J. Fetters, and E. L. Thomas*, Encyclopedia of Applied Physics, G. L. Trigg, Ed.; VCH Publishers, Inc., New York, **20**, 429-449, 1997.
"Synthesis, characterization and properties of model polymers."

3.+ K. I. Winey, book review of Introduction to Ionomers by A. Eisenberg and J.-S. Kim for *Euromaterials*; Wiley-VCH Publishers, Inc. Weinheim, Germany, **6**, November, 16, 1999.

4.+ K. I. Winey, book review of Block Copolymers by F.J. Balta Calleja and Z. Roslaniec, Eds., for the *Journal of the American Chemical Society*; **123** (29), 7198, 2001.

5. M. L. Hans, N. Dan, K. I. Winey, A. M. Lowman, S. J. Siegel*, in Handbook of Biodegradable Polymeric Materials and Their Applications, Volume 2: Applications, S. K. Mallapragada and B. Narasimhan, Eds., American Scientific Publishers, Inc., Stevenson Ranch, CA, 2005.
"Daily to annual drug delivery strategies for psychoactive compounds."

6. K.I. Winey, M. D. Dadmun, C. Leibig, R. Oliver, Eds; Materials Research Society Symposium Series **856E** (electronic only publication), 2005
"Multicomponent polymer systems - Phase behavior, dynamics and applications."

7.+ F. Du and K. I. Winey*, in Nanomaterials Handbook, Y. Gogotsi, Editor, Taylor & Francis Group, CRC Press, Boca Raton, FL, 565-583, 2006.
"Nanotubes in multifunctional polymer nanocomposites."

8.+ A. Kota and K. I. Winey*, in McGraw-Hill Yearbook of Science and Technology 2009, McGraw-Hill Book Co., New York, NY, 297-301, 2009.
"Polymer nanocomposites with carbon nanotubes."

9.+ K. I. Winey, book review of Polymer Microscopy, Third Edition by L.C. Sawyer, D.T. Grubb, and G.F. Meyers for the *Journal of the American Chemical Society*; **131** (9), 3408, 2009.

10. T. M. Alam*, J. E. Jenkins, M. E. Seitz, C. F. Buitrago, K. I. Winey, K. L. Opper, T. W. Baughman, K. B. Wagener, in NMR Spectroscopy of Polymers: Innovative Strategies for Complex Macromolecules, H. Chen *et al.* ACS Symposium Series, American Chemical Society, Washington, DC, **1077**, 115-131, 2011.
"1H MAS NMR spectroscopy of polyethylene acrylic acid copolymers and ionomers."

11.+ R. M. Mutiso and K. I. Winey*, Polymer Science: A Comprehensive Reference, K. Matyjaszewski and M. Moller (eds); Elsevier Publishers, Amsterdam, **7**, 327-344, 2012.
"Electrical conductivity of polymer nanocomposites."

**PUBLICATIONS IN REFEREED JOURNALS (*** corresponding author)

1. D. J. Kinning*, K. I. Winey, E. L. Thomas, *Macromolecules* **21**, 3502-3506, 1988.
"Structural transitions from spherical to nonspherical micelles in blends of poly(styrene-butadiene) diblock copolymer and polystyrene homopolymers."

2. K. I. Winey*, E. L. Thomas, L. J. Fetters, *J. Chem. Physics* **95**, 9367-9375, 1991.
"Ordered morphologies in binary blends of diblock copolymer and homopolymer and characterization of their intermaterial dividing surfaces."

3. K. I. Winey*, E. L. Thomas, L. J. Fetters, *Macromolecules* **24**, 6182-6188, 1991.
"The swelling of lamellar diblock copolymer by homopolymer: The influences of homopolymer concentration and molecular weight."

4. K. R. Shull*, K. I. Winey, E. L. Thomas, E. J. Kramer, *Macromolecules* **24**, 2748-2751, 1991.
"Segregation of block copolymer micelles to surfaces and interfaces."

5. K. I. Winey*, E. L. Thomas, L. J. Fetters, *Macromolecules* **25**, 422-428, 1992.
"The ordered bicontinuous double diamond morphology in diblock copolymer/ homopolymer blends."

6. K. R. Shull*, K. I. Winey, *Macromolecules* **25**, 2637-2644, 1992.
"Homopolymer distributions in lamellar copolymer/homopolymer blends."

7. K. I. Winey*, E. L. Thomas, L. J. Fetters, *Macromolecules* **25**, 2645-2650, 1992.
"Isothermal morphology diagrams for binary blends of diblock copolymer and homopolymer."

8. K. I. Winey*, S. S. Patel, R. G. Larson, H. Watanabe, *Macromolecules* **26**, 2542-2549, 1993.
"Interdependence of shear deformation and block copolymer morphology."

9. R. G. Larson*, K. I. Winey, S. S. Patel, H. Watanabe, R. Bruinsma, *Rheologica Acta* **32**, 245-253, 1993.
"The rheology of layered liquids: lamellar block copolymers and smectic liquid layers."

10. K. I. Winey*, S. S. Patel, R. G. Larson, H. Watanabe, *Macromolecules* **26**, 4373-4375, 1993.
"Morphology of a lamellae diblock copolymer aligned perpendicular to the sample plane: Transmission electron microscopy and small angle X-ray scattering."

11. K. I. Winey*, D. A. Gobran, Z. Xu, L. J. Fetters, E. L. Thomas, *Macromolecules* **27**, 2392-2397, 1994.
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12. M. E. Galvin*, S. Heffner, K. I. Winey* *Macromolecules* **27**, 3520-3524, 1994.
"Deuterium effects on blend miscibility of an alternating copolymer and a homopolymer."

13. S. S. Patel*, R. G. Larson, K. I. Winey, H. Watanabe, *Macromolecules* **28**, 4313-4318. 1995.
"Shear orientation and rheology of a lamellar polystyrene-polyisoprene block copolymer."

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"Melt intercalation of polystyrene in layered silicates."

18. D. L. Polis, K. I. Winey*, *Macromolecules* **29**, 8180-8187, 1996.
"Kink bands in a lamellar diblock copolymer induced by large amplitude oscillatory shear."

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20. Q. Pan, K. I. Winey, H. H. Hu, R. J. Composto*, *Langmuir* **13**, 1758-1766, 1997.
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25. J. H. Laurer, K. I. Winey*, *Macromolecules,* **31**, 9106-9108, 1998.
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27. D. L. Polis, S. D. Smith, N. J. Terrill, A. J. Ryan, D. C. Morse, K. I. Winey*, *Macromolecules*, **32**, 4668-4676, 1999.
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29. D. L. Polis, A. J. Ryan, S. D. Smith, K. I. Winey*, *Physical Review Letters*, **83**, 2861-2864, 1999.
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"Asymmetric miscibility in random copolymer / homopolymer blends: Monomeric size and polarity."

32. K. I. Winey*, J. H. Laurer, B. P. Kirkmeyer, *Macromolecules*, **33**, 507-513, 2000.
"Ionic aggregates in partially Zn-neutralized poly(ethylene-*co*-methacrylic acid) ionomers: Shape, size, and size dispersity."

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34. N. N. Pellegrini, R. J. Composto*, K. I. Winey*, *Journal of Polymer Science: Polymer Physics Edition*, **38**, 1547-1552, 2000.
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35. R. Haggenmueller, H. H. Gommans, A. G. Rinzler, J. E. Fischer, K. I. Winey*, *Chemical Physics Letters*, **330**, 219-225, 2000.
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"Polarized spectroscopy of aligned single-wall carbon nanotubes."

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"Spherical and vesicular ionic aggregates in Zn-neutralized sulfonated polystyrene ionomers."

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42. A. Taubert, K. I. Winey*, *Macromolecules*, **35**, 7419-7426, 2002.
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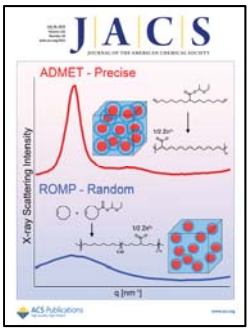

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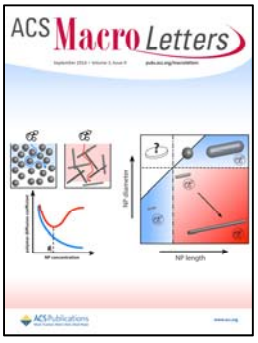

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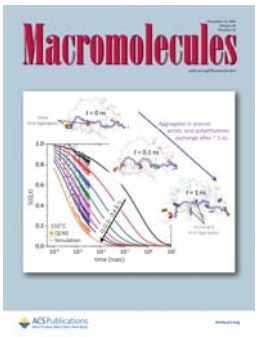


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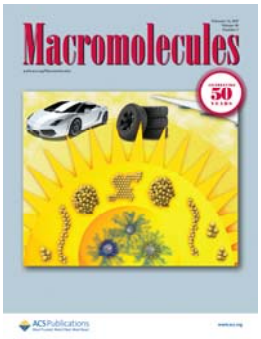


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**LICENSING AGREEMENTS**

NuPathe: Concept for a long-term drug delivery implant.
JJ X-ray: Designs for an environmental sample chamber for X-ray scattering experiments.
CSIRO: Polymerized ionic liquid block copolymers.